Mount Vernon Avenue Bridge Project

SAN BERNARDINO COUNTY, CALIFORNIA
DISTRICT 08-SBd-0-Mount Vernon Avenue
City of San Bernardino, Mount Vernon Avenue
EA 965120/BRLS-6507(003)

Supplemental Environmental Assessment and Final Programmatic Section 4(f) Evaluation with Finding of No Significant Impact

Prepared by the
State of California, Department of Transportation

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans.

Caltrans

October 2018

General Information about This Document

What's in This Document:

The California Department of Transportation (Caltrans), as assigned by the Federal Highway Administration (FHWA), has prepared this Environmental Assessment (EA) with Finding of No Significant Impact, which examines the potential environmental impacts of the alternatives being considered for the proposed project located in the City of San Bernardino, San Bernardino County, California. Caltrans is the lead agency under the National Environmental Policy Act (NEPA). The document tells you why the project is being proposed, what alternatives have been considered for the project, how the existing environment could be affected by the project, the potential impacts of each of the alternatives, and the proposed avoidance, minimization, and/or mitigation measures. The Environmental Assessment circulated to the public for 31 days between May 29, 2018 and June 29, 2018. As noted in Chapter 3 of this environmental document, comments were received during public circulation. Elsewhere throughout this document, a vertical line in the margin indicates a change made since the draft document circulation. Minor editorial changes and clarifications have not been so indicated. Additional copies of this document and the related technical studies are available for review at the Caltrans District 8 office located at 464 West 4th Street, San Bernardino. This document may also be downloaded at the following website: http://gosbcta.com/plans-projects/projects/mt-vernon/envi-docs/2018-eval/Mt_Vernon_EA_Final_52218.pdf.

Alternative Formats:

For individuals with sensory disabilities, this document can be made available in Braille, with large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to Caltrans District 8, ATTN: Aaron Burton, Senior Environmental Planner, Environmental Special Projects "C", 464 West Fourth Street, 6th Floor, MS 760; call 909-383-2841; or use the California Relay Service, 1 (800) 735-2929 (TTY), or 711.

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08-SBd-0-Mount Vernon Avenue
EA 965120/
BRLS-6507(003)

Replace the existing Mount Vernon Avenue Bridge (Bridge Number 54C-066) over the Burlington Northern Santa Fe (BNSF) rail yard in the City of San Bernardino, San Bernardino County, California.

Supplemental Environmental Assessment and Programmatic Section 4(f) Evaluation

Submitted Pursuant to:
(Federal) 42 USC 4332(2)(C), 49 USC 303, and/or 23 USC 138

THE STATE OF CALIFORNIA
Department of Transportation

5/22/18
Date of Approval

David Bricker
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District 8, Division of Environmental Planning
California Department of Transportation
NEPA Lead Agency

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CALIFORNIA DEPARTMENT OF TRANSPORTATION
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

FOR

Mount Vernon Avenue Bridge Project

The California Department of Transportation (Caltrans) has determined that the Build Alternative will have no significant impact on the human environment. This FONSI is based on the attached Supplemental Environmental Assessment (EA) and the associated technical studies, listed in Appendix F of the attached EA, which have been independently evaluated by Caltrans and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that a Supplemental Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached Supplemental EA (and other documents as appropriate).

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016 and executed by Federal Highway Administration (FHWA) and Caltrans.

10/9/18
Date

David Bricker
Deputy District Director
District 8, Division of Environmental Planning
California Department of Transportation
NEPA Lead Agency

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Chapter 1 Proposed Project

Changes have been made to this Environmental Document since the public circulation of the Supplemental Environmental Assessment and Programmatic 4(f) Evaluation (draft Supplemental EA) from May 29 to June 29, 2018. Public and agency comments received during the circulation of the draft Supplemental EA and the public hearing that was held on June 19, 2018, resulted in refinements that have been incorporated into this Supplemental Environmental Assessment with Finding of No Significant Impact (FONSI). A vertical line in the outside margin of this document indicates changes to the text since circulation of the draft Supplemental EA.

1.1 NEPA Assignment

California participated in the "Surface Transportation Project Delivery Pilot Program" (Pilot Program), pursuant to 23 USC 327, for more than five years, beginning July 1, 2007, and ending September 30, 2012. MAP-21 (P.L. 112-141), signed by President Obama on July 6, 2012, amended 23 USC 327 to establish a permanent Surface Transportation Project Delivery Program. As a result, the Department entered into a Memorandum of Understanding pursuant to 23 USC 327 (NEPA Assignment MOU) with the Federal Highway Administration (FHWA). The NEPA Assignment MOU became effective October 1, 2012, and was renewed on December 23, 2016 for a term of five years. In summary, the Department continues to assume FHWA responsibilities under NEPA and other federal environmental laws in the same manner as was assigned under the Pilot Program, with minor changes. With NEPA Assignment, FHWA assigned and the Department assumed all of the United States Department of Transportation (USDOT) Secretary's responsibilities under NEPA. This assignment includes projects on the State Highway System and Local Assistance Projects off of the State Highway System within the State of California, except for certain categorical exclusions that FHWA assigned to the Department under the 23 USC 326 CE Assignment MOU, projects excluded by definition, and specific project exclusions (Caltrans 2017a).

The project is subject to federal, as well as state environmental review requirements because the San Bernardino County Transportation Authority (SBCTA) proposes the use of federal funds from the FHWA and/or the project requires an approval from FHWA. Project documentation, therefore, has been prepared in compliance with the National Environmental Policy Act (NEPA). SBCTA is the project proponent, a joint lead agency with the Department under NEPA. FHWA's responsibility for environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 United States Code Section 327 (23 USC 327) and the Memorandum of Understanding dated December 23, 2016 and executed by FHWA and Caltrans.

This Environmental Assessment (EA) complies with the requirements of NEPA and other federal environmental laws.

Following circulation of the draft Supplemental EA, this final environmental document was prepared. Comments that were submitted during the circulation of the draft Supplemental EA are addressed in Chapter 3, Comments and Coordination.

1.2 Introduction

The SBCTA, in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Mount Vernon Avenue Bridge (Bridge Number 54C-066) over the Burlington Northern Santa Fe (BNSF) rail yard in the City of San Bernardino, San Bernardino County, California. Figures 1-1 and 1-2 show the regional location and project vicinity, respectively.

The project involves a road/railroad grade separation and is statutorily exempt from the California Environmental Quality Act (CEQA). A NEPA FONSI was adopted for the project in June 2011 (Caltrans 2011). Since the NEPA document was adopted, it has been noted that additional project improvements and refinements are needed that were not included in the adopted NEPA document. This Supplemental EA focuses on impacts that would result from proposed changes to the approved project since adoption of the FONSI in 2011. The "approved project" refers to the original project adopted in June 2011; "proposed project" refers to the new proposed changes to the project. In addition, the project sponsor is now SBCTA instead of the City of San Bernardino.

The project is included in the Southern California Association of Governments (SCAG) 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and also included in the SCAG 2019 Federal Transportation Improvement Program (FTIP), under project number SBD31905. The SCAG 2016–2040 RTP/SCS was found to conform to the State Implementation Plan (SIP) by FHWA on June 1, 2016. The 2019 FTIP was adopted by SCAG's Regional Council on September 6, 2018 and SCAG expects a mid-December 2018 approval of the 2019 FTIP by the federal agencies (SCAG 2018).The project description included in the approved 2019 FTIP is:

> "MT. VERNON AVENUE BRIDGE (OVERHEAD) AT BNSF REPLACE GRADE SEPARATION, REPLACE 4 LANE BRIDGE WITH 4 LANE BRIDGE FROM 2ND TO 5TH STREETS (0.2 MILES SOUTH OF RTE. 66)(BRIDGE NO 54C0066)."[1]

[1] SBCTA submitted an FTIP amendment on June 18, 2018, to SCAG to include the extended project limits. The updated project description is "MT. VERNON AVENUE BRIDGE (OVERHEAD) AT BNSF REPLACE GRADE SEPARATION, REPLACE 4 LANE BRIDGE WITH 4 LANE BRIDGE FROM RIALTO AVENUE TO 5TH STREET (0.2 MILES SOUTH OF RTE. 66)(BRIDGE NO 54C0066)." The amendment was approved as part of Amendment No. 17-22 to the 2017 FTIP on 8/31/18 by FHWA and FTA.

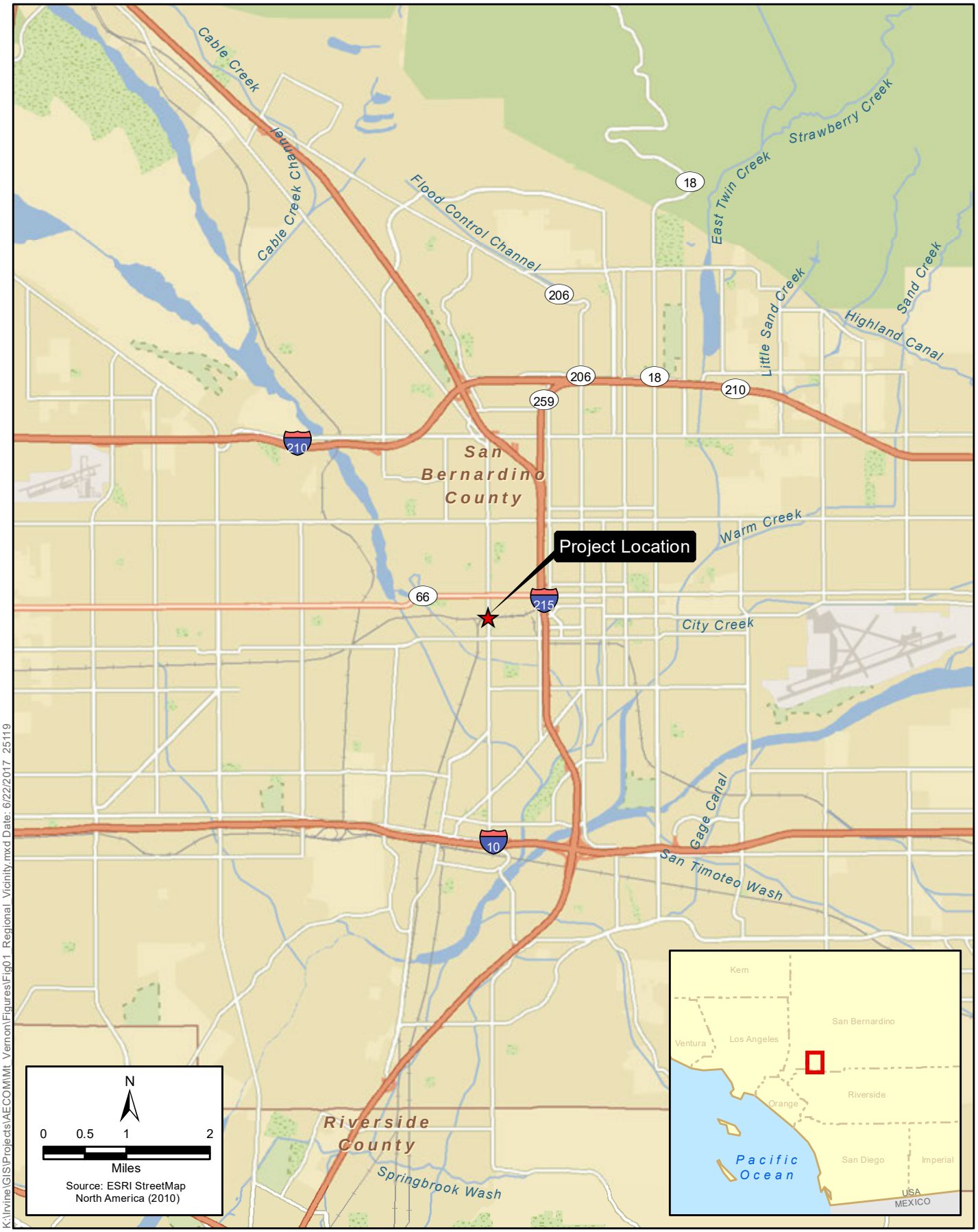

Figure 1-1
Regional Vicinity Map
Mount Vernon Avenue Bridge Project

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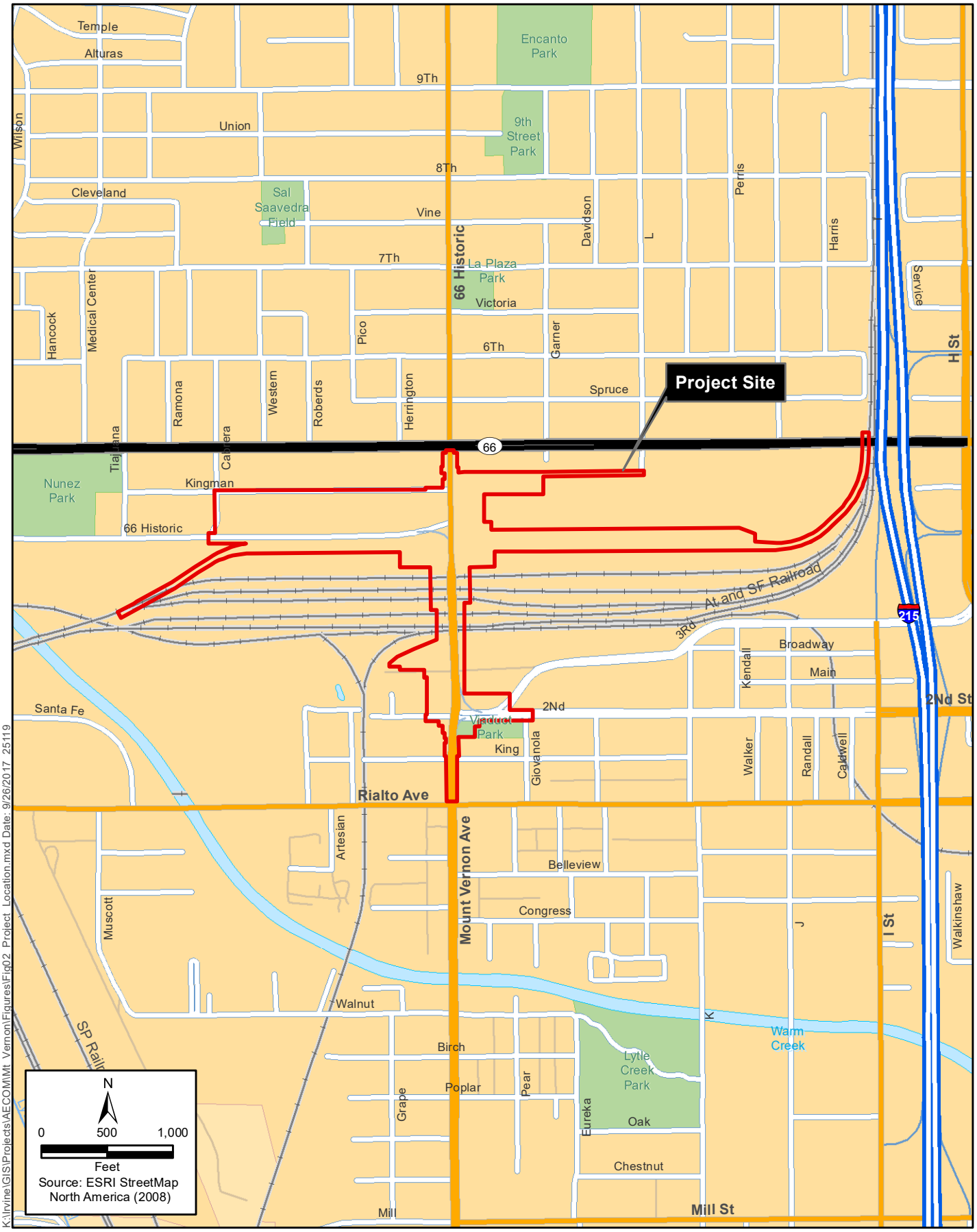

Figure 1-2
Project Location Map
Mount Vernon Avenue Bridge Project

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1.2.1 Existing Facility

The Mount Vernon Avenue Bridge (bridge) is located west of downtown San Bernardino, on Mount Vernon Avenue between West 2nd and West 5th Streets, approximately 0.2 mile south of State Route (SR) 66 (Foothill Boulevard) and 0.7 mile west of Interstate 215 (I-215). The bridge crosses the BNSF railroad mainlines, storage tracks, and intermodal yard, as well as the regional commuter rail tracks operated by the Southern California Regional Rail Authority (Metrolink) and the rail tracks used by Amtrak. The bridge provides the only arterial crossing over the BNSF rail lines between Rancho Avenue (approximately 1.1 miles to the west) and 5th Street (approximately 0.6 mile to the east), which provide north-south access in the area.

The existing Mount Vernon Avenue Bridge follows a generally north-south alignment along Mount Vernon Avenue and carries both vehicular and pedestrian traffic. The current bridge includes a stairwell on the southeast side providing pedestrian access to the Santa Fe Depot and Metrolink Station. The existing bridge is approximately 1,016 feet long and 49 feet wide with four 10-foot traffic lanes (two in each direction) and no median or shoulders. Sidewalks on each side of the existing bridge are 3.5 feet wide. Concrete barrier railings are located on each side of the bridge, though multiple areas have deteriorated or have been damaged and replaced with steel plates or plywood. Current vertical clearance over West 3rd Street is 13 feet, which is less than the current 15-foot standard. Vertical clearance over the BNSF railyard is 21.8 feet, which does not meet the minimum clearance requirements of either the California Public Utilities Commission (CPUC) (minimum 22.5 feet of vertical clearance) or the BNSF railroad (minimum 24 feet of vertical clearance).

The existing horizontal clearance between the bridge bents and some of the railroad tracks is only 6 to 8 feet with no crash walls. Standard minimum horizontal clearance requirements are 20 feet without crash walls and 10 feet with crash walls. Because the bridge is slightly offset to the east from the centerline of Mount Vernon Avenue at about West 2nd Street, the current south approach is misaligned with the bridge.

1.2.2 Project History

Replacement of the Mount Vernon Avenue Bridge is necessary because the current facility exhibits structural and functional deficiencies per Caltrans' *National Bridge Inventory—Structure Inventory and Appraisal,* which addresses bridges both on and off the federal highway system in the State of California. The existing bridge, constructed in 1934, incorporated steel girders salvaged from an earlier 1907 structure. The project was originally initiated by the mandated Local Bridge Seismic Safety Report Program, which is a part of the statewide Seismic Safety Retrofit Program. This program was established by emergency legislation (SB36X) enacted during an extraordinary legislative session after the October 1989 Loma Prieta Earthquake. In 1996, Caltrans retained a consultant to perform a seismic analysis and retrofit study for the existing bridge. A Final Seismic Retrofit Strategy Report was consequently developed and approved on June 2, 1997. The report concluded that the bridge falls under Category 1, a category for bridges that may potentially collapse in a seismic event and potentially threaten public safety.

In addition to this seismic deficiency, the bridge was placed on the FHWA Federal Eligible Bridge List (EBL) because of its low sufficiency rating. The bridge was found to be Structurally Deficient (SD) because of its poor deck condition. The bridge also meets the classification of being Functionally Obsolete (FO) with a low rating on the deck geometry (i.e., roadway width on the bridge) and because of the nonstandard deck geometry, misaligned south approach, and nonstandard vertical underclearance at West 3rd Street. The sufficiency rating for the bridge was 45.6 in 2002 and dropped to 2.0 in 2004 subsequent to bridge inspections and was confirmed at 2.0 in December 2016.

A Bridge Study Report documenting the results of the special bridge study was issued in March 2004. The report concluded that it would be technically feasible to retrofit and rehabilitate the bridge in a manner that would remove it from the EBL and improve its capability to withstand the maximum credible seismic event. The recommended improvements included bridge widening, full deck replacement, span replacement, girder and bent retrofit, bracing, lead paint removal, repainting, and locally lowering West 3rd Street below the bridge.

Although the 2004 Bridge Study Report found that a retrofit/rehabilitation alternative was technically feasible, the following important caveats were noted:

- Even with all possible planning to minimize harm to the historic resource, direct or indirect alterations to the historic characteristics that qualify the resource for listing in the National Register of Historic Places (NRHP) would likely result in an adverse effect under Section 106 and a direct use under Section 4(f). These issues would be more fully examined in the Section 106 of the National Historic Preservation Act (NHPA) and Section 4(f) documentation.
- The retrofitted bridge would have a limited service life of only 15 to 20 years because (1) major portions of the steel girders that were salvaged from the 1907 bridge could have questionable rivet connections as a result of corrosion; and (2) the bridge has been carrying heavy daily truck traffic since it was constructed in 1934, causing the aged carbon steel to reach the maximum allowable truck load cycles associated with fatigue.
- Some of the timber piles supporting the bridge foundations could be decayed from aging.

Two other limitations of the retrofit/rehabilitation alternative were presented to the Project Development Team (PDT). First, even though the retrofit/rehabilitation alternative would meet the 22.5-foot minimum vertical clearance requirement for the CPUC, it would not meet the 24-foot minimum vertical clearance required by the BNSF railroad. Second, to meet horizontal clearance requirements, some of the crash walls under this alternative would have to be limited to a nonstandard 1.3-foot thickness. Taking into consideration the results of the 2004 Bridge Study Report and the previously described limitations, the PDT agreed at its April 6, 2004, meeting that the retrofit/rehabilitation alternative was not viable and that a replacement bridge would be preferable to rehabilitating/retrofitting the Mount Vernon Avenue Bridge.

On April 29, 2004, Caltrans Structures Maintenance and Investigations staff independently performed a biennial bridge inspection and found critical girder and connection failure as a result of fatigue at several locations in the southbound lanes of the bridge. Consequently, the southbound lanes were closed to vehicular traffic. After further investigation by additional bridge

specialists from Caltrans headquarters, it was recommended that the entire bridge be closed. The City of San Bernardino (City) closed the bridge to all vehicular traffic on June 4, 2004. In order to reopen the bridge, temporary bridge shoring has been installed per a subsequent agreement between the City and BNSF, which allowed the installation of the temporary bridge shoring. The initial agreement with BNSF specified that removal of the shoring must occur before the end of two years. However, in 2014 the BNSF license was extended for 10 years and the existing shoring that currently supports the bridge was upgraded at that time for a 10-year life.

1.2.3 Purpose and Need

1.2.3.1 PROJECT PURPOSE

The project purpose has not changed since the original NEPA document was adopted in June 2011. The purpose of the proposed project is to provide a bridge that is structurally safe, meeting current seismic, design, and roadway standards.

1.2.3.2 PROJECT NEED

The project need has not materially changed since the original NEPA document was adopted in June 2011. However, the need presented in this section has been updated where more current data was found to be available.

Seismically Deficient

The existing Mount Vernon Bridge was constructed in 1934 and incorporated steel girders salvaged from an earlier 1907 structure. As part of the Local Bridge Seismic Safety Retrofit Program, a seismic analysis and retrofit study were conducted in 1996. The Final Seismic Retrofit Strategy Report, issued in June 1997, determined that the bridge fell under Category 1, a category for bridges that could potentially collapse in a seismic event and threaten public safety.

Sufficiency Rating

Caltrans maintains the *National Bridge Inventory—Structure Inventory and Appraisal* for bridges both on and off the federal highway system in the state. The inventory includes a sufficiency rating for each bridge. The sufficiency rating is typically determined by three considerations: (1) structural adequacy and safety, (2) serviceability and functional obsolescence, and (3) essentiality for public use. A special reduction factor is considered to account for conditions related to detours, traffic safety features, and structure type. When a bridge has a deficient sufficiency rating, it is placed on the FHWA Federal EBL to receive high priority for retrofit/rehabilitation or replacement under the Federal Highway Bridge Program (HBP). A deficient bridge is defined as having a sufficiency rating ≤ 80 and a status flag as SD. Bridges with a sufficiency rating ≤ 80 and SD or FO status are eligible for rehabilitation, while bridges with a sufficiency rating ≤ 50 and SD or FO status are eligible candidates for replacement. In 2002, the sufficiency rating for the Mount Vernon Avenue Bridge was 45.6 with flags for both SD and FO. The major bridge deficiencies in 2002 were identified as poor deck condition, nonstandard deck geometry, and nonstandard underclearance at West 3rd Street. In 2004, Caltrans established the sufficiency rating for the bridge as 2.0 after cracks were found in the main steel girders supporting the bridge. With the results of the 2004 bridge inspections, the sufficiency rating for the bridge is the result of the following factors: low superstructure capacity, poor substructure condition, serious deck condition, inadequate deck geometry, and

substandard vertical clearance at West 3rd Street. Additionally, the capacity of the existing bridge railing does not meet current standards. The bridge was closed by the City of San Bernardino for six months while timber shoring supports were installed to carry loads in the vicinity of the cracks. In December 2016, the sufficiency rating for the Mount Vernon Avenue Bridge was confirmed at 2.0. The bridge is currently closed to all commercial traffic including trucks and buses.

Structurally Deficient

The bridge has a low superstructure capacity, poor substructure conditions, and deck deficiencies. The deck has moderate and severe transverse cracks and spalls at various locations. The steel bents have structural damage and heavy corrosion on almost all steel element connections. The girders receive a score of 0.0 for operating and inventory ratings due to several severe fatigue cracks on the girder-to-cap beam connections; however, the bridge remains open because of temporary supports that were installed in the early 2000s. Inventory and operating capacity were calculated at 32 tons per vehicle (29 metric tons) and 34 tons per semi-trailer combination (31 metric tons). The load rating for this structure is adequate as long as the temporary shorings at bents 7, 14, 18, and 19 remain in place and in good satisfactory condition. All commercial vehicles except for commercial pickup trucks, vans, and passenger cars are currently prohibited from using this structure.

Functionally Obsolete (FO)

The existing bridge is considered to be FO because of the nonstandard deck geometry, misaligned south approach, and nonstandard vertical clearance at West 3rd Street.

Other Deficiencies

In addition to the previously described deficiencies, other serious conditions exist, such as substandard vertical clearance over the railroad and substandard vertical clearance for 3rd Street. Additionally, the bridge was last painted in 1954. The paint condition index (PCI) dropped from 74.5 in 2000 to 38 in 2016. Bridges on the EBL with a PCI of 65.0 or less qualify as a stand-alone painting project under the federal HBP guidelines. Additionally, the existing bridge has nonstandard vertical and horizontal clearances at the BNSF railroad yard.

1.2.4 Social Demands or Economic Development

According to the SCAG 2016–2040 RTP/SCS, the population of the County of San Bernardino (County) in 2000 was 1,719,000; by 2015 the population had increased to 2,111,000; and by year 2040 the population is expected to be 2,731,000. The City of San Bernardino had a population of 211,900 in 2012 and by 2040 the population is anticipated to be 257,400. The City of San Bernardino also included 59,300 households in 2012, which is expected to increase to 77,100 households by 2040.

As mentioned earlier in Section 1.2.3, the purpose of the project is to replace a structurally deficient bridge and not to increase capacity. While there is an increase in the population growth, volumes on Mount Vernon Avenue Bridge would not be expected to substantially increase based on future growth predictions. As demonstrated in Table 1-1, Mount Vernon Avenue Bridge currently operates at Level of Service (LOS) A and existing traffic volumes are 17,297. In the

Year 2022 and Year 2040, the LOS is predicted to remain at LOS A. This is because of the project area's designation as a limited growth Strategic Area by the City of San Bernardino General Plan.

Table 1-1. Roadway Capacity Conditions

Mount Vernon Avenue between 5th Street and 2nd Street	Number of Lanes	Roadway Capacity	Existing Weekday Volume	LOS
Existing (2017) Conditions	4	40,000	17,297	A
Opening Year (2022) without Project	4	40,000	18,757	A
Design Year (2040) without Project	4	40,000	24,011	A
Source: *Mount Vernon Avenue Overhead Replacement Project Traffic/Circulation Study, 2018.*				

As concluded in the adopted 2011 EA/FONSI, changes in land use patterns were also considered but not determined to result in a project need because the City of San Bernardino General Plan Strategic Area designation specifies that changes in the land use pattern are neither likely nor desired. Land use is further discussed in Section 2.1.1. Minor changes in the land use designations have occurred in the project study area. The only notable development in the immediate project area that has occurred since the adoption of the 2011 EA/FONSI was the construction of a Metrolink parking structure that was built immediately outside of the southeast quadrant of the 2011 project footprint.

In terms of modal relationships and system linkages, Mount Vernon Avenue is considered a Major Arterial per the City of San Bernardino General Plan. Thus, it is a connecting link between economic centers both within the City and the region as a whole. Mount Vernon Avenue Bridge provides an additional access route to rail and mass transit (Metrolink) facilities in the immediate area that also interface with port and airport facilities. The bridge is currently closed to all commercial traffic, including trucks and buses. Any permanent long-term closure of the Mount Vernon Avenue Bridge would remove an important connection linking communities north and south of the BNSF railroad.

1.2.5 Modal Interrelationships and System Linkages

Mount Vernon Avenue Bridge crosses the BNSF railroad mainlines, storage tracks, and intermodal yard, as well as the regional commuter rail tracks operated by Metrolink and the rail tracks used by Amtrak. These facilities also interface with port and airport facilities. The nearest commercial airports to the project site are San Bernardino International Airport (SBD), located about 3.5 miles southeast of the site, and Ontario International Airport (ONT), located about 16 miles southwest of the project limits, both of which are in San Bernardino County. These airports provide both cargo services and commuter air travel services. John Wayne Airport, located in Orange County in the City of Santa Ana, is about 55 miles southwest. This airport is also a commercial airport, with both cargo and commuter air travel services. Several smaller airports also serve Riverside County.

The project is approximately 75 miles from the Port of Long Beach and 80 miles from the Port of Los Angeles. The Ports of Los Angeles and Long Beach together are the world's largest sea-land port and international trade moves through these ports to and from all parts of the nation (SBCTA 2018). After docking, goods are transported by trucks if the distance is less than 500 miles, or by

train for longer distances (SBCTA 2018). Ninety percent of the port traffic to and from points outside the region crosses the Inland Empire (SBCTA 2018). This freight traffic, already heavy, is projected to nearly triple in the next 20 years because of tremendous growth in international trade through the ports (SBCTA 2018).

Mount Vernon also provides an important linkage for pedestrian and cyclists. On Mount Vernon Avenue, sidewalks are provided; however, on the bridge structure, the sidewalks are reduced to 3 feet, 6 inches. Continuous sidewalks are provided on both sides of the street on 5th Street, 2nd Street, and Rialto Avenue. Striped crosswalks are provided on all four approaches of all study area intersections as well. Bicycle usage is encouraged within the city of San Bernardino; however, there are currently no striped or marked bicycle facilities within the study area. A Class II or III bicycle facility is planned on Mount Vernon Avenue in the study area, as shown in the City of San Bernardino Bicycle Facilities Master Plan. The most recent pedestrian and bicycle counts, conducted on May 9, 2017, showed that a total of 249 pedestrians and cyclists (177 pedestrians and 72 cyclists) crossed the bridge (Caltrans 2018a).

Public transportation in the San Bernardino area is provided by Omnitrans, the regional public transit operator for San Bernardino County. Omnitrans operates 14 local-fixed routes in the city of San Bernardino. The following weekday Omnitrans bus routes serve the study area (Caltrans 2018a):

- Route 1 (Colton – Del Rosa): Local fixed-route service that operates along Mount Vernon Avenue and 2nd Street in the study area, with service provided every 15 minutes.
- Route 3/4 (West San Bernardino – Baseline – Highland): Local fixed-route service that provides service along Mount Vernon Avenue and 5th Street in the study area, with service provided every 20 minutes.
- Route 14 (Fontana – Foothill – San Bernardino): Local fixed-route service that provides service along 5th Street in the study area, with service provided every 15 minutes.

1.2.6 Independent Utility and Logical Termini

FHWA regulations (23 Code of Federal Regulations [CFR] 771.111 [f]) require that the action evaluated:

- Connect logical termini and be of sufficient length to address environmental matters on a broad scope.
- Have independent utility or independent significance (be usable and require a reasonable expenditure even if no additional transportation improvements in the area are made).
- Not restrict consideration of alternatives for other reasonably foreseeable transportation improvements.

Logical termini should encompass an entire project. Cutting a larger project into smaller projects may be considered "improper segmentation." A project must have independent utility; that is, a project must be able to function on its own, without further improvements.

The purpose of the proposed project is to provide a bridge that is structurally safe, meeting current seismic, design, and roadway standards. This would entail construction of a bridge with standard geometry to correct the current misalignment of the south approach, standard vertical clearance at West 3rd Street, and standard vertical and horizontal clearances at the BNSF yard. As such, the project is considered to have independent utility because it would address the seismic vulnerabilities and design deficiencies associated with the bridge without the need for additional transportation improvements in the area. In addition, it does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements in the area. Furthermore, the project would connect logical termini and has sufficient length to address all the environmental impacts associated with the project. The project would replace an existing bridge with a new bridge that does not increase the capacity of the facility and would join the existing roadways north and south of the project limits similar to current conditions, which would constitute a logical terminus at the north end of the project at 5th Street and at the south end of the project at Rialto Avenue.

1.3 Project Description

This section describes the proposed action and the project alternatives that were developed to meet the identified purpose and need of the project, while avoiding or minimizing environmental impacts. The alternatives are the Build Alternative (Preferred Alternative) and the No-Build Alternative.

The proposed project would replace the existing Mount Vernon Avenue Bridge (Bridge Number 54C-066) over the BNSF rail yard in the City of San Bernardino, San Bernardino County, California. The proposed project covers a distance of approximately 0.5 mile. Within the limits of the project, the existing Mount Vernon Avenue Bridge follows a generally north-south alignment along Mount Vernon Avenue and carries both vehicular and pedestrian traffic. The existing bridge is approximately 1,016 feet long and 49 feet wide with four 10-foot traffic lanes (two in each direction) and no median or shoulders. The purpose of the proposed project is to provide a bridge that is structurally safe and meets current seismic, design, and roadway standards.

1.4 Alternatives

1.4.1 Build Alternative (Preferred Alternative)

The project is located in the City of San Bernardino, San Bernardino County, California (Figures 1-1 and 1-2), along the Mount Vernon Bridge 54C-066, Section 7, Township 1 South, and Range 4 West on the San Bernardino South U.S. Geological Survey (USGS) 7.5-minute quadrangle map.

The Preferred Alternative (Alternative 3 – Bridge Replacement), identified in the adopted 2011 NEPA document, extended from just south of 5th Street to just north of King Street. Based on the identified project improvements/refinements, the project would now extend from just south of

5th Street to Rialto Avenue. Figure 1-3, Project Layout Map (Index and Sheets 1–4), shows the current proposed project while Figure 1-4 presents the replacement bridge cross section.

The following discussion includes those portions of the project description from the adopted 2011 EA/FONSI that are still proposed for inclusion in the project, followed by the refinements/improvements that have been incorporated into the proposed project.

As discussed in the adopted 2011 EA/FONSI, the proposed project would involve removal of the existing bridge structure, construction of a new replacement bridge structure, and improvements to bridge approaches and roadways in the project vicinity. The new replacement bridge would be 1130.5 feet long and 80 feet wide with four travel lanes (two in each direction), a 2-foot-wide median, and 4-foot-wide minimum shoulders which will accommodate a Class II bicycle facility. Sidewalks on each side of the new bridge would be 6 feet wide and would meet Americans with Disabilities Act (ADA) requirements for sidewalk width and slopes, including preservation of existing access directly from the bridge to the Santa Fe Depot and Metrolink Station. Concrete barrier railings (2.8 feet high) topped with fencing (8 feet high) would be provided on each side of the new bridge.

Design Speed. The project would be designed for speeds of 35 miles per hour and up to 40 miles per hour due to vertical profile.

Vertical Clearance/Horizontal Alignment/Street Geometrics. The profile of the new replacement bridge would be raised to at least 24 feet with a maximum clearance of approximately 36 feet. This alternative would also provide for the minimum 15-foot clearance over West 3rd Street. Southbound left-turn pockets are proposed at 2nd Street. At the Mount Vernon Avenue/2nd Street intersection, the free right turn from westbound 2nd Street to the northbound Mount Vernon Avenue would be replaced by a right-turn pocket.

Horizontal Clearance. Per BNSF request, the bridge columns are to be a minimum of six feet in diameter, which qualifies as "heavy construction," and therefore avoids the need to construct crash walls.

Bridge Alignment/Street Geometrics. To correct the misalignment with the south approach roadway, the bridge would be widened on the west side closer to some of the existing residential land uses within the project vicinity. This widening would require the service road at the southwest end of the bridge between West 2nd and West 3rd Streets to be closed.

Service Road and Westerly Alleyway. The bridge widening would require that the Mount Vernon Avenue service road between West 2nd and West 3rd Streets be closed. Access to the parallel alleyway behind the four residential parcels in this area would be maintained. A parallel alleyway behind four residential parcels in this area would be upgraded to "Access Roadway" standards, providing a travelled way of 26 feet (curb-to-curb) consisting of two un-striped 13-foot wide lanes (beyond 10-foot standard lanes).

Roadway Improvements. Roadway improvements at the south end of the bridge would include retaining walls or concrete walls that would be constructed along both sides of the south approach, minor restriping, repaving, and installing of curbs and gutters. At the north end of the new bridge, similar types of roadway improvements would be provided. Additionally, retaining walls or concrete walls would be constructed along both sides of the north approach between about Kingman Avenue and West 4th Street. The walls would be landscaped with vegetation that

has aerial rootlets to cover the wall, potentially with creeping fig. The intersection of West 4th Street and Mount Vernon Avenue has been reconstructed in a cul-de-sac configuration as part of a separate City public works project. Pedestrian access to existing parcels on Mount Vernon Avenue would be constructed, which would be provided with ADA compliant ramps in addition to steps.

Construction Methods. Construction methods that would minimize impacts on railroad operations would be employed for the new replacement bridge. Removal of the existing bridge would be performed prior to construction using techniques approved by BNSF. The girders would be precast concrete bulb-tee girders (concrete deck). The bridge foundation would be formed by large diameter driven piles (commonly referred to as cast-in-steel-shell piles, or CISS) to avoid the substantial footprint area required for pile-group-type foundations. Minimizing the footprint of the substructure would reduce the impact to railroad operations. Columns would be supported on the CISS piles; where required, crash walls would be implemented. Construction of the replacement bridge would be carried out using standard techniques that are typical in California and would be staged in the railroad right of way using BNSF and Metrolink authorized work windows.

The proposed improvements/refinements to the project that are being addressed in this Supplemental EA are listed below.

- A portion of the BNSF intermodal operations/parking area east of the bridge on the north side of the existing tracks would be removed and a new paved area between Kingman Street and West 4th Street and from Cabrera Avenue to Mount Vernon Avenue would be constructed (this will involve acquisition and removal of existing residences/businesses within these limits) to accommodate BNSF operational uses that are displaced by the project. A 12-foot-tall block wall and a 20-foot-wide landscape buffer would be constructed along Kingman Street and Cabrera Avenue to shield this area from surrounding uses.
- Just west of Mount Vernon Avenue, West 4th Street would form an intersection with Cabrera Avenue and be vacated east of that intersection.
- The existing Eagle Building and four associated buildings would be relocated from the east side of Mount Vernon Avenue to the west side of Mount Vernon Avenue.
- The two existing crane repair pads would be relocated north of their current location (one on either side of Mount Vernon Avenue).
- To address impacts to BNSF railyard facilities and operations, SBCTA will provide two shoofly tracks (Tracks 218 and 219) during the bridge demolition, foundation work, and new bridge construction[2].
- Existing Tracks 216 and 217 would be realigned in the immediate vicinity of the new bridge to accommodate the new bridge column locations. Since adoption of the 2011 EA/FONSI, BNSF realigned Track 216 and constructed Track 217 as part of operational improvements associated with the railyard, separate from the Mount Vernon Avenue Bridge project.

[2] SBCTA has no jurisdiction or authority to determine the salvage, disposition, temporariness, or permanency of the shooflies upon completion of the project.

- Three single-family residences and two commercial businesses located at the southwest end of the bridge, bordered by Mount Vernon Avenue to the east, the alley behind the structures to the west, West 3rd Street to the north, and West 2nd Street to the south, would be acquired and removed.
- The access associated with structures fronting Mount Vernon Avenue south of West 2nd Street and north of King Street would be reconstructed as needed to match the new road/sidewalk grade.

Consistent with the updated project layout the following would be incorporated:

- Utilities would be relocated as needed, to accommodate the proposed improvements.
- Best management practices (BMPs) for water quality treatment would be provided as part of the proposed project where feasible.
- Signage would be incorporated within the project's limits of disturbance, where necessary.
- Pedestrian facilities would be compliant with Americans with Disability Act (ADA) standards.
- Geotechnical borings would be conducted within the project's limits of disturbance as needed for the design of the project.
- Temporary advanced signage would be required during construction, which would involve portable changeable message signs or other temporary signage that would not require any ground disturbance.
- The proposed project will incorporate bicycle facilities within the project limits that are consistent with the City of San Bernardino Bicycle Facilities Master Plan and SBCTA's adopted Non-Motorized Transportation Plan.

The profile of the replacement bridge would be different from that of the existing bridge, necessitating the raising of the intersection of Mount Vernon Avenue and 2nd Street. Mount Vernon Avenue is proposed to be closed between 5th Street and Rialto Street from late 2019 to late 2021 while the bridge is replaced. Demolition of the bridge and construction activities are anticipated to begin in the fall of 2019 and be completed by the fall of 2021.

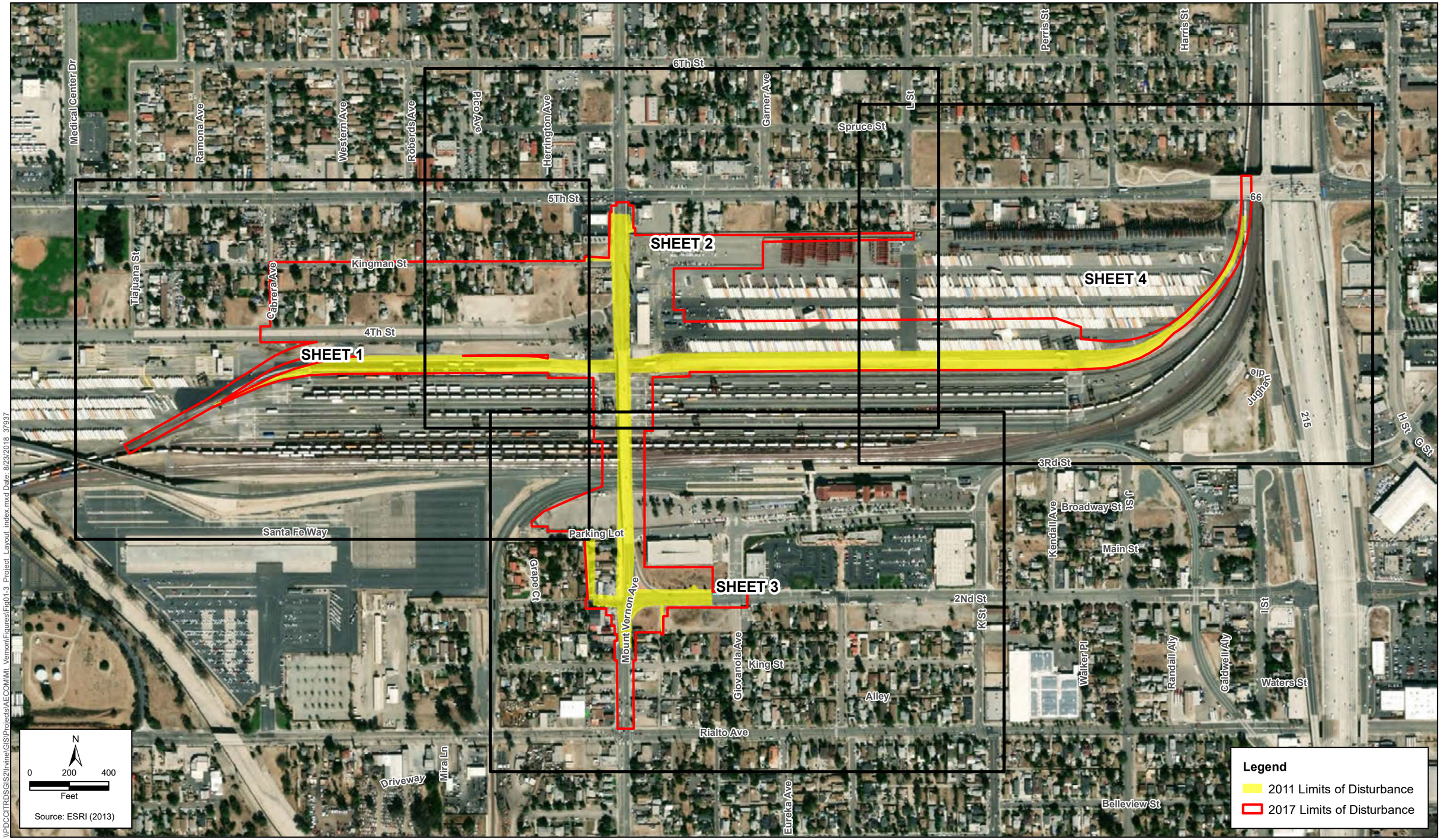

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Figure 1-3
Project Layout Map Sheet Index
Mount Vernon Avenue Bridge Project

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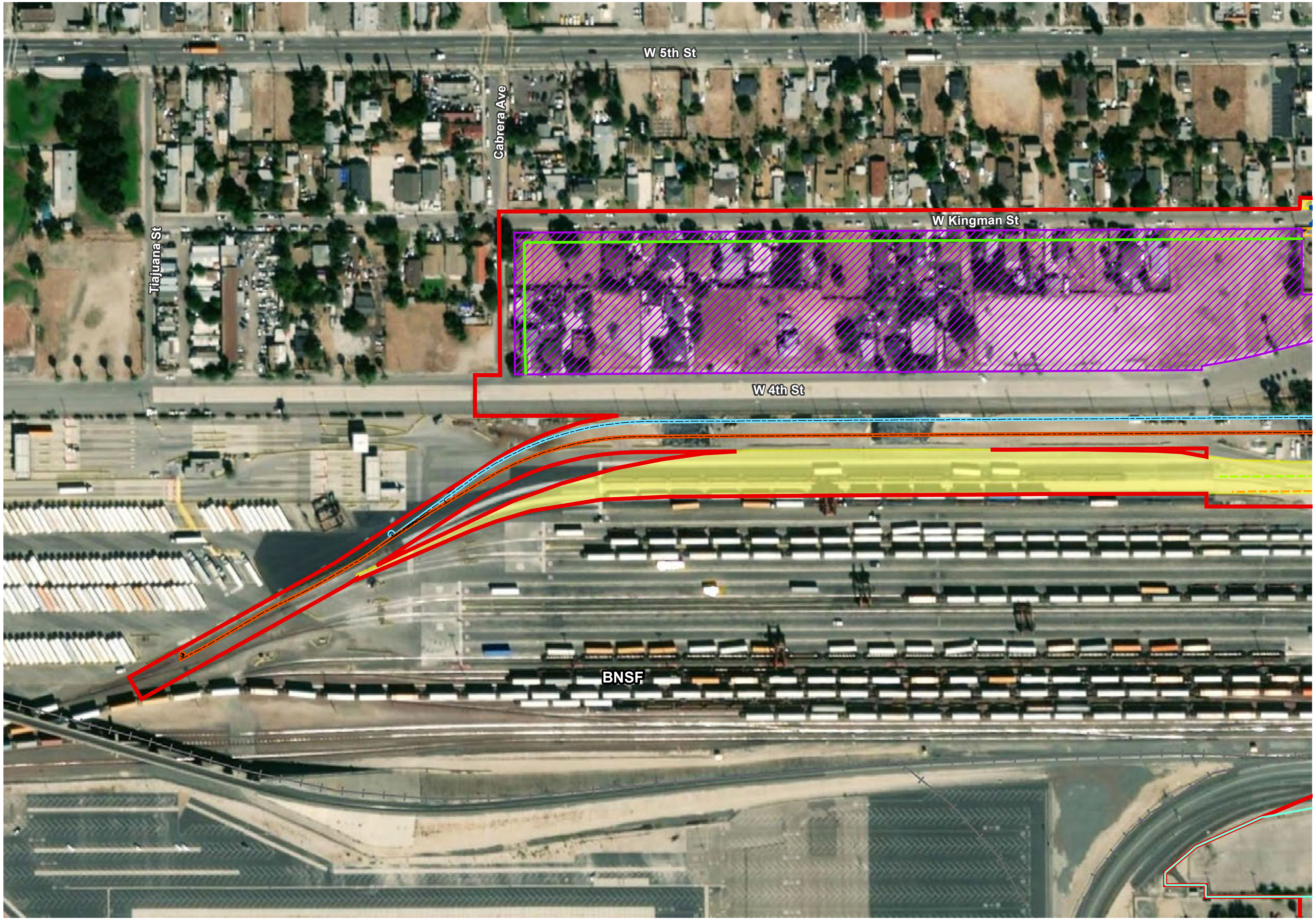

Legend
Limits of Disturbance (2011)
Limits of Disturbance (2017)
Proposed Right-of-Way Acquisition
Temporary Construction Easement
Temporary Staging Area
Realignment of Existing Track 216
Realignment of Existing Track 217
Shoofly Track 218
Shoofly Track 219
Proposed Drainage
Proposed Striping
Proposed 12-foot Block Wall
Source: StreetMap North American (2013)
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Figure 1-3 - Sheet 1
Project Layout Map
Mount Vernon Avenue Bridge Project

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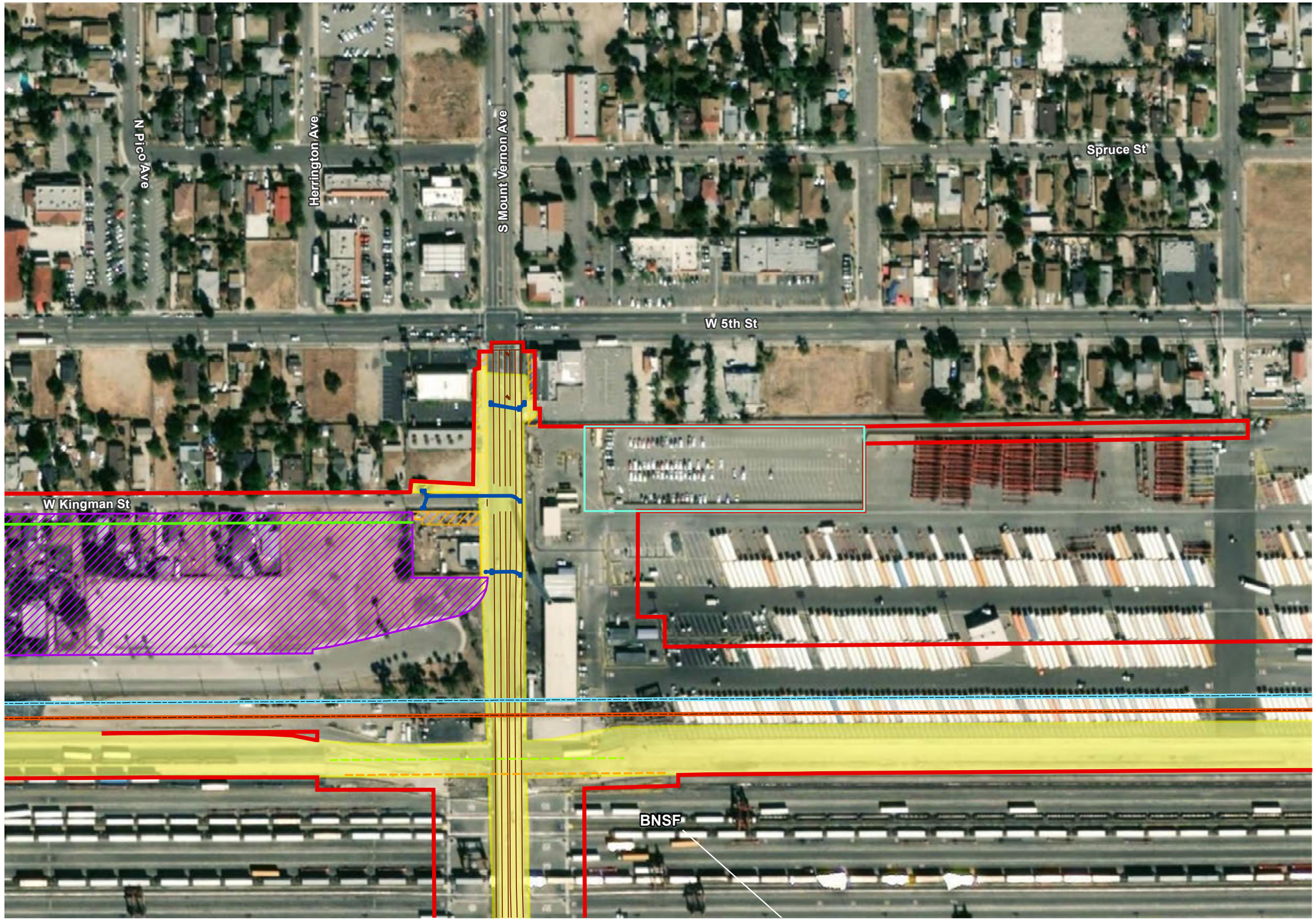

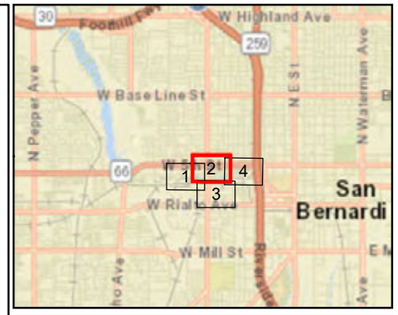

Legend

- Limits of Disturbance (2011)
- Limits of Disturbance (2017)
- Proposed Right-of-Way Acquisition
- Temporary Construction Easement
- Temporary Staging Area
- Realignment of Existing Track 216
- Realignment of Existing Track 217
- Shoofly Track 218
- Shoofly Track 219
- Proposed Drainage
- Proposed Striping
- Proposed 12-foot Block Wall

Source: StreetMap North American (2013)

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Figure 1-3 - Sheet 2
Project Layout Map
Mount Vernon Avenue Bridge Project

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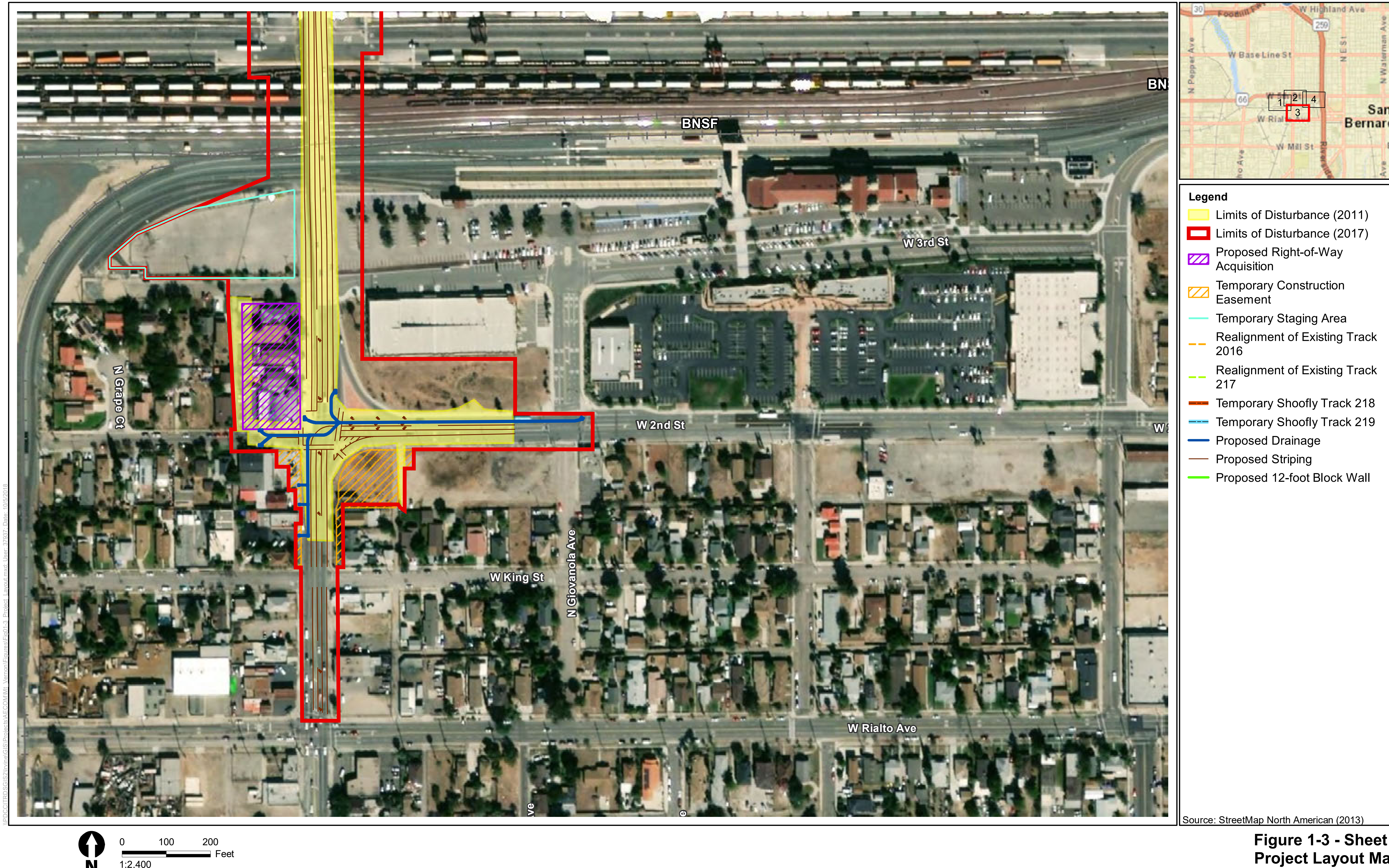
BNSF
BNSF
W 3rd St
W 2nd St
N Grape Ct
W King St
N Giovanola Ave
W Rialto Ave
W Highland Ave
Foothill Fwy
W Base Line St
N Pepper Ave
N E St
N Waterman Ave
W Rialto
W Mill St
San Bernardi
1
2
3
4
Legend
Limits of Disturbance (2011)
Limits of Disturbance (2017)
Proposed Right-of-Way Acquisition
Temporary Construction Easement
Temporary Staging Area
Realignment of Existing Track 2016
Realignment of Existing Track 217
Temporary Shoofly Track 218
Temporary Shoofly Track 219
Proposed Drainage
Proposed Striping
Proposed 12-foot Block Wall
Source: StreetMap North American (2013)
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Figure 1-3 - Sheet 3
Project Layout Map
Mount Vernon Avenue Bridge Project

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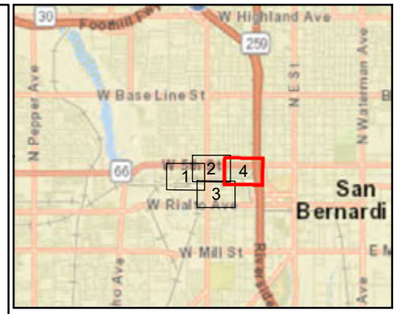

Legend

- Limits of Disturbance (2011)
- Limits of Disturbance (2017)
- Proposed Right-of-Way Acquisition
- Temporary Construction Easement
- Temporary Staging Area
- Realignment of Existing Track 216
- Realignment of Existing Track 217
- Shoofly Track 218
- Shoofly Track 219
- Proposed Drainage
- Proposed Striping
- Proposed 12-foot Block Wall

Source: StreetMap North American (2013)

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Figure 1-3 - Sheet 4
Project Layout Map
Mount Vernon Avenue Bridge Project

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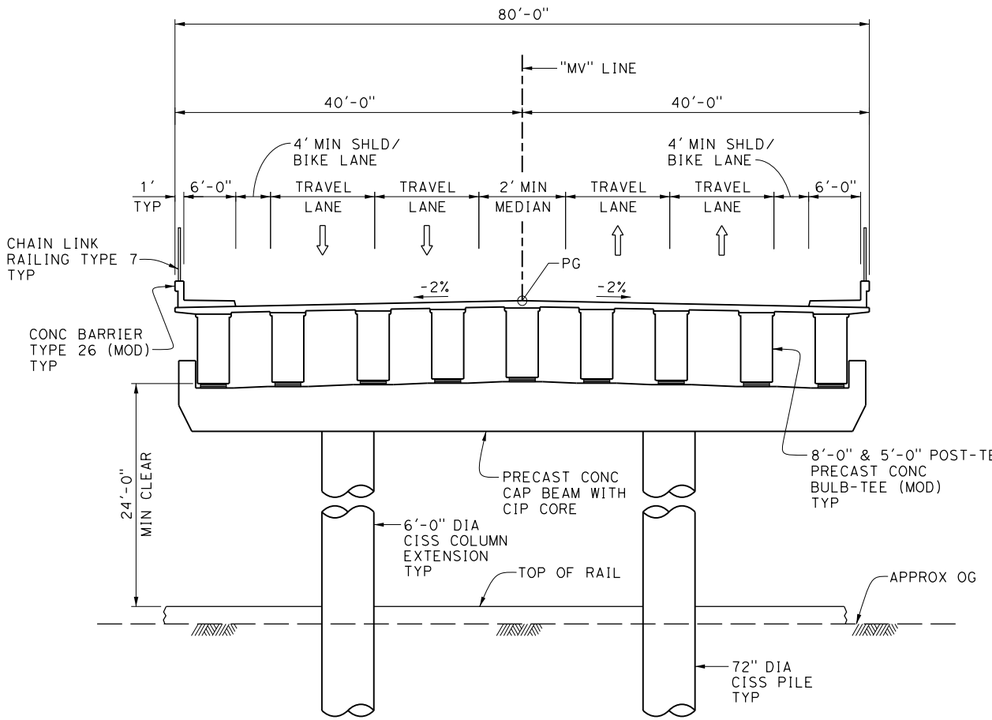
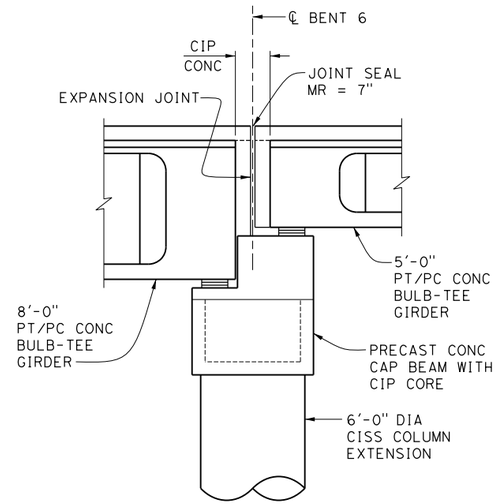


TYPICAL SECTION - BENT 6

1/8" = 1'-0"



CAP SECTION - BENT 6

1/4" = 1'-0"

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1.4.2 No-Build Alternative

Under the No-Build Alternative, no new or modified bridge or other physical improvements would be constructed on Mount Vernon Avenue between Rialto Avenue and West 5th Street. The existing bridge would be left in its current condition, and no structural or functional deficiencies would be corrected. Ongoing maintenance would continue. The No-Build Alternative does not assume that the existing bridge would undergo seismic retrofitting. The existing shoring that currently supports the bridge was upgraded in 2014 for a 10-year life; the BNSF license was extended for 10 years. Barring other safety issues, the bridge would remain open until at least 2024 under the No-Build Alternative. After 2024, it is unknown if the bridge would remain open or not. Describing and analyzing a No-Build Alternative helps decision-makers and the public compare the impacts of approving the proposed project with the consequences of not approving the proposed project.

Permanent closure of the bridge would result in an unreasonable social and economic burden on the local community. Accordingly, the No-Build Alternative has been determined to be imprudent and infeasible and would not meet the project purpose and need as previously described.

1.4.3 Identification of a Preferred Alternative

Full consideration was given to the results of the technical studies prepared for the project. After comparing and weighing the benefits and impacts of the Build Alternative (Preferred Alternative) and No-Build Alternative, the Build Alternative (Preferred Alternative) was identified as the preferred alternative. This decision was based on the Build Alternative fully addressing the purpose and need identified for the project, which is to provide a bridge that is structurally safe, meeting current seismic, design, and roadway standards. More specifically, implementation of the project would replace the existing bridge to improve seismic performance, provide standard vertical clearance over the rail tracks, and comply with American Association of State Highway and Transportation Officials (AASHTO) roadway cross section standards.

1.4.4 Alternatives Considered but Eliminated From Further Discussion Prior to "Draft" Supplemental Environmental Assessment

Alternatives that were considered and eliminated from further consideration were presented in the adopted 2011 EA/FONSI and that information is presented below. In addition, a discussion of the Retrofit/Rehabilitation Alternative, which has been eliminated from further consideration, is also presented.

In 1997, the New Mount Vernon Bridge Concept Study Report (DMJM 1997) evaluated four conceptual alternative bridge alignments. Two of these alignments were dropped from consideration during the study based on their impacts and costs. Three bridge types were studied further for Alternative Alignments 1 through 4 and included the following:

- Bridge Type A—Precast segmental concrete box girders (two independent structures).
- Bridge Type B—Trapezoidal steel girders with cast-in-place concrete decks (two independent structures).

- Bridge Type C—Precast segmental cable-stayed box girders (one single structure).

Four project-specific bridge criteria were evaluated for each of the three bridge types, including:

- Maintenance of north/south vehicular traffic.
- Minimized disruption to rail operations.
- Seismic performance.
- Structure maintenance.

The alternative alignments and bridge types considered were as follows:

- Alternative Alignment 1: This alternative was proposed as a new four-lane bridge, generally in the same location as the existing bridge. The horizontal alignment of this alternative would eliminate the existing curve in the bridge with minimal alterations to the intersections at West 2nd and West 4th Streets. However, adjusting the horizontal alignment would require the acquisition of properties fronting the bridge on the southwest side between West 2nd and West 3rd Streets. Advantages of this alternative alignment include minor impacts on BNSF rail operations, intermodal apron, and existing buildings. While this alternative would have some impacts on existing utilities, the impacts would be less than those for the other alternative alignments evaluated. All three bridge types considered for this alternative alignment would require complete closure of the existing bridge to vehicular and pedestrian traffic during construction. Bridge Type C would result in the least impact on rail facilities and operations, but Type A, the precast segmental box girder, would also result in minimal impacts. All three bridge types would afford the same level of seismic performance. Bridge Type A would require the least maintenance of all the bridge types; Type B would have the highest cost due to periodic painting. Alternative Alignment 1, the only viable alternative, has been carried forward to the current studies. Retrofit/rehabilitation or replacement of the Mount Vernon Avenue Bridge is needed because the current facility exhibits structural and functional deficiencies.
- Alternative Alignment 2: This alternative was proposed as a new four-lane bridge on an alignment west of the existing bridge. Once a new bridge was constructed, the existing bridge would have been demolished. Vehicular and pedestrian traffic could have been maintained on the existing bridge during construction of the new bridge. Construction outside of the existing bridge footprint would have required approval by the railroad operators. This alternative would have resulted in substantial impacts on BNSF intermodal facilities and operations, as well as Amtrak and Metrolink service. This alternative alignment also would have required relocating existing utilities, reconstructing both the West 2nd and West 4th Street intersections, and acquiring adjacent residences and businesses. All three bridge types considered for this alternative alignment would have allowed for vehicular and pedestrian traffic on the existing bridge during construction. Impacts on rail operations, seismic performance, and structure maintenance would be the same as those previously discussed for Alternative Alignment 1. Because this alternative would have required substantial alterations to the existing BNSF railroad facilities and the reconstruction of street improvements in a less desirable alignment for intersections and approaches, this alternative was withdrawn

from consideration. Although Alternative Alignment 2 meets the project purpose and need, it would require more substantial alterations to the existing BNSF intermodal facilities and operations, more extensive relocation of existing utilities, less desirable intersection/street/approach reconstruction locations for the West 2nd Street and West 4th Street intersections, and acquisition of both residential and commercial properties. Therefore, it was withdrawn from consideration.

- Alternative Alignment 3: This alternative was proposed as a new four-lane bridge on an alignment east of the existing bridge. Traffic would have been maintained on the existing Mount Vernon Avenue Bridge during construction, as previously discussed for Alternative Alignment 2. Also similar to Alternative Alignment 2, this alternative would have had substantial impacts on rail facilities and operations, but east of the existing bridge. Of particular concern were potential impacts on the nearby locally significant Santa Fe smokestack located just east of the bridge at West 4th Street. Other disadvantages of this alternative alignment would have included reconstruction of both the West 2nd and West 4th Street intersections, impacts on the Metrolink parking lot, and relocation of existing utilities. Like Alternative Alignments 1 and 2, this alternative also would have required acquisition of residential and commercial properties. Because this alternative would have required altering the existing BNSF railroad facility, modifying the existing Metrolink commuter parking lot, and reconstructing street improvements in a less desirable alignment for intersections and approaches, this alternative was withdrawn from consideration with no additional evaluation of bridge types. Although Alternative Alignment 3 meets the project purpose and need, it would have impacts on the Santa Fe smokestack and impacts on the Metrolink parking lot (in addition to impacts similar to Alternative Alignment 2). Therefore, it was withdrawn from consideration.
- Alternative Alignment 4: This alternative was proposed as a new split bridge with two southbound lanes west of and two northbound lanes east of the existing bridge. The split alignment would have allowed for construction of the new bridges while the existing bridge remained in service. The existing bridge would have been demolished once the new bridges were in operation. This alternative would have had impacts similar to those for Alternative Alignments 2 and 3 (i.e., utility relocations and property acquisitions). It would have resulted in the least desirable intersections at West 2nd and West 4th Streets and would have had the highest impact on railroad facilities and operations. Because this alternative would have required altering the existing BNSF railroad facility and reconstructing street improvements in a less desirable alignment for intersections and approaches, this alternative was withdrawn from consideration with no additional evaluation of bridge types. Although Alternative Alignment 4 meets the project purpose and need, it would have impacts on the Santa Fe smokestack and impacts on the Metrolink parking lot (in addition to impacts similar to Alternative Alignment 2). Therefore, it was withdrawn from consideration.
- Retrofit/Rehabilitation Alternative (2011 EA/FONSI Alternative 2): This alternative as proposed would have seismically retrofitted, rehabilitated, and widened the existing bridge to improve its structural safety and functionality. As part of this alternative, new footings would have been excavated and new piles drilled. Widening and retrofitting the existing structure would have involved improvements to the substructure to meet seismic standards. Additional work would have included complete deck replacement, girder strengthening, removal of lead paint, repainting, installation of new railings and roadway lighting, replacement or

retrofit/rehabilitation of expansion joints, and the addition of crash walls around the bridge piers. The existing roadway configuration and sidewalks would have been improved to provide a 72-foot-wide bridge with two 12-foot lanes in each direction, a 4-foot median, 4-foot shoulders, and 5-foot sidewalks. The sidewalks on the bridge would not meet ADA slope requirements following the retrofit/rehabilitation. The modifications associated with this alternative would have changed the overall visual appearance of the bridge as a result of the materials that would have been added to the bridge to bring it into compliance with current seismic standards. These modifications would likely have resulted in an adverse impact on those features that make the bridge eligible for listing on the NRHP. This alternative would not have addressed the nonstandard vertical and horizontal clearances associated with the bridge. In addition, this alternative would not have replaced all of the existing girders that have been determined to have neared their service life. The service life of the bridge would likely have been extended only by a limited 15 to 20 years beyond completion of the retrofit/rehabilitation. Taking into consideration the results of the 2004 Bridge Study Report and the previously described limitations, the PDT agreed at its April 6, 2004, meeting that the retrofit/rehabilitation alternative was not viable.

1.5 Permits and Approvals Needed

The following permits, reviews, and approvals listed in Table 1-2 would be required for proposed project construction.

Table 1-2. Required Permits, Reviews, and Approvals

Agency	Permit/Approval	Status
State Water Resources Control Board (SWRCB)	**Clean Water Act Section 402—The National Pollutant Discharge Elimination System (NPDES).** Prior to issuance of any grading permits, SBCTA will prepare a Stormwater Pollution Prevention Plan (SWPPP) and provide proof that a Notice of Construction was filed for the coverage under the state NPDES for construction-related discharges. This evidence will consist of a Waste Discharge Identification Number (WDID) issued by SWRCB.	To be submitted after approval of final Environmental Document

Agency	Permit/Approval	Status
State Office of Historic Preservation (SHPO)	As part of the Section 106 process, a Memorandum of Agreement (MOA) has been developed between the SHPO and Caltrans due to the finding of Adverse Effect for the bridge. Additional design details were developed in the MOA, which was finalized after public review of this Environmental Assessment. The MOA includes concurrence by the Caltrans local office (Caltrans District 8) and the City. Architectural design of the structures will be submitted to and approved by SBCTA prior to alteration of the existing historical resources.	A draft of the MOA was submitted to SHPO for review on December 3, 2008. This document was finalized and approved after public circulation of the draft Environmental Document. The final MOA was signed and executed on February 8, 2011. An amendment to the MOA was completed in March 2018 to extend the expiration date of the original MOA and to replace the City with SBCTA. A second amendment to the MOA was prepared and approved by SHPO on 09/05/2018. The second amendment to the MOA was prepared when Caltrans in consultation with SHPO determined that project scope changes subsequent to execution of the MOA resulted in the expansion of the APE, resulting in the potential to effect subsurface historical archaeological deposits within the northwest quadrant of the APE. As a result, a second amendment to the MOA and a Cultural Resources Discovery and Monitoring Plan to address the potential for subsurface sensitivity for historical archaeological deposits were prepared.
BNSF Railroad	Encroachment Permit application submittal during the Plans, Specifications, and Estimates (PS&E) final design. Cooperative Agreement process to commence during PS&E final design.	A series of discussions, including participation in the Value Analysis (VA) for the project, have occurred with BNSF, and preliminary plans were approved at the time of the VA. The Cooperative Agreement will be coordinated with the California Public Utilities Commission (CPUC) during the Project Specifications and Estimates (PS&E) (final design) phase of the project.
CPUC	Modifications to existing rail crossings are within the scope of CPUC's General Order (GO) 88-B "Rules for Altering Public Highway-Rail Crossings." A request for authorization shall be submitted to the CPUC through the CPUC's Rail Crossing Engineering Section (RCES).	The GO 88-B application will be coordinated with the CPUC's RCES during PS&E final design. It has a processing time of two to six weeks, and will be finalized once concurrence of all parties (railroad, City, and CPUC) is obtained.
City of San Bernardino	Vacate a portion of Fourth Street as a public roadway.	To be completed after approval of final Environmental Document

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Chapter 2. Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

As part of the scoping and environmental analysis carried out for the project, the following environmental issues were considered but no adverse impacts were identified. As a result, there is no further discussion about these issues in this document.

- *Coastal Zone:* The project is not within the State Coastal Zone.
- *Wild and Scenic Rivers:* The project is not in the vicinity of a designated Wild and Scenic River.
- *Farmlands/Timberlands*: There are no farmlands or timberlands within or adjacent to the project site.
- *Hydrology and Floodplains:* The project site is not located in a Federal Emergency Management Agency– (FEMA-) designated 100-year base floodplain. There will be no effects to floodplains because the project is not located within a 100-year base floodplain.
- *Sole Source Aquifer:* The project is not within a designated Sole Source Aquifer.
- *Encroachment on State Lands*: The project would not encroach on state lands.

Where short-term (construction) and long-term (operation) impacts would differ or where these impacts warrant independent discussion, separate headings are included and discussions are provided, as appropriate.

2.1 Human Environment

2.1.1 Land Use

2.1.1.1 EXISTING AND FUTURE LAND USE

Existing Land Use

Information used in this section is based on the *Mount Vernon Avenue Bridge Project* S*upplemental Community Impact Assessment Memorandum*, December 2017 (California Department of Transportation [Caltrans] 2017b). The proposed project is located in a highly developed urban area with commercial and residential uses as well as transportation uses associated with the nearby BNSF railroad facility and Metrolink/Amtrak station. Residential uses are located to the southwest, along the Mount Vernon Avenue service road between West 2nd Street and West 3rd Street, and also northwest of the project site. The City of San Bernardino General Plan identifies the area surrounding the project site as being an area with several individual land use designations, including 1) Industrial, 2) Commercial, 3) Residential, 4) Utilities, 5) Parks, 6) Other Retail/Service, and 7) Institutions/ Government (refer to Figure 2-1) (City of San Bernardino 2005). Existing development in the study area is generally consistent with the associated land use designations. The City of San Bernardino General Plan Circulation Element

also designates Mount Vernon Avenue as a Major Arterial, defined as roadways that can accommodate six or eight travel lanes, with or without raised medians, and carry high volumes of traffic. Major Arterials are the primary thoroughfares, linking the city of San Bernardino with adjacent cities and to the regional highway system. The existing development in the project area is generally consistent with the City of San Bernardino General Plan Land Use designations.

The City of San Bernardino (City) has approved eight specific plans that govern land use development in designated areas throughout the city. Specific plan designations provide incentives and policies that help businesses in an area become more economically viable. The northern portion of the project site is within the Paseo Las Placitas Specific Plan (also known as the Mount Vernon Corridor Specific Plan). The southern portion of the project site is not within any specific plan area.

The City of San Bernardino has also designated areas as Strategic Areas, which are intended to create, preserve, revitalize, and enhance selected areas of the city. The entire project site is within the Mount Vernon Strategic Area; however, policies established for this Strategic Area do not specifically address the proposed project.

Future Development

Future development trends near the project site in the city of San Bernardino are shown in Figure 2-2 and listed in Table 2-1. As can be seen, future development near the project site consists of a variety of land uses, from residential to commercial, indicative of the variety of land use designations in the surrounding area.

2.1.1.2 CONSISTENCY WITH FEDERAL, STATE, REGIONAL, AND LOCAL PLANS

Federal

Federal Transportation Improvement Program

The proposed project is included in the Southern California Association of Governments (SCAG) 2019 Federal Transportation Improvement Program (FTIP), under project number SBD31905.

Regional

The proposed project is included in the SCAG 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) under project number SBD31905.

Local

City of San Bernardino General Plan

The 2005 City of San Bernardino General Plan provides a blueprint for the city's growth and development. It covers areas within the boundaries of the city and areas outside of its boundaries (sphere of influence) that relate to planning activities. The City's General Plan is considered a long-term plan because it looks 20 years into the future, guided by a vision statement as well as key strategies for the city. The City's General Plan, which considers both current conditions and future needs, is the basis for determining long-term objectives as well as policies for day-to-day decision-making.

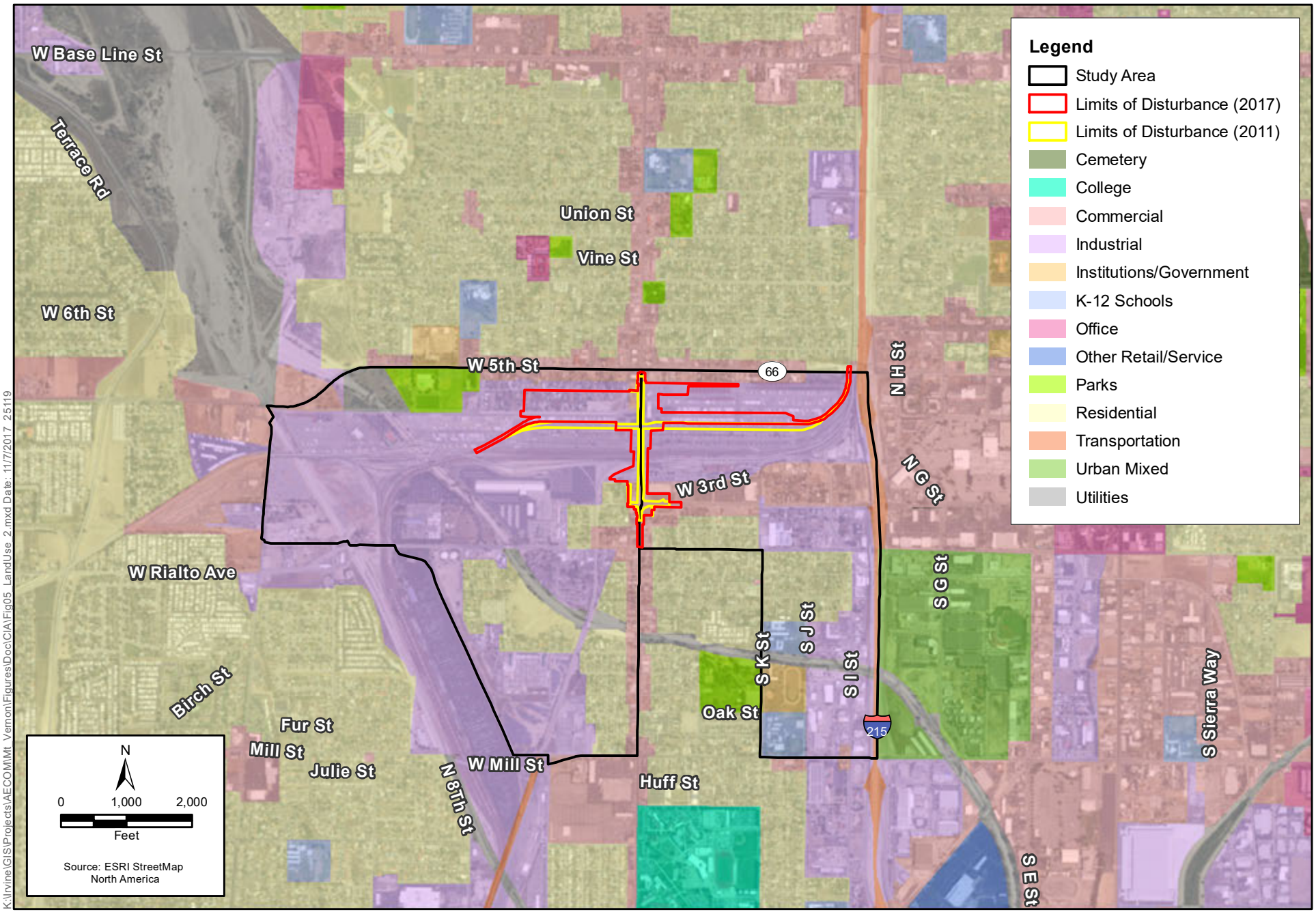

Figure 2-1
Existing Land Use Designations per City of San Bernardino General Plan
Mount Vernon Avenue Bridge Project

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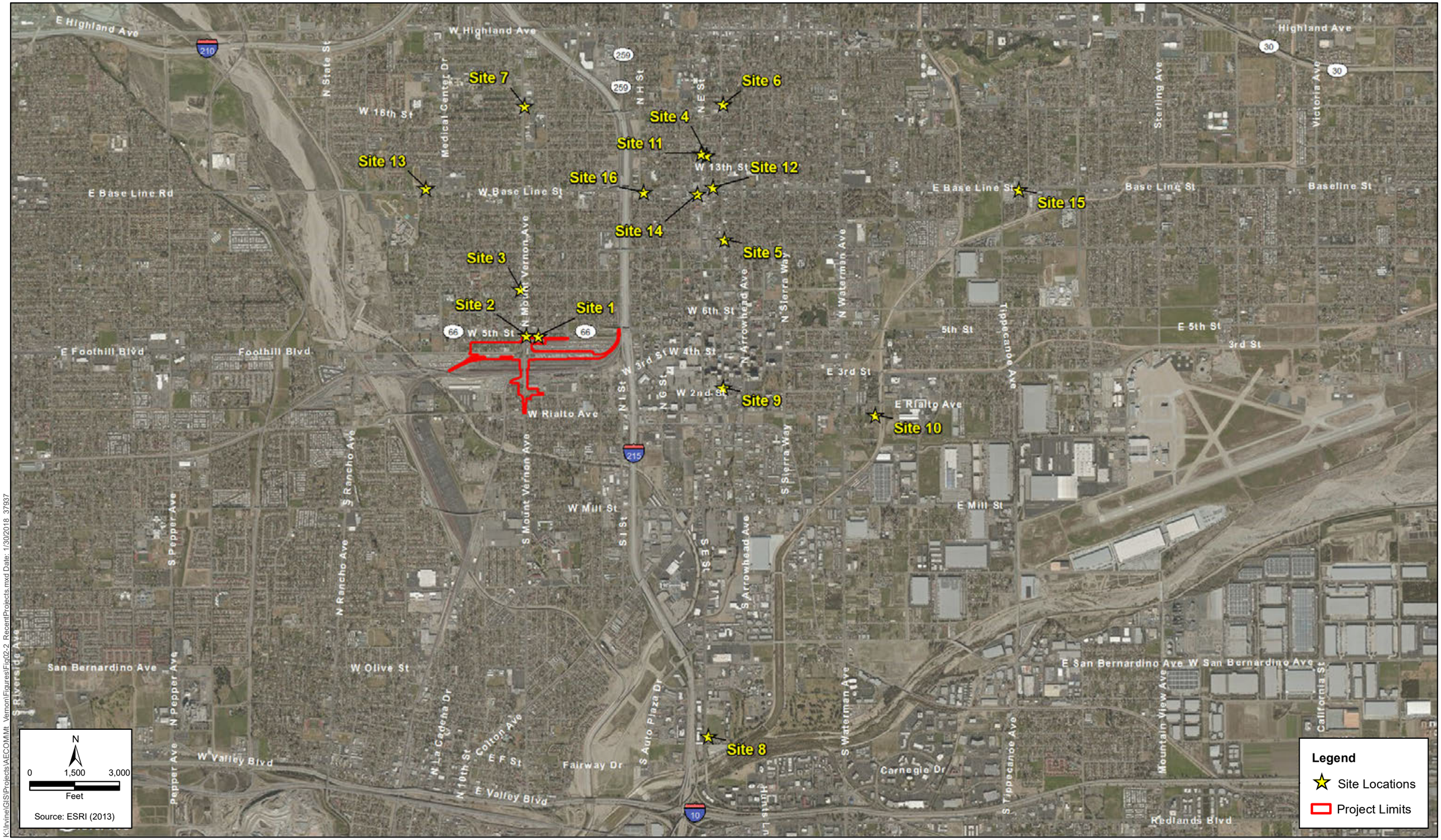

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Figure 2-2
Recent and Planned Development Projects
Mount Vernon Avenue Bridge Project

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Table 2-1. Planned Area Development

Site ID[1]	City ID	Address	Project	Status (updated August 1, 2018)
1	CUP14-13	1241 West 5th Street	Construct 6,365-square-foot La Nueva Copa Cabana restaurant and night club.	Pending plan check review.
2	CUP16-20	1293 West 5th Street	Extension of existing Pepe's Night Club.	Scheduled for Planning Commission on 8/14/18.
3	CUP16-24	708 North Mount Vernon Avenue	Religious facility, approximately 15,340 (square feet) sq. ft.	Revised planning application still under review.
4	CUP17-13	1351 North E Street	A 29-unit permanent supportive housing complex for low- income veterans.	Pending plan check submittal from applicant.
5	CUP17-20	955 North D Street	Outpatient recovery center within an existing commercial building.	Pending plan check submittal from applicant.
6	DP-D16-18	1605 North D Street	Conversion of existing office building into six residential units.	Scheduled for Planning Commission on 9/11/18.
7	DP-D16-20	1629 North Mount Vernon Avenue	Two-story commercial building.	Plan check approved.
8	DP-D16-27	East side of E Street, north of MacKay Drive	Office building, approximately 43,953 sq. ft.	Permit issued on 06/11/18.
9	DP-D17-09	221 North D Street	Construction of a truck parking facility.	Pending plan check submittal from applicant.
10	DP-P16-04	505/534 East Rialto Avenue	A 38-unit apartment complex.	Pending plan check review.
11	DP-P16-07	1360 North E Street	Mixed-use building with approximately 1,276 sq. ft. of mixed use and 1,448 sq. ft. of residential.	Pending plan check submittal from applicant.
12	DP-D16-23	Northeast corner of Baseline Street and Stoddard Avenue	Dental office.	Approved by Development Environmental Review Committee. Plan check approved.
13	CUP17-10	1710 West Baseline Street	Drive-thru car wash.	Approved by Planning Commission. Plan Check approved.
14	CUP17-02	505 West Baseline Street	Drive-thru car wash.	Permit Issued on 7/26/18.
15	CUP16-07	1295 East Baseline Street	Automobile dealership and repair shop.	Scheduled for Mayor and City Council Approval.
16	CUP13-21	799 West Baseline Street	Demolition of existing gas station/restaurant and construction of new gas station with convenience store, self-service car wash, and smog check service.	Permit Issued.

Source: City of San Bernardino, Community Development Department – Major Projects List (Updated August 1, 2018).
[1] Site ID number corresponds with Site ID numbers shown in Figure 2-2.

City of San Bernardino General Plan – Circulation Element

The 2005 City of San Bernardino General Plan Circulation Element addresses the need for a safe and efficient circulation system for the city's residents and visitors. As San Bernardino County's largest city, and given its location, the city of San Bernardino's transportation system has broad reach, serving the mobility of more than 186,000 residents. The Circulation Element includes guidance and goals related to improving the city's circulation system to meet the current and future needs of all its residents.

2.1.1.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

Temporary construction easements (TCEs) on 18 parcels would be required during the construction period to facilitate access to construction work areas (refer to Table 2-8). During this time, access to the properties would be maintained. These TCEs would occur on parcels adjacent to the project site but would not affect existing land use designations adjacent to the project site. Because the need for TCEs would be temporary, limited to the construction period, and the portion of the parcel that would be temporarily affected would be returned to the landowner after construction is completed, no adverse effects related to land use designations, land use plans, or policies would result. Construction would not result in any changes to the existing land use designations that would conflict with any federal, regional, or local plans or policies.

Permanent

The proposed project includes relocating a portion of the BNSF intermodal operations area, currently located east of the bridge, on the north side of the existing railroad tracks, to a new facility between Kingman Street and West 4th Street and between Cabrera Avenue and Mount Vernon Avenue. This would result in the permanent acquisition and relocation of 25 single-family residences and one multi-family residence. In addition, southwest of Mount Vernon Avenue Bridge, an additional six parcels would be acquired for proposed street widening. This would result in permanent acquisition and relocation of three single-family residences and one non-residential unit (car wash). In total, the proposed project would result in the additional permanent acquisition and relocation of 28 single-family residences, one multi-family residence, and one non-residential unit (car wash) beyond the acquisitions analyzed in the 2011 Environmental Assessment (EA)/Finding of No Significant Impact (FONSI). This would result in a permanent change in the current residential, commercial, industrial, and vacant land uses adjacent to the BNSF intermodal operations yard and parking northeast of the bridge. Southwest of the bridge, the existing residential and commercial land uses would change to transportation right of way. However, given the relatively small number of relocations compared with the number of households in the project area, the change in land use would not result in an adverse effect under the proposed project.

Although replacement of the Mount Vernon Avenue Bridge is not specifically identified in any of the applicable land use plans or policies, renovation of the bridge is consistent with local plans and policies pertaining to the safe and efficient movement of traffic throughout the city. Because the proposed project would provide a safe and reliable bridge structure with a normal useful lifespan, it would be considered consistent with adopted local plans and policies. The proposed project would not have a negative effect on implementation of the Paseo Las Placitas Redevelopment Plan or the Mount Vernon Corridor Strategic Area Plan.

The proposed project is also consistent with the City of San Bernardino General Plan Circulation Element, which classifies Mount Vernon Avenue as a Major Arterial. Although the proposed structure, with a two-lane configuration in each direction of travel, would be at variance with the typical six to eight lanes of the Major Arterials roadway classification, neither this classification nor the City of San Bernardino General Plan contains a specific requirement for Mount Vernon Avenue to be six to eight lanes if projected traffic does not warrant the need for six to eight lanes. As such, the proposed project would not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. Table 2-2 summarizes the comparison between each alternative and its consistency with applicable policies.

No-Build Alternative

Under the No-Build Alternative, no new or modified bridge improvements would be constructed at the project site. The existing shoring that currently supports the bridge was upgraded in 2014 for a 10-year life. Barring other safety issues, the bridge would remain open until 2024 under this alternative. After 2024, it is unknown if the bridge would remain open to vehicular and pedestrian traffic. If the bridge ultimately has to be closed then this alternative would be inconsistent with local and regional plans and policies, which identify Mount Vernon Avenue as a continuous major arterial through the project area.

2.1.1.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The Build Alternative (Preferred Alternative) would not conflict with any applicable federal, state, regional, or local programs, plans, or policies. No avoidance, minimization, and/or mitigation measures are required.

Table 2-2. Comparison between Build Alternative (Preferred Alternative) and No-Build Alternative

Plan or Program Name	Policy	Build Alternative (Preferred Alternative) Consistency	No-Build Alternative Consistency
Regional			
City of San Bernardino General Plan	Policy 2.2.5: Establish and maintain an ongoing liaison with Caltrans, the railroads, and other agencies to help minimize impacts and improve the aesthetics of their facilities and operations, including possible noise walls, berms, limitations on hours and types of operations, landscaped setbacks, and decorative walls along the periphery of facilities.	Consistent. Ongoing communication and coordination between the San Bernardino County Transportation Authority (SBCTA) shall, Caltrans, and BNSF has occurred regarding the Mount Vernon Avenue Bridge Project. This has led to the inclusion of a 12-foot block wall around the new BNSF intermodal operations area to shield it from surrounding uses.	Inconsistent. Under the No-Build Alternative, coordination between SBCTA, Caltrans, and BNSF may occur but would not lead to any improvements to enhance the aesthetics of BNSF facilities and operations.
	Policy 2.3.6: Circulation system improvements shall continue to be pursued that facilitate connectivity across freeway and rail corridors.	Consistent. The proposed project is a grade-separation project that would enhance connectivity across a rail corridor.	Inconsistent. Under the No-Build Alternative, no improvements would be made, and the bridge could close after 2024, which would not enhance connectivity across a rail corridor.
	Policy 2.3.7: Improvements shall be made to transportation corridors that promote physical connectivity and reflect consistently high aesthetic values.	Consistent. The proposed project is a grade-separation project that would promote physical connectivity by continuing the grade-separated crossing at Mount Vernon Avenue. The proposed project would also improve the aesthetics at the project site through construction of a 12-foot-high block wall and 20-foot-wide landscape buffer to provide aesthetic relief to adjacent viewers by blocking views of the rail yard.	Inconsistent. Under the No-Build Alternative, no improvements would be made, and the bridge could close after 2024, which would not promote physical connectivity. In addition, no improvements to the aesthetic environment would be made.
	Policy 2.8.1: Ensure that all structures comply with seismic safety provisions and building codes.	Consistent. The proposed project would comply with seismic safety provisions and building codes.	Inconsistent. The No-Build Alternative would not comply with seismic safety provisions and building codes because no improvements would occur.

Plan or Program Name	Policy	Build Alternative (Preferred Alternative) Consistency	No-Build Alternative Consistency
	Goal 6.7: Work with the railroads and other public agencies to develop and maintain railway facilities that minimize the impacts on adjacent land uses.	Consistent. The proposed project involves coordination between SBCTA, Caltrans, and BNSF to maintain BNSF facilities and operations while minimizing adverse environmental effects.	Inconsistent. Under the No-Build Alternative, coordination between SBCTA, Caltrans, and BNSF may occur but would not lead to any improvements to BNSF's facilities or operations.
	Policy 6.7.3: Encourage the provision of a buffer between residential land uses and railway facilities, and encourage the construction of sound walls or other mitigating noise barriers between railway facilities and adjacent land uses.	Consistent. The proposed project includes the construction of a 12-foot block wall around the new BNSF intermodal operations area to shield it from surrounding areas.	Inconsistent. No buffer between BNSF facilities and surrounding land uses would be constructed with this alternative.

2.1.2 Parks and Recreational Facilities

Information used in this section is based on the *Mount Vernon Avenue Bridge Project* S*upplemental Community Impact Assessment Memorandum*, December 2017 (Caltrans 2017b). Public parks and recreational facilities identified in the *Supplemental Community Impact Assessment Memorandum* as being within 0.5 mile of the project site are presented in Table 2-3.

Table 2-3. Parks and Recreational Facilities within 0.5 mile of the Project Limits

Park Name	Address	Size and Facilities	Distance to Project Limits
Pioneer Park[1]	555 W 6th Street San Bernardino, CA 92410	5 acres. San Bernardino Public Library shares grounds; public benches and memorials.	0.45 mile
Lytle Creek Park	San Bernardino, CA 92410	17.98 acres. Community center, basketball court, tennis courts, volleyball courts, handball courts, playgrounds, trails, public benches, and BBQ grills.	0.38 mile
Guadalupe Field Park	780 Roberds Avenue N, San Bernardino, CA 92411	2.25 acres. Baseball diamond, picnic tables, and BBQ grills.	0.40 mile
Nunez Park and Gateway Park	1717 W 5th Street, San Bernardino, CA 92411	These two parks share some facilities. Combined, they equal 22.04 acres. Baseball diamond, soccer field, basketball courts, tennis courts, racquetball courts, swimming pool, and playground areas.	0.15 mile
Ninth Street Park (also known as Bobby Vega Park)	2931 Garner Avenue, San Bernardino, CA 92411	3.62 acres. Tennis courts, picnic area, BBQ grills, and playground.	0.45 mile
La Plaza Park	685 N Mt. Vernon Avenue San Bernardino, CA 92411	2.04 acres. Playground, picnic area, benches, and BBQ grills.	0.25 mile
Gateway Park	1717 W 5th Street, San Bernardino, CA 92411	See notes on Nunez Park, above.	0.20 mile

2.1.2.1 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

Construction effects on community facilities, including parks and recreational facilities, under the proposed project would be the same as those identified in the adopted 2011 EA/FONSI, except that the limits of construction would be expanded under the proposed project to accommodate additional improvements and the duration of construction would be longer (approximately 32 months under the proposed project compared with approximately 24 months in the adopted 2011 EA/FONSI). Expansion of the limits of disturbance, as shown in Figure 1-3,

[1] Pioneer Park appears to have been officially closed by the City of San Bernardino; however, the grounds appear to be maintained as part of the San Bernardino Public Library, which also sits on the site and is therefore still included in this table.

would place construction activities approximately one block west of Gateway Park under the proposed project compared with multiple blocks away under the adopted 2011 EA/FONSI.

Construction activities would result in temporary, localized, site-specific disruptions to the community in the immediate vicinity of the limits of disturbance, which would result primarily from construction-related traffic changes associated with trucks and equipment in the area; partial and/or full street and lane closures, some of which would require detours; increased noise and vibration; light and glare; and changes in air emissions. However, no TCEs would be required from any community facilities, including parks, and no direct impacts on these facilities would result. Vehicle and pedestrian detours could affect access to local parks and recreation areas during the construction period. The use of detour routes along Rialto Avenue, G and H Streets, and 5th Street may be required to travel around the areas that would be affected by construction. However, access would be maintained at all times to parks within 0.5 mile of the project site (see Table 2-3); parking would not be affected at these parks.

Because construction activities would be temporary and the effects would not be substantially different from the nuisance effects associated with typical construction activities throughout Southern California, no adverse effects on park and recreational facilities are expected to occur.

Permanent

The proposed project would provide overall operational benefits, including improved vehicular safety and crossing times, as a result of the renovated Mount Vernon Avenue Bridge. This would improve access to community facilities, including parks and recreational facilities, in the area.

Section 4(f) Properties

The publicly owned parks and recreation areas within 0.5 mile of the project area, identified in Table 2-3, would not be affected by the proposed project. However, the existing Mount Vernon Avenue Bridge is a historic resource and eligible for listing on the National Register of Historic Places (NRHP); it is, therefore, a Section 4(f) resource. The Section 4(f) evaluation included in the adopted 2011 EA/FONSI remains valid and is included as Appendix A to this Supplemental EA.

No-Build Alternative

Under the No-Build Alternative, the proposed project improvements would not be carried out. Therefore, existing parks and recreational facilities in the area would not be affected, and no direct or indirect adverse impacts on recreational and Section 4(f) resources would occur. However, if the bridge has to ultimately be closed to pedestrian and vehicular traffic, then this could result in park users having to utilize more circuitous routes to access these facilities.

2.1.2.2 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The Build Alternative (Preferred Alternative) would not result in direct impacts on parks and recreational facilities in the project area. No avoidance, minimization, and/or mitigation measures are required.

2.1.3 Growth

2.1.3.1 REGULATORY SETTING

The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with the National Environmental Policy Act (NEPA) of 1969, require evaluation of the potential environmental effects of all proposed federal activities and programs. This provision includes a requirement to examine indirect effects, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations (40 Code of Federal Regulations [CFR] 1508.8) refer to these consequences as indirect impacts. Indirect impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

First-Cut Screening

Caltrans, in conjunction with the Federal Highway Administration (FHWA) and the U.S. Environmental Protection Agency (EPA), developed a guidance document titled *Guidance for Preparers of Growth-Related, Indirect Impact Analyses* (May 2006). The information below is based on that guidance.

The first step in determining the likely growth potential for a roadway improvement project is to perform a "first-cut screening," which focuses on answering the following questions:

- Accessibility – To what extent would changes in accessibility affect growth or land use (i.e., its location, rate, type, or amount)?
- To what extent would travel, travel times, costs, or accessibility to employment, shopping, or other destinations be changed?
- Would this change affect travel behavior, trip patterns, or the attractiveness of some areas to development over others?
- Resources of Concern/Land Use – To what extent would resources of concern be affected by this growth or land use change?

Information used in this section is based on the *Mount Vernon Avenue Bridge Project Supplemental Community Impact Assessment Memorandum*, December 2017 (Caltrans 2017b).

2.1.3.2 AFFECTED ENVIRONMENT

According to the SCAG 2016–2040 RTP/SCS, the population of San Bernardino County in 2000 was 1,719,000. By 2015, the population had increased to 2,111,000, and by 2040, the population is expected to be 2,731,000. The city of San Bernardino had a population of 211,900 in 2012. By 2040, the population is anticipated to be 257,400. The city of San Bernardino had 59,300 households in 2012. That number is expected to increase to 77,100 by 2040.

The regional growth forecast was developed from the regional forecast methodology used in development of the 2012 RTP growth forecast, updated with demographic-economic assumptions. As the population grows, so too does the effort to maintain and enhance the transportation system to handle the challenges of growth. One of the continuing challenges

facing the SCAG region is that the overall transportation system is aging rapidly and deteriorating, an issue that will need to be addressed to accommodate changing needs and growth in the communities.

2.1.3.3 BUILD ALTERNATIVE (PREFERRED ALTERNATIVE)

Temporary

As concluded in the adopted 2011 EA/FONSI, growth effects under the proposed project would be unlikely during construction because the proposed project would not increase the population.

Permanent

The first-cut screening analysis included in the adopted 2011 EA/FONSI is applicable to the proposed project because no factors that could influence growth have changed since the EA/FONSI was adopted. The first-cut screening analysis in the adopted 2011 EA/FONSI determined that growth resulting from the proposed project is not foreseeable. Therefore, a growth-related analysis is not warranted for the proposed project. This finding remains applicable.

2.1.3.4 NO-BUILD ALTERNATIVE

Although the mobility of populations in the vicinity of the project area would be affected, unplanned growth due to the potential elimination of the Mount Vernon Avenue crossing after 2024 would not be likely. As such, no growth-related impacts would occur under the No-Build Alternative.

2.1.4 Community Impacts

2.1.4.1 COMMUNITY CHARACTER AND COHESION

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). The Federal Highway Administration (FHWA) in its implementation of NEPA (23 USC 109[h]) directs that final decisions on projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Affected Environment

Information used in this section is based on the *Mount Vernon Avenue Bridge Project Supplemental Community Impact Assessment Memorandum*, December 2017 (Caltrans 2017b).

The study area for the proposed project includes the populations and communities that are most likely to experience adverse effects from physical improvements associated with the proposed project. The study area for the proposed project includes Census Tract 49, Block Groups 2 and 4, located within the city of San Bernardino (refer to Figure 2-3, Community Study Area).

Race and Ethnicity

The study area is highly developed with commercial and residential uses as well as transportation uses associated with the nearby BNSF railroad facility and Metrolink/Amtrak station. Persons identifying as Hispanic/Latino make up the largest ethnic group in the study area (89 percent), the city (62 percent), and the county (51 percent). As such, the percentage of Hispanic/Latino persons in the study area is measurably higher than the percentages in both the city and county, indicating a predominately minority community. Non-Hispanic whites are the next largest racial/ethnic group in the study area, accounting for five percent of the population, compared with 17 percent in the city and 31 percent in the county. Race and ethnicity information for the study area, the City of San Bernardino, and San Bernardino County is provided in the table below.

Table 2-4. Race and Ethnicity

	Total Population	Hispanic/ Latino (%)	White (%)	Black or African American (%)	Native American (%)	Asian (%)	Native Hawaiian/Pacific Islander (%)	Other Race (%)	Two or More Races (%)
County of San Bernardino	2,094,769	51	31	8	<1	7	<1	<1	2
City of San Bernardino	214,112	62	17	14	<1	4	<1	<1	2
Study Area*	3,718	89	5	3	1	2	0	0	0

* Study area includes Census Tract 49, Block Groups 2 and 4.
Source: *Mount Vernon Avenue Bridge Project – Supplemental Community Impact Assessment Memorandum*, December 2017.

Housing

The average household size in the study area is 4.68 persons. This is larger than the average household size for the city (3.55 persons) and the county (3.33 persons). The occupancy and vacancy rates of the study area are comparable to those of the city and county; however, the study area has a lower percentage of owner-occupied housing units (42 percent) compared with the city at 47 percent and county at 60 percent. The housing characteristics of the study area, city of San Bernardino, and San Bernardino County are listed in the table below.

Table 2-5. Housing Characteristics

	Total Households	Average Household Size	Housing Units		Occupied Housing Units	
			Occupied	Vacant	Owner Occupied	Renter Occupied
County of San Bernardino	614,325	3.33	87%	13%	60%	40%
City of San Bernardino	57,580	3.55	92%	8%	47%	53%
Study Area*	771	4.68	87%	13%	42%	59%

* Study area includes Census Tract 49, Block Groups 2 and 4.
Source: *Mount Vernon Avenue Bridge Project – Supplemental Community Impact Assessment Memorandum*, December 2017.

Income and Poverty

According to the U.S. Census Bureau, the labor force for the study area is 1,449 persons, the labor force for the city is 88,503 persons, and the labor force for the county is 948,728 persons. The unemployment rate in the study area is 18 percent, roughly the same as the unemployment rate in the city (17 percent) but slightly higher than the unemployment rate in the county (13 percent). This trend also corresponds to income data for the study area, city, and county. The percentage of all people below the poverty level is 33 percent in the study area, 33 percent in the city, and 19 percent in the county. The study area has a lower median household income ($30,440) than both the city ($37,047) and the county ($53,433). The median incomes for the study area, city, and county are higher than the 2017 federal annual income poverty guideline threshold of $24,600 for a household of four, as identified by the U.S. Department of Health and Human Services. The economic data are summarized in the table below.

Table 2-6. Economic Data and Income

	Total in Civilian Labor Force	Unemployment Rate	Median Household Income	Persons below Poverty Level
County of San Bernardino	948,728	13%	$53,433	19%
City of San Bernardino	88,503	17%	$37,047	33%
Study Area*	1,449	18%	$30,440	33%

* Study area includes Census Tract 49, Block Groups 2 and 4.
Source: *Mount Vernon Avenue Bridge Project – Supplemental Community Impact Assessment Memorandum*, December 2017.

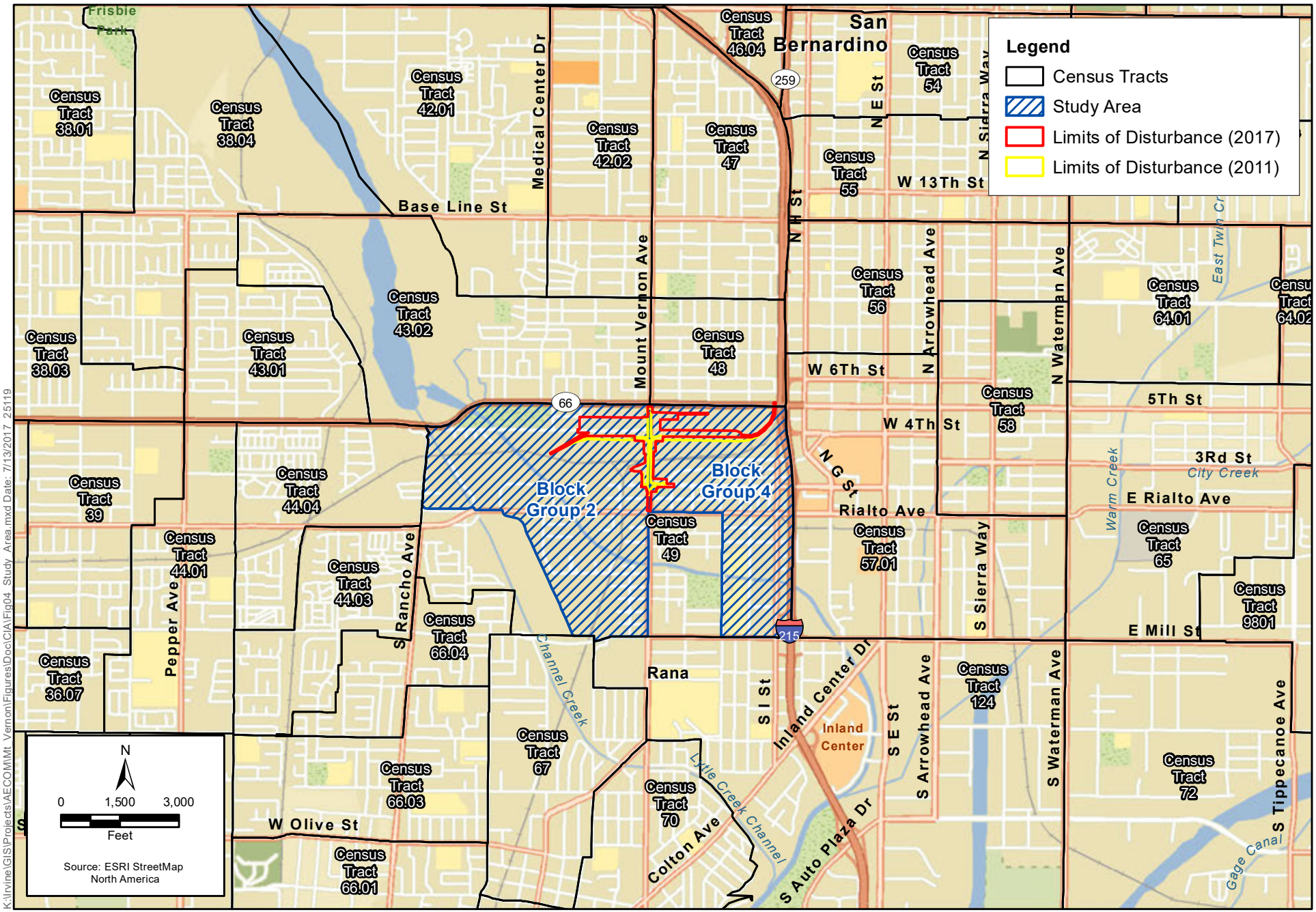

Figure 2-3
Community Study Area
Mount Vernon Avenue Bridge Project

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Community Services

Community services and facilities are an important aspect of neighborhood identity and can be critical resources for the community. Occasionally, transportation projects may affect community services, either positively or negatively, thereby affecting the character and cohesion of a community, either temporarily or permanently. The community facilities and services near the project site are listed in the table below.

Table 2-7. Community Facilities and Services

Type	Name	Address	Distance from Project (miles)
Fire/EMS	San Bernardino Fire Department, Station #222	1201 West 9th Street	0.48
Police/Sheriff	San Bernardino Police Department	1584 West Base Line Street, #106	1.06
	San Bernardino Police Department	710 North D Street	1.22
Schools	Lytle Creek Elementary School	275 South K Street	0.45
	Ramona Alessandro Elementary School	670 North Ramona Avenue	0.20
	Mount Vernon Elementary School	1271 West 10th Street	0.60
	Richardson PREP HI Middle School	455 South K Street	0.62
Parks	Gateway Park	1717 West 5th Street	0.25
	La Plaza City Park	685 North Mount Vernon Avenue	0.20
	Encanto Park	West 10th Street/North Garner Avenue	0.60
	Lytle Creek Park	South K Street/West Oak Street	0.45
	Sal Saavedra Field	780 Roberds Avenue North	0.41
Community Centers	Senior Citizens Center	600 West 5th Street	0.75
	San Bernardino Area Chamber of Commerce	546 West 6th Street	0.85
Places of Worship	Our Lady of Guadalupe Church	1430 West 5th Street	0.10
	Iglesia del Nazareno	1495 West Union Street	0.50
	Temple of Missionary Baptist Church	1583 West Union Street	0.62
	Casa de Oracion Camino de Vida	1065 West 8th Street	0.53
	Saint Philip the Apostle Melkite Greek Catholic Church	923 West Congress Street	0.60
	Downtown Apostolic Church	766 West 6th Street	0.53
	Holy Tabernacle Church	1322 West Belleview Street	0.15
Library	Villasenor Branch Library	525 North Mount Vernon Avenue	0.04
Transportation Centers	Metrolink San Bernardino Station Park and Ride	1204 West 3rd Street	>0.01
	San Bernardino Greyhound Bus Station	596 North G Street	0.55
	Omnitrans Bus Terminal	1700 West 5th Street	0.30

Source: *Mount Vernon Avenue Bridge Project – Supplemental Community Impact Assessment Memorandum*, December 2017.

Environmental Consequences

Build Alternative (Preferred Alternative)

Temporary

Construction effects on community character and cohesion under the proposed project would be the same as under the previously adopted 2011 EA/FONSI, except that the limits of

construction would be expanded under the proposed project to include additional improvements (see Figure 1-3) and the duration of construction would be longer (approximately 32 months under the proposed project compared with approximately 24 months under the adopted 2011 EA/FONSI). This would expand the area of the community that would be exposed to construction activities. These construction activities would result in temporary, localized, site-specific disruptions to the community in these areas for a longer period of time. The disruptions would stem primarily from construction-related traffic changes associated with trucks and equipment in the area; partial and/or complete street and lane closures, some of which would require detours; increased noise and vibration; light and glare; and changes in air emissions. As identified in the previously adopted 2011 EA/FONSI, traffic, including Omnitrans bus routes, would most likely be detoured around the project site via Rialto Avenue, G and H Streets, and 5th Street during construction. In addition, traffic, including Omnitrans bus routes, using 2nd Street to access Mount Vernon Avenue would very likely be detoured to Rialto Avenue. Signage would be placed along the detour routes to guide motorists. These detours would result in changes in the bus routes that typically travel along or cross Mount Vernon Avenue, including Routes 1, 3, 4, and 14. Advanced warning of any changes in bus routes would be posted in buses and at stations so that travelers would be aware in advance of any changes.

During construction, there would be no pedestrian route across the BNSF rail yard at the Mount Vernon Avenue Bridge location during the two-year construction period. The shortest alternative pedestrian route is approximately two miles in length. This would affect pedestrians, including students who walk to school and may have to cross the BNSF rail yard at Mount Vernon Avenue Bridge. Therefore, it would be necessary to provide alternative motorized means of transportation for pedestrians while the bridge is inaccessible.

Measure **TR-2** in the previously adopted 2011 EA/FONSI stated that a bus pass for area residents would be provided to compensate for pedestrian access that would be eliminated by closure of the bridge during construction. Measure **TR-2** would ensure mobility for area residents and students who would be affected by closure of Mount Vernon Avenue Bridge during construction. Under the proposed project, measure **TR-2** would still apply but would be required for a longer period of time compared with that of the previously adopted 2011 EA/FONSI, which stated that the measure would be required from mid-2012 to mid-2014.

Because construction activities would be temporary, they would not be likely to have effects that would be substantially different from the nuisance-like effects associated with typical construction projects throughout Southern California. No short-term adverse effects are expected, and this conclusion is consistent with the conclusion of the previously adopted 2011 EA/FONSI. No new measures would be required as a result of the proposed project.

No-Build Alternative

Under the No-Build Alternative, the project improvements would not occur; therefore, there would be no short-term or long-term direct or indirect adverse impacts on community character or cohesion under this alternative. However, if the bridge ultimately has to be closed to pedestrian and vehicular traffic, this could have a negative effect on community character and cohesion because this point of connection between the communities north and south of the bridge would be eliminated. This would result in a particularly adverse effect on pedestrians because

there are no other points of connectivity within convenient walking distance of Mount Vernon Avenue, with H Street being approximately 0.75 mile to the east and Rancho Avenue approximately one mile to the west. This would result in total walking distances of approximately two miles to the east and three miles to the west to get from the area on the north side of the bridge to the area on the south.

2.1.4.2 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Measure **TR-2** from the previously adopted 2011 EA/FONSI would apply to the proposed project (discussed in further detail in Section 2.1.5) to maintain mobility for individuals (including both pedestrians and cyclists) who would be affected by the bridge closure. Measures **R-1**, **R-2**, and **R-3** (refer to Section 2.1.5.3); **EJ-1** (refer to Section 2.1.6.3); and **UT-1**, and **UT-2** (refer to Section 2.1.7.3), adopted in the 2011 EA/FONSI, would be applicable to the revised project and implemented. In addition to those measures, the following new avoidance and minimization measures were identified in the 2017 *Supplemental Community Impact Assessment Memorandum* and shall be implemented.

C-1 During construction, access to all properties will be maintained.

C-2 SBCTA will prepare a sensitive community outreach plan that will identify and develop outreach activities targeted to minority and low-income residents during the final design and implementation process for the project. Community outreach will include providing timely information about anticipated construction activities to affected citizens and adjacent property owners. Notification methods will include options that are readily available to the target population, such as multi-language fliers, mailers, and posters as well as emails.

2.1.5 Relocations and Real Property Acquisition

2.1.5.1 REGULATORY SETTING

The Department's Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (Uniform Act), and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of the RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix C for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, persons with disabilities, religion, age, or sex. Please see Appendix B for a copy of the Department's Title VI Policy Statement.

2.1.5.2 AFFECTED ENVIRONMENT

Information used in this section is based on the *Mount Vernon Avenue Bridge Project Supplemental Community Impact Assessment Memorandum* (Caltrans 2017b) and *Mount Vernon Avenue Bridge Project Relocation Impact Report* (Caltrans 2017c).

Description of Study Area

The study area is highly developed with commercial and residential uses as well as transportation uses associated with the nearby BNSF railroad facility and Metrolink/Amtrak station. Residential neighborhoods are located in both the northwest and northeast portion of the study area as well as the southwest and southeast portion of the study area. Residential neighborhoods are also located along the service road at the southwest end of the bridge, between West 2nd and West 3rd Streets.

Commercial establishments in the project area are dominated by automobile-related businesses, such as auto repair shops, tire/parts retailers, and a car wash. Other prominent commercial operations include bars/restaurants, ethnic food markets, discount stores, and service-oriented businesses, such as hair salons, shoe repair shops, and video rental establishments. The car wash, tire retailer, and shoe repair shop, as well as a Metrolink parking structure, are located at the south end of the bridge, at the northwest and southwest corners of Mount Vernon Avenue. The majority of the commercial establishments are neighborhood-level retailers. The residential properties surrounding the project, but primarily along Rialto Avenue, are almost entirely single-family structures, with few multi-family units.

2.1.5.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

A summary of TCEs is provided below in Table 2-8. A total of 18 parcels would require TCEs under the proposed project. Access to these properties would be maintained. Because these would be temporary and the portions of the parcels required during construction would be restored and returned to their owners following construction, no permanent adverse effects would result.

Table 2-8. Temporary Construction Easements under the Proposed Project

Parcel Number	Address	Existing Land Use
0138-191-01	1293 West 5th Street, San Bernardino, CA 92411	Commercial/Night Club
0138-181-25	No Property Address Found	Vacant
0138-181-24	Protected per CA Govt. Code Sect. 6254.21	Vacant
0138-181-23	472 North Mount Vernon Avenue, San Bernardino, CA 92410	Motel
0138-181-22	Protected per CA Govt. Code Sect. 6254.21	Vacant
0138-181-46	1305 West 5th Street, San Bernardino, CA 92411	Retail
0138-182-19	436 North Mount Vernon Avenue, San Bernardino, CA 92410	Vacant
0138-182-20	Protected per CA Govt. Code Sect. 6254.21	Commercial
0138-182-21	436 North Mount Vernon Avenue, San Bernardino, CA 92410	Vacant
0138-283-40	196 North Mount Vernon Avenue, San Bernardino, CA 92410	Auto Repair
0138-283-16	190 North Mount Vernon Avenue, San Bernardino, CA 92410	Single-family Residential
0138-283-17	170 North Mount Vernon Avenue, San Bernardino, CA 92410	Retail
0138-283-18	No Property Address Found	Parking Lot
0138-283-19	160 North Mount Vernon Avenue, San Bernardino, CA 92410	Single-family Residential
0138-291-16	151 North Mount Vernon Avenue, San Bernardino, CA 92410	Single-family Residential
0138-291-17	153 North Mount Vernon Avenue, San Bernardino, CA 92410	Single-family Residential
0138-291-18	155 North Mount Vernon Avenue, San Bernardino, CA 92410	Single-family Residential

Parcel Number	Address	Existing Land Use
0138-211-01	1535 West 4th Street, San Bernardino, CA 92411	BNSF
Source: *Supplemental Community Impact Assessment Memorandum* (Caltrans 2017b)		

Permanent

A summary of permanent acquisitions by assessor parcel number is provided in Table 2-9. Three parcels would require permanent partial acquisition. The proposed project would also require permanent full acquisition of 63 parcels to implement the project. Six of these parcels were identified in the adopted 2011 EA/FONSI as permanent partial acquisitions (parcels 138-251-04 through 138-251-09); no permanent property acquisitions were identified in that document. Many of the parcels are either vacant or already owned by BNSF and therefore would not require relocation. However, 28 single-family residences, one multi-family residence (duplex), and one nonresidential unit (car wash) would be fully acquired under the proposed project and would require relocation. The residential acquisitions would affect a total of 29 residential units and approximately 107 residents.[2]

Table 2-9. Permanent Acquisitions under the Revised Project

Assessor Parcel Number	Address	Existing Land Use	Proposed Land Use	Partial or Full Acquisition	Require Relocation Yes/No
0138-174-11	1457 West Kingman Street, San Bernardino CA 92411	Single-family Residence	Intermodal Yard	Full	Yes
0138-174-12	1455 West Kingman Street, San Bernardino, CA 92411	Vacant lot	Intermodal Yard	Full	No
0138-174-13	1472 West 4th Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-174-26	1479 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-182-01	No Property Address Found	Vacant	Intermodal Yard	Full	No
0138-182-02	1447 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-182-03	1439 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-182-04	1431 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-182-34	1432 West 4th Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-182-05	No Property Address Found	Vacant	Intermodal Yard	Full	No
0138-182-07	1407 West Kingman Street, San Bernardino, CA 92410	Residential	Intermodal Yard	Full	Yes
0138-182-08	1399 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-182-09	1397 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes

[2] Estimate is from the Relocation Impact Report; estimate of residents is based on an average of 3.55 persons per household (2011–2015 U.S. Census Statistics).

Assessor Parcel Number	Address	Existing Land Use	Proposed Land Use	Partial or Full Acquisition	Require Relocation Yes/No
0138-182-10	No Property Address Found	Vacant	Intermodal Yard	Full	No
0138-182-11	1371 West Kingman Street, San Bernardino, CA 92410	Residential	Intermodal Yard	Full	Yes
0138-182-12	1367 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-182-13	1357 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-182-35	1438 West 4th Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-182-36	1442 West 4th Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-182-37	1448 West 4th Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-182-38	1415 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-174-01	443 Cabrera Avenue, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-174-02	No Property Address Found	Vacant	Intermodal Yard	Full	No
0138-174-05	1507 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-174-06	1501 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-174-07	1495 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-174-08	1487 West Kingman Street, San Bernardino, CA 92410	Residential	Intermodal Yard	Full	Yes
0138-174-18	1522 West 4th Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-174-20 0138-174-19	1528 West 4th Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-174-24	1515 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-174-25	1521 West Kingman Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	No
0138-174-22	1496 West 4th Street, San Bernardino, CA 92411	Residential	Intermodal Yard	Full	Yes
0138-181-25	No Property Address Found	Vacant	Pedestrian Ramp and Retaining Wall	Partial	No
0138-182-19	436 North Mount Vernon Avenue, San Bernardino, CA 92410	Vacant	Pedestrian Ramp and Retaining Wall	Partial	No
0138-182-22	Protected per CA Govt. Code Sect. 6254.21	BNSF	Yard Buildings	Full	No
0138-211-01	1535 West 4th Street, San Bernardino, CA 92411	BNSF	Aerial Easements	Full	No

Assessor Parcel Number	Address	Existing Land Use	Proposed Land Use	Partial or Full Acquisition	Require Relocation Yes/No
0138-211-06	No Property Address Found	BNSF	Aerial Easements	Full	No
0138-182-28	1364 West 4th Street, San Bernardino, CA 92411-1390	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-29	1390 West 4th Street, San Bernardino, CA 92411-1364	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-42	1430 West 4th Street, San Bernardino, CA 92411-1390	Industrial	Intermodal Yard	Full	No
0138-182-33	Protected per CA Govt. Code Sect. 6254.21	Industrial	Intermodal Yard	Full	No
0138-182-32	1418 West 4th Street, San Bernardino, CA 92411	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-39	1430 West 4th Street, San Bernardino, CA 92411	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-14	1343 West Kingman Street, San Bernardino, CA 92411	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-26	Protected per CA Govt. Code Sect. 6254.21	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-27	1358 West 4th Street, San Bernardino, CA 92411	BNSF/Vacant	Intermodal Yard	Full	No
0138-174-14	Protected per CA Govt. Code Sect. 6254.21	BNSF/Vacant	Intermodal Yard	Full	No
0138-174-15	Protected per CA Govt. Code Sect. 6254.21	BNSF/Vacant	Intermodal Yard	Full	No
0138-174-21	Protected per CA Govt. Code Sect. 6254.21	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-15	1337 West Kingman Street, San Bernardino, CA 92411	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-16	Protected per CA Govt. Code Sect. 6254.21	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-17	1317 West Kingman Street, San Bernardino, CA 92411	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-18	Protected per CA Govt. Code Sect. 6254.21	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-22	Protected per CA Govt. Code Sect. 6254.21	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-40	1310 West 4th Street, San Bernardino, CA 92411	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-41	1314 West 4th Street, San Bernardino, CA 92411	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-24	1328 West 4th Street, San Bernardino, CA 92411	BNSF/Vacant	Intermodal Yard	Full	No
0138-182-25	Protected per CA Govt. Code Sect. 6254.21	BNSF/Vacant	Intermodal Yard	Full	No
0138-251-04	248 North Mount Vernon Avenue, San Bernardino, CA 92410	Single-family Residence	Street Widening	Full	Yes

Assessor Parcel Number	Address	Existing Land Use	Proposed Land Use	Partial or Full Acquisition	Require Relocation Yes/No
0138-251-05	240 North Mount Vernon Avenue, San Bernardino, CA 92410	Vacant	Street Widening	Full	No
0138-251-06	232 North Mount Vernon Avenue, San Bernardino, CA 92410	Single-family Residence	Street Widening	Full	Yes
0138-251-07	224 North Mount Vernon Avenue, San Bernardino, CA 92410	Single-family Residence	Street Widening	Full	Yes
0138-251-08 0138-251-09	202 North Mount Vernon Avenue, San Bernardino, CA 92410	Car Wash	Street Widening	Full	Yes
0138-283-40	196 North Mount Vernon Avenue, San Bernardino, CA 92410	Auto Repair	Ramp and Retaining Walls	Partial	No
Source: *Supplemental Community Impact Assessment Memorandum* (Caltrans 2017b)					

As shown in Table 2-10, available data indicate that adequate resources, which encompass factors such as availability, funding, staffing, and time, exist for residential displacees, with the exception of available multi-family properties for rent. However, there are several one-bedroom houses and multi-family residences for sale that these individuals could relocate to. The replacement area evaluated is within a five-mile radius of the proposed project. Under the proposed project, there would be only one multi-family (duplex) acquisition. As of June 2017, there were plenty of comparable two- and three-bedroom units for rent or sale, as shown in Table 2-10.

Table 2-10. Summary of Relocation Resources Available within Five Miles (Residential)

Relocation Resource	For Rent	For Sale	Total Units
One-bedroom Houses	N/A	7	7
Two-bedroom Houses	5	48	53
Three-bedroom Houses	39	50	89
Four-plus-bedroom Houses	18	18	36
Condominiums	N/A[1]	N/A	N/A
Multi-family Residences	3	6	9
Mobile Homes	N/A[1]	N/A	N/A

Source: *Supplemental Community Impact Assessment Memorandum* (Caltrans 2017b)
[1] None were available at the time of the search conducted for the Relocation Impact Study.

Under the proposed project, only one nonresidential displacee (car wash) is anticipated. Because of the specific nature of the nonresidential displacee, it is anticipated that comparable commercial properties will require modifications to meet the specific needs of a car wash, unless another car wash site is found upon implementation of relocation assistance, as shown in Table 2-11.

As part of project implementation, all acquisitions would be conducted in accordance with the Uniform Act and the California Relocation Act. In addition, the number of relocations would be

a small percentage (3.7 percent) of the total number of households in the study area (771 households). Therefore, the proposed project would not result in an adverse effect.

Table 2-11. Summary of Relocation Resources Available within Five Miles (Nonresidential)

Relocation Resource	For Rent	For Sale	Total Units
Commercial Retail/Auto Related	5	8	13
Commercial Office/Special Services	N/A	N/A	N/A
Industrial Complex	N/A	N/A	N/A
Industrial/Commercial Properties	N/A	N/A	N/A
Farmland	N/A	N/A	N/A
Source: *Supplemental Community Impact Assessment Memorandum* (Caltrans 2017b)			

No-Build Alternative

Under the No-Build Alternative, no construction would occur, and no relocations or property acquisitions would be required. Therefore, no direct or indirect adverse short- or long-term impacts would occur.

2.1.5.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Avoidance and minimization measures **R-1** and **R-2**, from the adopted 2011 EA/FONSI, would still be applicable to the proposed project.

R-1 In accordance with the federal Uniform Act, compensation for partial acquisition will be provided to eligible recipients. The Uniform Act provides for fair and equitable treatment of persons whose property will be acquired as a result of federally funded projects. The programs and assistance provided under the Uniform Act will be available to all eligible recipients without discrimination. For partial acquisition, compensation will be provided to eligible recipients for the portion of the property acquired. Additional compensation may be provided for any demonstrated damage to the remainder property. If it is determined that the remainder property will have little or no value or utility (i.e., an uneconomic remnant), then the property owner will have the option of either accepting full purchase of the remnant or keeping it.

R-2 An encroachment permit application will be submitted to the California Public Utilities Commission (CPUC) and BNSF during the Plans, Specifications, and Estimates (PS&E) phase of the final design. The Cooperative Agreement process and six-week General Order (GO) 88-B application/request for authorization will commence during the PS&E phase of the final design, in compliance with GO 88-B, Rules for Altering Public Highway-Rail Crossings, and be finalized once concurrence from all parties (railroad, City, and CPUC) is obtained. The Cooperative Agreement and GO 88-B application will be coordinated with the CPUC's Rail Crossings Engineering Section.

In addition to measures **R-1** and **R-2**, the following avoidance and minimization measure shall be implemented:

R-3 SBCTA shall provide additional relocation assistance and counseling resources to persons and businesses, beyond the requirements of the Uniform Relocation Assistance and Real Properties Acquisition Policies Act, to ensure adequate relocation and a decent, safe, and sanitary home for displaced residents. Spanish-speaking relocation assistance personnel will be required and provided by SBCTA. All eligible displacees will be entitled to moving expenses. All benefits and services will be provided equitably to all residential and business displacees without regard to race, color, religion, age, national origin, or disability, as specified under Title VI of the Civil Rights Act of 1964. All relocation activities will be conducted by the implementing agencies, in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act.

2.1.6 Environmental Justice

2.1.6.1 REGULATORY SETTING

All projects involving a federal action (funding, permit, or land) must comply with Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by President William J. Clinton on February 11, 1994. This Executive Order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2017, this was $24,600 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964, and related statutes, have also been included in this project. The Department's commitment to upholding the mandates of Title VI is demonstrated by its Title VI Policy Statement, signed by the Director, which can be found in Appendix B of this document.

2.1.6.2 AFFECTED ENVIRONMENT

Information used in this section is based on the *Mount Vernon Avenue Bridge Project Supplemental Community Impact Assessment Memorandum* (Caltrans 2017b).

Description of Study Area

To determine if environmental justice populations exist within the study area, the demographic profile of the study area was developed to identify the low-income and minority populations. For the purposes of this analysis, a census tract was considered to contain an environmental justice population if:

- The total minority population of the census tract block group(s) is more than 50 percent of the total population or disproportionately higher than that of the city and county, or
- The proportion of the census tract block group population that is below the federal poverty level exceeds that of the city where it is located.

The majority of the permanent right-of-way acquisitions would occur north of 4th Street and west of Mount Vernon Avenue. This area currently consists of residential, industrial, and vacant BNSF property. Minor amounts of right-of-way acquisitions would also be needed west of Mount Vernon Avenue and south of 3rd Street. This area includes single-family residences and commercial/industrial uses. The study area for the proposed project included Census Tract 49, Block Groups 2 and 4, which also includes the area of right of way that would be required. As shown in Table 2-4, the proportion of the population composed of minority populations in the study area is 95 percent (89 percent Hispanic, 3 percent African American, 1 percent Native American, and 2 percent Asian) compared with approximately 66 percent in San Bernardino County (51 percent Hispanic, 8 percent African American, < 1 percent Native American, and 7 percent Asian) and approximately 80 percent in the city of San Bernardino (62 percent Hispanic, 14 percent African American, < 1 percent Native American, and 4 percent Asian). As such, the population within the study area, and thus the area where right of way will be required, includes environmental justice populations.

As shown in Table 2-6, the study area's median household income of $30,440 is greater than the 2017 federal annual income poverty guideline of $24,600 for a household of four, as identified by the U.S. Department of Health and Human Services (U.S. Department of Health and Human Services 2017).

Certain characteristics of the residential neighborhoods and commercial centers near the project site, including their apparent longevity, physical and spatial attributes, community facilities, and demographic profile, are indicative of an established, cohesive community. Most homes in this area are more than 30 years old, which suggests that some aspects of cohesiveness and neighborhood character have developed over time among long-term residents. In addition, the residential areas are relatively dense and surrounded by commercial properties or roadways, thereby contributing to a sense of community through spatial proximity. There are also 13 community facilities (e.g., schools, parks, churches, libraries, transportation centers) within 0.5 mile of the project site, as shown above in Table 2-7. This indicates a variety of community facilities that residents can walk to, which could indicate a stronger sense of community. Finally, the demographic data for the study area where the proposed project would be located contains a population that is 89 percent Hispanic or Latino, which could indicate a high degree of cohesiveness in the community. To the extent that demographic and physical characteristics have enabled a shared sense of stability to develop, some degree of community cohesion very likely exists in this neighborhood. However, there are also indications of a lack of community cohesion, such as poorly maintained properties and many vacant parcels.

2.1.6.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

The environmental justice analysis considers the following factors: (1) the similarity of impacts on minority and/or low-income populations compared to the general population, (2) the generally equivalent efficacy of proposed minimization measures and project enhancements, and (3) the offsetting benefits of the transportation facility.

Adverse Effects on General Population

The technical analyses conducted for the project regarding air quality and noise and vibration indicate that no substantial adverse effects related to the areas of study are expected as a result of the proposed project, which is the same conclusion identified in the adopted 2011 EA/FONSI. However, these analyses do indicate that some potential effects are expected. The impacts identified in these analyses, as well as the measures to avoid or reduce them, are outlined below.

Air Quality

During construction, short-term degradation of air quality may occur because of the release of particulate emissions (fugitive dust), which would be generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated, including carbon monoxide (CO), oxides of nitrogen (NO_X), reactive organic gases (ROGs), directly emitted particulate matter (particulate matter less than 10 microns [PM10] and particulate matter less than 2.5 microns [PM2.5]), and toxic air contaminants (TACs) (also known as mobile-source air toxics [MSATs]), such as diesel exhaust particulate matter. Construction-related effects on air quality from most highway/bridge projects are greatest during the site preparation phase because most emissions from heavy construction equipment are associated with excavating, handling, and transporting soils to and from the site (Caltrans 2017b). However, the project would conform to Caltrans construction requirements, as specified in Caltrans' 2015 Standard Specifications, Section 14-9.02 (Air Pollution Control) and Section 14-11.04 (Dust Control), for asphalt concrete emissions and all earthwork, clearing and grubbing, and roadbed activities involving heavy construction equipment. The contractor would comply with all air pollution control ordinances and statutes that apply to any work performed pursuant to the contract, including any air pollution control rules, regulations, ordinances, or statutes specified in Section 11017 of the Government Code. Compliance with these specifications would minimize the air quality effects in the study area. In addition, measures **AQ-1** through **AQ-3** would be incorporated into the project to avoid and minimize construction air quality impacts (refer to Section 2.2.5.4).

Mount Vernon Bridge construction would displace some existing BNSF intermodal operations. As such, shoofly tracks (Tracks 218 and 219) would need to be installed in order for BNSF to maintain operations during bridge construction. These track installations would change the locations where some existing intermodal activity (and related air pollutant emissions) would occur from within the BNSF property during bridge construction. More specifically, this temporary change would move emissions activity closer to some residential use sensitive receptor locations (i.e., residential uses to the north and northwest of proposed improvements), and farther away from other locations during bridge construction. Temporary accommodations would include the installation of two shoofly tracks (Tracks 218 and 219). Please see the Project Description, Section 1.4.1, for detailed discussion of proposed accommodations.

The installation of shoofly tracks during bridge construction would have no effect on intermodal throughput capacity or the existing level of intermodal activity–related air pollutant emissions. Nevertheless, it is important to note that the residential use sensitive receptors located north and northwest of the project site may experience a degradation in local air quality during bridge construction, while the areas located south and southeast may experience an improvement in

local air quality. Changes in local air quality are anticipated to be minor because the proposed change to the existing emissions source would be relatively minor.

Noise and Vibration

Noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. However, noise associated with construction is controlled by Caltrans' Standard Specifications, Section 14-8.02 (Noise Control). No substantial adverse noise impacts from construction are anticipated because construction would be conducted in accordance with Caltrans' Standard Specifications, Section 14.8-02. Construction noise would be short term and intermittent. In addition, measures **N-2** and **N-3** would be incorporated into the project to avoid and minimize construction noise impacts (see Section 2.2.6.4).

Traffic and Transportation

As described in Section 2.1.8.3, Traffic and Transportation, the proposed project would result in vehicle and pedestrian detours. Vehicle detours would affect equally both environmental justice populations within the study area as well as the general population within a few miles of the bridge. Pedestrian detours are more likely to affect environmental justice populations and those who rely on non-motorized travel within the study area. However, that is due to the proximity of those groups to the proposed project. Measures **TR-1** through **TR-4** would be incorporated into the project to avoid and minimize construction traffic impacts (refer to Section 2.1.8.4).

As described earlier, construction air quality, noise, and traffic impacts would be avoided with implementation of minimization and avoidance measures. However, for all other impacts, (1) the community, in general, would be similarly affected; (2) the effects of the project on environmental justice populations would not be more severe compared with the effects on non-environmental justice populations; and (3) the impacts on environmental justice populations would be similar to those on the general population.

Disproportionately High and Adverse Effects on Minority and Low-Income Populations

Environmental justice considerations require an assessment of whether the effects of the proposed project on minority and low-income groups could be considered disproportionately high and adverse, taking into consideration the minimization measures that have been recommended in the technical studies, the impact avoidance and minimization efforts that have occurred during the project planning and development process, and the potential benefits that would accrue within the community.

Efficacy of Minimization Efforts – Unavoidable Adverse Effects

Of the temporary noise, air quality, and traffic construction effects identified in the technical analyses, none are beyond those identified in the adopted 2011 EA/FONSI and none are unavoidable adverse effects. All temporary impacts could be avoided or substantially minimized with implementation of the avoidance and minimization measures included in the project. Refer to traffic measures **TR-1** through **TR-4** in Section 2.1.8.4, air quality measures **AQ-1** through **AQ-3** in Section 2.2.5.4, and noise measures **N-2** and **N-3** in Section 2.2.6.4.

Project Benefits

Implementation of the proposed project would unquestionably have offsetting benefits that would accrue within the community. Residents, businesses, and visitors would be provided with

a safer and more reliable bridge. A critical link in the local and regional circulation system would be restored, which, it is assumed, would be beneficial to the community.

Potential Disproportionately High and Adverse Effects

The determination of whether or not the effects of the proposed project are disproportionately high and adverse depends on whether (1) the effects of the project are borne predominately by a minority or low-income population or (2) the effects of the project are appreciably more severe or greater in magnitude on minority or low-income populations compared with the effects on non-minority or non-low-income populations (see the Federal Highway Administration's *Western Resource Center Interim Guidance – Addressing Environmental Justice in the EA/EIS* [1999]).

Although the effects of the proposed project would occur within an area with a population that is predominately minority, these effects cannot reasonably be considered disproportionately high and adverse under the circumstances. The two census block groups in the project study area are composed of substantial proportions of minority populations. The proportion of these groups, however, is not determinative of whether there is a disproportionately high and adverse effect. Instead, it is more appropriate to conclude that, even though these groups could bear a large part of the burden associated with the proposed project, primarily due to their proximity to short-term construction activities, the community in general would be similarly affected. The bridge is an important part of both the local and regional circulation system. Consequently, local motorists and pedestrians from the immediate project area, as well as those traveling to and from the project area from elsewhere, would all be inconvenienced by traffic delays and other disruptions during the project construction period.

The City of San Bernardino, and subsequently SBCTA, instituted public involvement and community outreach efforts to ensure that issues of concern or controversy to environmental justice populations are identified and addressed where practicable as part of the project planning and development process as well as the environmental process. This may include, but not necessarily be limited to, additional community meetings, informational mailings, a project website, and news releases to local media. The community outreach and public involvement programs for the proposed project would seek to actively and effectively engage the affected community and include mechanisms to reduce cultural, language, and economic barriers to participation.

The proposed project would also comply with applicable federal requirements promulgated in accordance with Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency (August 11, 2000), which requires federal programs and activities to be accessible to persons with limited English language proficiency.

The proposed project would be developed in accordance with Title VI of the Civil Rights Act of 1964, which provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity that receives federal financial assistance. In addition, the proposed project would be developed in conformity with related statutes and regulations that mandate that no person in the State of California shall, on grounds of race, color, sex, age, national origin, or disabling condition, be excluded from participation in, be denied the

benefits of, or be otherwise subjected to discrimination under any program or activity administered by or on the behalf of Caltrans.

Permanent

Adverse Effects on General Population

The technical analyses regarding permanent acquisitions/relocations indicate that no substantial adverse effects are expected as a result of the proposed project, which is the same conclusion identified in the adopted 2011 EA/FONSI. However, these analyses do indicate that some potential effects are expected. The impacts identified in these analyses, and the measures to avoid or reduce them, are outlined below.

- Permanent Acquisitions/Relocations: Effects resulting from the proposed project are primarily due to additional construction effects on the community from an expanded construction footprint and temporary and permanent acquisitions, resulting in relocations. A total of 30 relocations would be required (28 single-family residents, one multi-family residence, and one nonresidential business).

- Shifting of Existing Air Emissions Sources: Mount Vernon Bridge construction would permanently move some existing BNSF intermodal operations in the immediate vicinity of Mount Vernon Bridge. These changes would result in permanent changes in locations where existing intermodal activity (and related air pollutant emissions) would occur from within the existing BNSF property configuration. These changes would move emissions closer to some residential use sensitive receptor locations (i.e., locations to the north and northwest of proposed improvements), and farther away from others. Permanent changes would include the realignment of existing tracks (Tracks 216 and 217), and the relocation of some BNSF operations on the BNSF property, among other accommodations. Please see the Project Description, Section 1.4.1, for detailed discussion of proposed accommodations.

  These changes would have no effect on intermodal throughput capacity or the existing level of intermodal activity–related air pollutant emissions. Nevertheless, it is important to note that the residential use sensitive receptor locations located north and northwest of proposed improvements may experience a degradation in local air quality, while other areas may experience an improvement in local air quality. Changes in local air quality are anticipated to be minor because the proposed change to the existing emissions source would be relatively minor.

- Shifting of Existing Noise Sources: With the acquisition of the properties between Kingman Street and West 4th Street and from Cabrera Avenue to Mount Vernon, various existing structures (residences and businesses) would be removed and BNSF operations would be displaced into this newly-acquired area. The homes immediately north of Kingman Street and west of Cabrera Avenue would then become front-row receptors with respect to railyard operations (as opposed to their existing condition of being separated from the yard by one or more rows of intervening properties and structures). These changes, which would include the realignment of existing tracks (Tracks 216 and 217), and the relocation of some BNSF operations on the BNSF property, would move noise sources closer to some sensitive receptor locations, and farther away from others. Please see the Project Description, Section 1.4.1, for detailed discussion of proposed changes.

These changes would have no effect on intermodal throughput capacity or the overall level of intermodal activity–related noise. Nevertheless, it is important to note that some sensitive receptor locations may experience higher operational noise levels, while others may experience a decrease in noise levels. The new front row receptors to the northwest of the project site would be shielded from BNSF operations by the proposed 12-foot-high block wall that would be constructed along Kingman Street and Cabrera Avenue as part of the project. This shielding, combined with the distance provided by the proposed 20-foot-wide landscape buffer and the width of the exiting streets, would minimize the noise increases at the affected receivers.

Disproportionately High and Adverse Effects on Minority and Low-Income Populations

Environmental justice considerations require an assessment of whether the effects of the proposed project on minority and low-income groups could be considered disproportionately high and adverse, taking into consideration the minimization measures that have been recommended in the technical studies, the impact avoidance and minimization efforts that have occurred during the project planning and development process, and the potential benefits that would accrue within the community.

Efficacy of Minimization Efforts – Unavoidable Adverse Effects

Of the permanent effects identified thus far in the supplemental technical studies, none are beyond those previously identified in the adopted 2011 EA/FONSI, with the exception of the temporary and permanent property acquisitions. However, as noted earlier, these impacts are not considered unavoidable adverse effects. As part of project implementation, all acquisitions would be conducted in accordance with the Uniform Act and the California Relocation Act. In addition, the number of relocations would be a small percentage (3.7 percent) of the total number of households in the study area (771 households). Therefore, the proposed project would not result in an adverse effect. All effects would be substantially minimized with implementation of avoidance and minimization measures **R-1** through **R-3,** as identified in Section 2.1.5.4.

Project Benefits

Implementation of the proposed project would unquestionably have offsetting benefits that would accrue within the community. Residents, businesses, and visitors would be provided with a safer and more reliable bridge. A critical link in the local and regional circulation system would be restored, which, it is assumed, would be beneficial to the community.

Potential Disproportionately High and Adverse Effects

The determination of whether or not the effects of the proposed project are disproportionately high and adverse depends on whether (1) the effects of the project are borne predominately by a minority or low-income population or (2) the effects of the project are appreciably more severe or greater in magnitude on minority or low-income populations compared with the effects on non-minority or non-low-income populations (see the Federal Highway Administration's *Western Resource Center Interim Guidance – Addressing Environmental Justice in the EA/EIS* [1999]).

Although permanent acquisitions and the relocation of residents and businesses would occur in an area that is predominately minority, adverse effects from permanent acquisitions that would require relocations (28 of the 771 households in the study area) are not anticipated after

implementation of avoidance and minimization measures. The number of relocations (28 single-family residences) is relatively small compared with the overall number of households in the study area (771 households). In addition, these effects cannot reasonably be considered disproportionately high and adverse under the circumstances. The two census block groups in the project study area are composed of substantial proportions of minority populations. The proportion of these groups, however, is not determinative of whether there is a disproportionately high and adverse effect. Instead, it is more appropriate to conclude that, even though these groups could bear a large part of the burden associated with the proposed project, primarily due to their proximity to the project, the community in general would be similarly affected. The bridge is an important part of both the local and regional circulation system. The census block groups would also see a positive result from their being able to use the bridge to cross the rail yard. Implementation of the proposed project would unquestionably have offsetting benefits that would accrue within the community. Residents, businesses, and visitors would be afforded a safer and more reliable bridge. A critical link in the local and regional circulation system would be restored, which could help stimulate social and economic redevelopment projects within the community.

As mentioned previously, the City of San Bernardino has instituted public involvement and community outreach efforts to ensure that issues of concern or controversy to minority and low-income populations are identified and addressed where practicable as part of the project planning and development process as well as the environmental process.

Conclusion

Given the above discussion and analysis, the Build Alternative (Preferred Alternative) would not result in disproportionately high and adverse effects on any minority or low-income populations, according to the provisions of Executive Order 12898. No further environmental justice analysis is required.

No-Build Alternative

Under the No-Build Alternative, no construction would occur. Therefore, no direct or indirect adverse short- or long-term impacts would occur that could adversely affect environmental justice populations in the study area. However, if the bridge ultimately has be closed to pedestrian and vehicular traffic, this could adversely affect the mobility of the environmental justice populations that are present.

2.1.6.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Based on the above discussion and analysis, the Build and No-Build Alternatives would not cause disproportionately high and adverse effects on any minority or low-income populations, in accordance with the provisions of EO 12898. No further environmental justice analysis is required. Avoidance and minimization measure **EJ-1** from the adopted 2011 EA/FONSI would still be applicable to the proposed project. In addition, new measures **C-1** and **C-2** (refer to Section 2.1.4.2) and **R-3** (refer to Section 2.1.5.4) would also be incorporated into the project to minimize potential impacts on minority or low-income populations.

EJ-1 Actively and effectively engage all segments of the affected community with mechanisms to reduce cultural, language, and economic barriers to participation

(e.g., by providing bilingual materials on construction updates and detours, holding community meetings with bilingual facilitators, holding meetings at a time convenient to the local community).

2.1.7 Utilities/Emergency Services

2.1.7.1 AFFECTED ENVIRONMENT

Information used in this section is based on the *Mount Vernon Avenue Bridge Project Supplemental Community Impact Assessment Memorandum* (Caltrans 2017b).

Utilities

Public utilities and services are associated with gas and electrical power, telecommunications, the water supply, and the sewer system. Utility providers in the area include the City of San Bernardino, Southern California Edison, Southern California Gas, San Bernardino Municipal Water District, West Valley Water District, AT&T, AT&T California, Charter Communications, and Time Warner Cable. The following utilities in the project area were identified in the adopted 2011 EA/FONSI:

- Southern California Edison (SCE) electric line along the west side of the bridge
- 12-inch San Bernardino Municipal Water District (SBMWD) steel water line along the west side of the bridge (and/or adjacent connected pipelines, services, and appurtenances)
- 42-inch storm drain on the east side of the bridge, extending to the BNSF rail yard
- 30-inch corrugated metal pipe (CMP) storm drain in the BNSF rail yard at the following locations: (1) near southerly shoofly track 1 and (2) near West 4th Street ramp to southbound Mount Vernon Avenue
- Two-inch gas line along the alleyway to the southwest of the bridge
- Four-inch gas line along the south side of West 4th Street
- Eight-inch gas line along the south side of West 4th Street
- Two-inch water line along West 3rd Street, west of the bridge
- Eight-inch water line on the north side of West 3rd Street, east of the bridge

In addition to those utilities identified in the adopted 2011 EA/FONSI, the following utilities are also within the project limits of disturbance:

- Eight-inch sewer line along the south approach of and under the proposed Mount Vernon Avenue Bridge within the BNSF rail yard
- Three-inch gas line along the northwest corner of the 2nd Street and Mount Vernon Avenue intersection
- 12-inch water line under the proposed Mount Vernon Avenue Bridge, within the BNSF rail yard along the north approach

- Six-inch water line along the north approach
- Electric lines under the proposed Mount Vernon Avenue Bridge within the BNSF rail yard, along the north approach, and overhead electrical lines along the east edge of the existing Mount Vernon Avenue Bridge and the southern sidewalk on Kingman Street
- City of San Bernardino drainage junction structure along the north approach
- 36-inch corrugated metal pipe drain along the north approach and 4th Street

This list, which is based on best available information, has been generated in coordination with BNSF. The identification and final determination regarding utilities located within the project limits is anticipated to be completed during the initial design portion of the design-build phase of the proposed project.

Emergency Services

As of July 2016, fire protection and emergency medical response services are provided by the San Bernardino County Fire District (SBCFD) (SBCFD 2018). Specifically, city coverage is provided by SBCFD Division 6, led by Assistant Chief John Chamberlin. Police services are provided by the San Bernardino Police Department (SBPD). There is one hospital within 1.5 miles of the proposed project. Table 2-12 lists all emergency services within 1.5 miles of the proposed project limits.

Table 2-12. Emergency Services within 1.5 Mile of the Proposed Project

Type	Name	Address	Distance from Project (miles)
Fire/EMS	San Bernardino Fire Department, Station #222	1201 West 9th Street	0.5
Police/Sheriff	San Bernardino Police Department	1584 West Base Line Street, #106	1.1
	San Bernardino Police Department	710 North D Street	1.2
Hospital	Community Hospital of San Bernardino	1805 Medical Center Drive	1.5
Source: *Supplemental Community Impact Assessment Memorandum* (Caltrans 2017b)			

2.1.7.2 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

Construction effects on utilities under the proposed project would be the same as under the adopted 2011 EA/FONSI, except that the limits of construction have been expanded under the proposed project to accommodate additional improvements. As described previously, several new utilities have been identified that are within the limits of disturbance. These could be affected during the construction period. During construction, the proposed project would require electrical connections to existing power sources, which may include private utility companies.

Final determinations of impacts on utilities and relocation requirements will be completed during the initial design portion of the design-build phase of the proposed project. An updated utility

search will be conducted during final design to confirm that all utility conflicts that require protection in place or relocation are addressed. Utility companies typically do not approve such relocations until the final design phase of a project. If the final utility relocations create additional environmental impacts, beyond those identified in this analysis, then additional environmental analysis would be required. The current analysis is based on preliminary engineering efforts to date. Potentially affected utilities would be relocated in accordance with federal and state laws and regulations as well as County of San Bernardino and City policies. Ongoing coordination will continue between Caltrans, the City of San Bernardino, BNSF, affected agencies, and utility companies to minimize any potential disruption of utility service. In addition, implementation of avoidance and minimization measures **UT-4** and **UT-6** would ensure that temporary impacts would be minimized (refer to Section 2.1.7.3).

Construction effects on emergency services under the proposed project would be the same as those identified in the adopted 2011 EA/FONSI, except that the limits of construction would be expanded under the proposed project to accommodate additional improvements and the duration of construction would be longer (32 months under the proposed project compared to 24 months under the adopted 2011 EA/FONSI). Construction activities would now extend from just south of 5th Street to Rialto Avenue and include the area between Kingman Street and West 4th Street and between Cabrera Avenue and Mount Vernon Avenue (refer to Figure 1-3, Project Layout Map). This would expand the number of street detours as well as partial and/or complete street and lane closures, which could affect emergency service providers and response times during the construction period.

SBCFD indicated that closure of the bridge in 2004 affected emergency response times (Caltrans 2011). Affected stations were Station 221, Station 222, Station 229, and Station 230. The nearest fire station (Station 222) is 0.5 mile north of the bridge. With the bridge again closed during the construction period, fire vehicles would need to use alternate routes. Detours and dispatching adjustments would have temporary effects, similar to those described in the adopted 2011 EA/FONSI, once the bridge is closed for construction.

According to SBPD, police response times, as well as access to areas north and south of the bridge, were impaired by closure of the bridge in 2004 (Caltrans 2011). During the construction period, different detour routes would be used, based on time of day and traffic levels. When the bridge is eventually closed again for construction, detour routes would be implemented in coordination with SBPD. Temporary effects on response times are expected to occur during the construction period, similar to those described in the adopted 2011 EA/FONSI.

Emergency service response times would be temporarily affected because the bridge would not be available during the construction period. However; coordination with emergency services personnel and preparation of a Traffic Management Plan (TMP) (measure **UT-5**) and Access Management Plan (AMP) would improve response times. In addition, implementation of avoidance and minimization measures **UT-1**, **UT-2**, and **UT-3** would ensure that temporary impacts related to emergency service providers would be minimized during the construction period (refer to Section 2.1.7.3).

Permanent

No additional direct or indirect permanent impacts on utilities or emergency services, compared with those stated in the adopted 2011 EA/FONSI, would result from implementation of the Build Alternative (Preferred Alternative). Emergency service response times are expected to be at least consistent with existing conditions, and the new bridge would have the same traffic capacity as the existing bridge. Therefore, population growth is unlikely, as is the need for new or expanded utilities and emergency services.

No-Build Alternative

With the No-Build Alternative, there would be no changes to utilities or emergency services from the existing condition, and construction would not occur that would affect emergency service access. However, if the bridge ultimately has to be closed to vehicular and pedestrian traffic, this could have a detrimental effect on both utilities, which would very likely have to be moved from the bridge to a new location (if the bridge can no longer support these utilities or if the bridge is ultimately removed), and emergency services, which would have to use more circuitous routes to traverse the rail yard.

2.1.7.3 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Avoidance and minimization measures **UT-1** through **UT-6**, as well as **R-2** (refer to Section 2.1.5.3) from the adopted 2011 EA/FONSI, would still apply to the proposed project.

UT-1 Implement a construction management program that maintains access to and from the project area community through signage, detours, flagmen, etc.

UT-2 Coordinate with emergency services providers to ensure that alternative response routes to and from the project area community are in place during construction of the proposed project.

UT-3 Consult with local school officials to identify safe pedestrian and vehicular routes for students traveling to and from schools in the project area community during construction of the proposed project.

UT-4 San Bernardino County Transportation Authority will coordinate all utility relocation work with the affected utility companies to ensure minimum disruption to customers in the service areas during construction.

UT-5 The potential for disruption or obstruction of emergency services access in the project area to occur as a result of construction activities will be avoided with the preparation of a Traffic Management Plan (TMP) and an Access Management Plan (AMP). These plans will be written by San Bernardino County Transportation Authority and approved by Caltrans' traffic operations staff. The TMP will include a public awareness campaign to ensure that the public is aware of when and where any traffic closures or detours, or utility disruptions, if any, will occur. The AMP will be designed in coordination with emergency services personnel and local school officials to ensure that the communities within the project vicinity will remain accessible during the construction phase. The TMP will include a requirement to maintain access to all businesses and residences during project construction. Temporary improvements will be implemented prior to closure of the existing bridge and remain in place until the new bridge is opened to traffic. The temporary improvements will be removed and the intersections returned to their existing configurations after the new bridge is opened to traffic. Temporary circulation improvements will be included at the following locations to improve operations:

- Mount Vernon Avenue/5th Street: Restripe westbound approach as a through lane and an exclusive right-turn lane.
- Mount Vernon Avenue/Rialto Avenue: Restripe northbound approach as a shared left-turn/through lane and two exclusive right-turn lanes.
- H Street/5th Street: Restripe northbound approach as two exclusive left-turn lanes and a shared through/right-turn lane.
- G Street/Rialto Avenue: Restripe eastbound approach as two exclusive left-turn lanes and a shared through/right-turn lane. Change the phasing on eastbound and westbound approaches to split phasing.

UT-6 All utility lines shall be protected in place, relocated, replaced, and/or upgraded as necessary, with minimal disruption of existing domestic water or fire protection service.

Also see measure **R-2** in Section 2.1.5, Relocations and Real Property Acquisitions.

2.1.8 Traffic and Transportation/Pedestrian and Bicycle Facilities

2.1.8.1 REGULATORY SETTING

The Department, as assigned by the Federal Highway Administration (FHWA), directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of Federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652). It further directs that the special needs of the elderly and the disabled must be considered in all Federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

In July 1999, the U.S. Department of Transportation (USDOT) issued an Accessibility Policy Statement pledging a fully accessible multimodal transportation system. Accessibility in federally assisted programs is governed by the USDOT regulations (49 CFR 27) implementing

Section 504 of the Rehabilitation Act (29 United States Code [USC] 794). The FHWA has enacted regulations for the implementation of the 1990 Americans with Disabilities Act (ADA), including a commitment to build transportation facilities that provide equal access for all persons. These regulations require application of the ADA requirements to Federal-aid projects, including Transportation Enhancement Activities.

2.1.8.2 AFFECTED ENVIRONMENT

This section utilizes information from the *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study (Traffic/Circulation Study)* (Caltrans 2018a) and the *Mount Vernon Avenue Overhead Replacement Project – Final Pedestrian and Vehicular Detour Analysis Report (Detour Analysis Report)* (Caltrans 2018b). Because the traffic data used in the adopted 2011 EA/FONSI is now outdated, the traffic analysis for the project has been updated in its entirety. That information is presented in this section.

Study Area and Analysis Scenarios

Mount Vernon Avenue is a major north–south arterial in the western portion of the city of San Bernardino. The bridge is the only arterial crossing over the BNSF rail yard between Rancho Avenue (approximately 1.1 miles to the west) and 5th Street (approximately 0.6 mile to the east). Because the purpose of the proposed project is to replace a structurally deficient bridge and not to increase capacity, the study area is limited to the intersections directly affected by the project. The following three intersections were specifically evaluated in the *Traffic/Circulation Study* approved in 2018:

- Mount Vernon Avenue/5th Street (signalized), located north of the BNSF rail yard;
- Mount Vernon Avenue/2nd Street (signalized), located south of the BNSF rail yard; and
- Mount Vernon Avenue/Rialto Avenue (signalized), located south of the BNSF rail yard.

Furthermore, the following traffic conditions were evaluated for each of the following scenarios:

- Existing (2017) conditions;
- Opening-year (2022) no-build conditions;

  Opening-year (2022) build conditions;
- Design-year (2040) no-build conditions;[3]
- Design-year (2040) build conditions.

[3] The No-Build Alternative or the "without-project" scenario in the traffic study did not assume bridge closure in 2024; it assumes the bridge is open to traffic. Although this is not consistent with the rest of the Supplemental EA's methodology for the No-Build Alternative, this was selected because it was the more conservative approach for traffic given the unknown of what is happening after 2024.

The *Pedestrian and Vehicular Detour Analysis Report* (*Detour Analysis Report*) (Caltrans 2018b) prepared for the proposed project analyzes the impacts of closing Mount Vernon Avenue and routing traffic through a detour route (refer to Figure 2-4, Detour Route) during construction of the Mount Vernon Avenue Bridge. It includes a wider study area and evaluated the following additional 20 detour study intersections:

1. Rancho Avenue/Foothill Boulevard
2. Rancho Avenue/Rialto Avenue
3. 4th Street/Foothill Boulevard (5th Street)
4. Medical Center Drive/5th Street
5. Santa Fe Way/Rialto Avenue
6. Cabrera Avenue/5th Street
7. L Street/5th Street
8. K Street/2nd Street
9. K Street/Rialto Avenue
10. I Street/2nd Street
11. I Street/Rialto Avenue
12. I-215 southbound (SB) ramps/5th Street
13. I-215 SB ramps/2nd Street
14. I-215 northbound (NB) ramps/5th Street
15. I-215 NB ramps/2nd Street
16. H Street/5th Street
17. H Street/4th Street
18. H Street/3rd Street
19. G Street/2nd Street
20. G Street/Rialto Avenue

The following scenarios were evaluated as part of the Detour Analysis Report:

- Existing (2017) conditions;
- Year 2021 without-detour conditions;[4]
- Year 2021 with-detour conditions.

[4] The detour study uses 2021 volumes, which are considered the most conservative volumes expected for the project or worst-case scenario. If the project construction schedule is advanced, the traffic volumes are expected to be reduced.

Existing Traffic Volumes

Existing intersection turning movement counts, including heavy vehicle counts, were conducted during typical weekday AM (7 a.m. to 9 a.m.) and PM (4 p.m. to 6 p.m.) peak periods at the three study intersections. Level of service (LOS) analysis was used to evaluate congestion and delay on streets and highways, consistent with the *City of San Bernardino Traffic Impact Study Guidelines*. The relative level of congestion is evaluated on a scale from A through F. LOS A indicates free-flow condition with no delay. LOS F indicates a breakdown of the system with very long delays. The *City of San Bernardino Traffic Impact Study Guidelines* establishes LOS D as the acceptable threshold for intersection operations. As indicated in Table 2-13 below, all study intersections currently operate at an acceptable LOS.

Table 2-13. Existing Conditions (2017) Intersection LOS

Intersection	AM Peak-Hour LOS	PM Peak-Hour LOS
Mount Vernon Avenue/5th Street	D	D
Mount Vernon Avenue/2nd Street	C	C
Mount Vernon Avenue/Rialto Avenue	B	B
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study*, 2018a.		

A roadway segment capacity analysis was also conducted to evaluate existing conditions during typical weekday conditions. Under existing conditions, Mount Vernon Avenue is a four-lane undivided major arterial between Kingman Street and 2nd Street. With the capacity of four lanes, Mount Vernon Avenue between 5th Street and 2nd Street operates at LOS A. The capacity of Mount Vernon Avenue is adequate for existing travel demands, as indicated in Table 2-14 below.

Table 2-14. Existing Conditions (2017) Roadway Capacity

Location	Number of Lanes	Capacity	Existing Weekday Volume	LOS
Mount Vernon Avenue between 5th Street and 2nd Street	4	40,000	17,297	A
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study*, 2018a.				

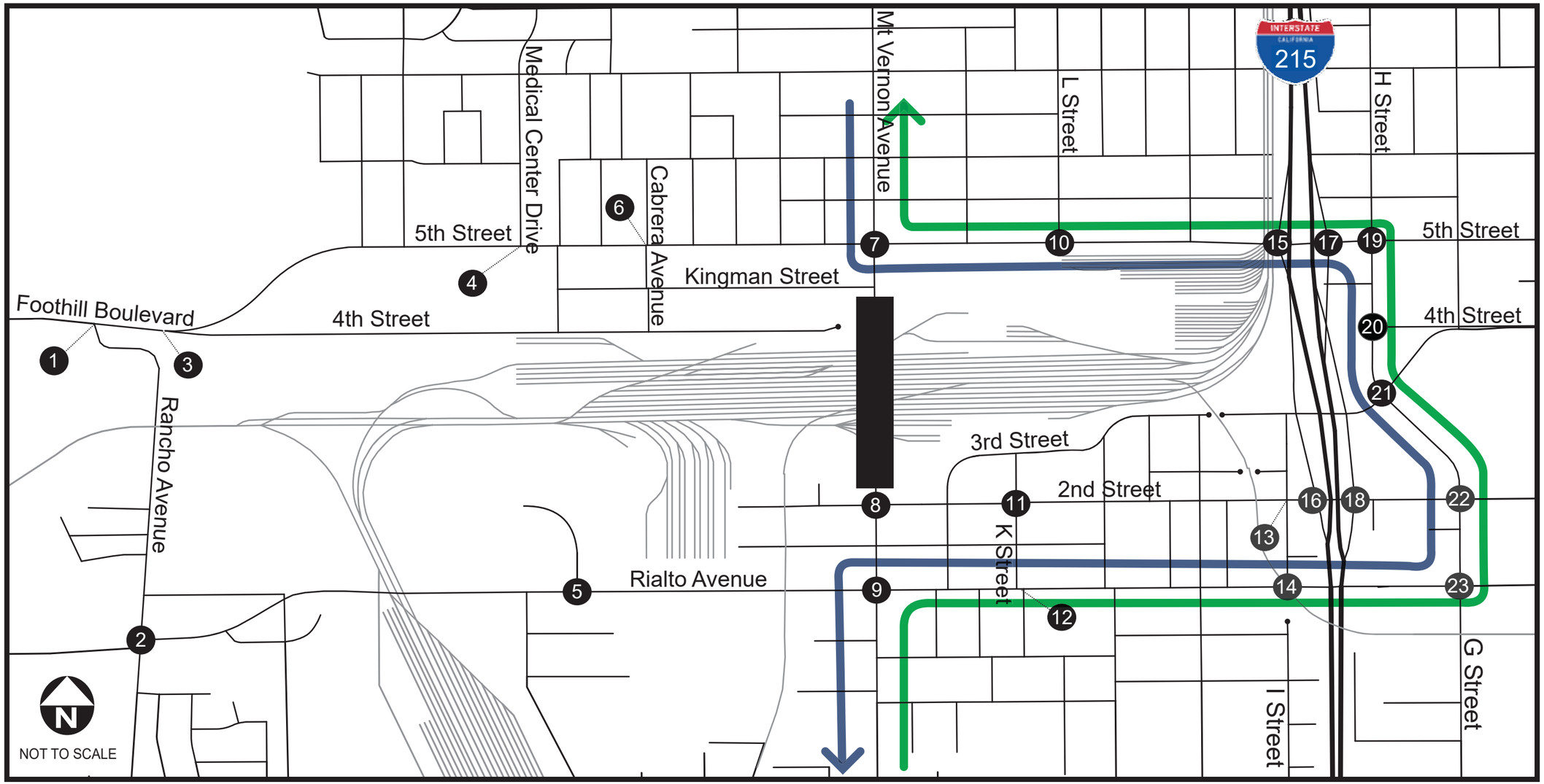
A queue length analysis was completed for existing conditions during the AM and PM peak hours, as shown in Table 2-15.

Table 2-15. Existing Conditions (2017) Queue Length Analysis

Intersection	Direction	Lane	Available Storage Length (feet)	Queue Length (feet)	
				AM Peak	PM Peak
Mount Vernon Avenue/5th Street	Northbound	Left	100	56	114
		Thru	2,045	93	*164*
	Southbound	Left	80	**101**	**127**
		Thru	680	*115*	*128*
	Eastbound	Left	150	56	106
		Thru	1,780	*182*	*178*
	Westbound	Left	95	51	95
		Thru	1,460	*144*	*192*
	Northbound	Thru	680	141	246

Intersection	Direction	Lane	Available Storage Length (feet)	Queue Length (feet)	
				AM Peak	PM Peak
Mount Vernon Avenue/2nd Street	Southbound	Thru	2,045	191	226
	Eastbound	Thru	630	24	32
	Westbound	Left	550	108	150
		Thru	550	50	69
Mount Vernon Avenue/Rialto Avenue	Northbound	Left	85	26	35
		Thru	1,610	54	*108*
	Southbound	Left	80	17	20
		Thru	680	*85*	*98*
	Eastbound	Left	80	77	**82**
		Thru	2,420	119	104
	Westbound	Left	90	66	80
		Thru	1,880	49	*106*

Note: Bold indicates queues longer than capacity. Italics indicate through movement queue is longer than the adjacent turning pocket length.
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study*, 2018a.



Legend

- # Traffic Study Intersections
- Study Roadway Segment
- Proposed Detour Route

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Figure 2-4
Detour Route
Mount Vernon Avenue Bridge Project

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For the Mount Vernon Avenue/5th Street intersection, the left-turn vehicle queue length at the southbound approach exceeds the available left-turn lane queue length during both the AM and PM peak hours. For all approaches to the Mount Vernon Avenue/5th Street intersection during both peak hours, the through-movement queues exceed the adjacent left-turn pocket lengths, indicating that through-movement queues may be blocking access to the left-turn lane.

As seen above, left-turn lane vehicle queues at the Mount Vernon Avenue/2nd Street intersection are currently within the available turn-pocket lengths during both peak hours. The through-movement queues adjacent to the left-turn pockets do not extend beyond the existing turn-pocket lengths; therefore, left-turning vehicles have no difficulty accessing the left-turn lanes. For the Mount Vernon Avenue/Rialto Avenue intersection, the left-turn vehicle queue length at the eastbound approach exceeds the available storage length during the PM peak hour. The through-movement queues exceed the adjacent left-turn pocket lengths at all approaches during both peak hours.

Detour Analysis

Intersection turning-movement counts, including heavy vehicle counts, were also obtained during typical weekday AM (7 a.m. to 9 a.m.) and PM (4 p.m. to 6 p.m.) peak periods at the detour study intersections. An LOS analysis was conducted to evaluate exiting intersection operations during the weekday AM and PM peak hours. All study area intersections fall within the jurisdiction of the City of San Bernardino. The City's acceptable LOS standard is LOS D. Any intersection operating at LOS E or LOS F is considered unsatisfactory. Table 2-16 shown below summarizes existing (2017) peak-hour LOS at the detour intersections.

Table 2-16. Existing Conditions (2017) Detour Intersection LOS

Intersections	Traffic Control	AM Peak-Hour LOS	PM Peak-Hour LOS
Rancho Avenue/Foothill Boulevard	Unsignalized	**F**	**F**
Ranch Avenue/Rialto Avenue	Signalized	B	B
4th Street/Foothill Boulevard (5th Street)	Signalized	A	A
Medical Center Drive/5th Street	Signalized	B	B
Santa Fe Way/Rialto Avenue	Signalized	B	B
Cabrera Avenue/5th Street	Signalized	B	B
Mount Vernon Avenue/5th Street	Signalized	B	C
Mount Vernon Avenue/2nd Street	Signalized	C	C
Mount Vernon Avenue/Rialto Avenue	Signalized	B	B
L Street/5th Street	Signalized	B	B
K Street/2nd Street	Signalized	A	B
K Street/Rialto Avenue	Signalized	B	B
I Street/2nd Street	Signalized	B	B
I Street/Rialto Avenue	Unsignalized	A	B
I-215 SB Ramps/5th Street	Signalized	C	C
I-215 SB Ramps/2nd Street	Signalized	B	B
I-215 NB Ramps/5th Street	Signalized	B	D
I-215 NB Ramps/2nd Street	Signalized	B	B
H Street/5th Street	Signalized	C	D

Intersections	Traffic Control	AM Peak-Hour LOS	PM Peak-Hour LOS
H Street/4th Street	Unsignalized	A	A
H Street/3rd Street	Signalized	C	B
G Street/2nd Street	Signalized	C	C
G Street/Rialto Avenue	Signalized	B	B

Note: Bold font indicates unsatisfactory operations.
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Pedestrian and Vehicular Detour Analysis Report* (Caltrans 2018b).

As seen in the table above, all study intersections are currently operating at a satisfactory LOS during the AM and PM peak hours, except for the Ranch Avenue/Foothill Boulevard intersection, which is operating at LOS F in both the AM and PM peak hours.

Transit, Bicycle and Pedestrian Facilities

Public transportation in the project area is provided by Omnitrans, the regional transit operator for San Bernardino County. The project area, including the detour route, is served by the following routes on weekdays:

- Route 1 (Colton–Del Rosa): Local fixed-route service that operates along Mount Vernon Avenue south of 2nd Street and along 2nd Street east of Mount Vernon Avenue. During operating hours, there are 15-minute intervals between bus arrivals.
- Route 3 and 4 (West San Bernardino–Baseline–Highland): Local fixed-route service along Mount Vernon Avenue north of 5th Street and 5th Street east of Mount Vernon Avenue, providing service every 20 minutes during operating hours.
- Route 14 (Fontana–Foothill–San Bernardino): Local fixed-route service along 5th Street, providing service every 15 minutes during operating hours.

Updated pedestrian and bicycle counts were collected in 2017 to determine the number of crossings over the Mount Vernon Avenue Bridge by pedestrians and bicyclists. The counts indicated that 175 pedestrians (90 northbound and 85 southbound) and 74 bicyclists (32 northbound and 42 southbound) crossed the bridge, resulting in a total of 249 pedestrian and bicyclist crossings. In comparison, the 2017 counts are nearly identical to those from 2004, which were presented in the adopted 2011 EA/FONSI.

Sidewalks are provided along Mount Vernon Avenue, including the bridge structure. Continuous sidewalks are provided on both sides of 5th Street, 2nd Street, and Rialto Avenue, with striped crosswalks provided on all four approaches at all study area intersections. However, there are currently no striped or marked bicycle lanes within the project area.

2.1.8.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

Detours and Construction Staging

Mount Vernon Avenue Bridge construction is anticipated to commence in 2019 and continue to the end of 2021. Mount Vernon Avenue is proposed to be closed while the bridge is replaced and

a detour route provided. An intersection LOS analysis was conducted to evaluate 2021 without-detour project conditions during the weekday AM and PM peak hours. Table 2-17 summarizes 2021 without-detour and with-detour LOS at the study intersections.

As seen in Table 2-17, similar to existing (2017) conditions, all study area intersections in 2021 without the detour are projected to operate at an acceptable LOS, except for the Ranch Avenue/ Foothill Boulevard intersection, which is predicted to operate at LOS F during AM and PM peak hours.

During construction of Mount Vernon Avenue Bridge, the majority of traffic would be detoured around the project site via Rialto Avenue, G and H Streets, and 5th Street. In addition, traffic utilizing 2nd Street to access Mount Vernon Avenue would be detoured to Rialto Avenue. The detour analysis assumed that some percentage of the traffic would access an alternative north–south route via Rancho Avenue. Adequate directional signage would be placed to assist motorists along the detour route.

As shown in Table 2-17, it is projected that there would be an increase in delay at some study intersections along the detour routes because of the increase in traffic, resulting in a predicted unsatisfactory LOS at the following intersections:

- Rancho Avenue/Foothill Boulevard (AM and PM peak hours);
- Mount Vernon Avenue/5th Street (PM peak hour);
- Mount Vernon Avenue/Rialto Avenue (PM peak hour);
- H Street/5th Street (PM peak hour);
- G Street/Rialto Avenue (PM peak hour).

Table 2-17. Year 2021 With- and Without-Detour Intersection LOS

Intersections	Without-Detour Intersection LOS			With-Detour Intersection LOS	
	Traffic Control	AM Peak-Hour LOS	PM Peak-Hour LOS	AM Peak-Hour LOS	PM Peak-Hour LOS
Rancho Avenue/Foothill Boulevard	Unsignalized	**F**	**F**	**F**	**F**
Ranch Avenue/Rialto Avenue	Signalized	B	B	B	B
4th Street/Foothill Boulevard (5th Street)	Signalized	A	A	A	A
Medical Center Drive/5th Street	Signalized	B	B	B	B
Santa Fe Way/Rialto Avenue	Signalized	B	B	B	B
Cabrera Avenue/5th Street	Signalized	B	B	B	B
Mount Vernon Avenue/5th Street	Signalized	B	C	C	**E**
Mount Vernon Avenue/2nd Street	Signalized	C	C	B	B
Mount Vernon Avenue/Rialto Avenue	Signalized	B	B	D	**F**
L Street/5th Street	Signalized	B	B	B	B
K Street/2nd Street	Signalized	A	B	A	B
K Street/Rialto Avenue	Signalized	C	B	C	C
I Street/2nd Street	Signalized	B	B	B	B
I Street/Rialto Avenue	Unsignalized	A	B	B	B
I-215 SB Ramps/5th Street	Signalized	C	C	C	B
I-215 SB Ramps/2nd Street	Signalized	B	C	B	C
I-215 NB Ramps/5th Street	Signalized	B	D	C	D
I-215 NB Ramps/2nd Street	Signalized	B	B	B	B
H Street/5th Street	Signalized	C	D	D	**F**
H Street/4th Street	Unsignalized	A	A	B	C
H Street/3rd Street	Signalized	C	B	C	C
G Street/2nd Street	Signalized	C	C	D	D
G Street/Rialto Avenue	Signalized	B	B	D	**F**

Note: Bold font indicates unsatisfactory operations.
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Pedestrian and Vehicular Detour Analysis Report* (Caltrans 2018b).

The following temporary and short-term improvements have been identified to improve traffic operations under the with-detour condition:

- Mount Vernon Avenue/5th Street: Restripe westbound approach as a through lane and exclusive right-turn lane.
- Mount Vernon Avenue/Rialto Avenue: Restripe northbound approach as a shared left-turn/through lane and two exclusive right-turn lanes.
- H Street/5th Street: Restripe northbound approach as two exclusive left-turn lanes and a shared through/right-turn lane.
- G Street/Rialto Avenue: Restripe eastbound approach as two exclusive left-turn lanes and a shared through/right-turn lane and change the eastbound and westbound phasing to split phasing.

The affected intersection at Ranch Avenue/Foothill Boulevard is a one-way stop-controlled intersection in the northbound direction; east–west traffic is free flowing and uncontrolled. The intersection is currently operating at LOS F and is projected to continue to operate at LOS F under 2021 without-detour and with-detour conditions; therefore, the LOS reflected at this intersection is not a result of the proposed detour, and temporary improvements to address the issue at this intersection under the with-detour condition are not warranted as part of the proposed project.

An intersection LOS analysis was conducted at the four intersections with the temporary improvements listed above implemented. Table 2-18 summarizes the findings.

Table 2-18. Year 2021 With-Detour with Temporary Improvements LOS

Intersection	Traffic Control	AM Peak-Hour LOS	PM Peak-Hour LOS
Mount Vernon Avenue/5th Street	Signalized	C	D
Mount Vernon Avenue/Rialto Avenue	Signalized	C	C
H Street/5th Street	Signalized	D	D
G Street/Rialto Avenue	Signalized	D	D

Source: *Mount Vernon Avenue Overhead Replacement Project – Final Pedestrian and Vehicular Detour Analysis* Report (Caltrans 2018b).

The results in Table 2-18 indicate that the proposed temporary improvements, if implemented, are projected to improve traffic operations at these four intersections. Furthermore, prior to construction, a Traffic Management Plan (TMP), with a comprehensive public information element to proactively keep the public informed of project progress and closures, would reduce construction-related impacts.

Permanent

Opening Year (2022) Conditions (With Project)

The proposed project would replace the existing four-lane undivided bridge with a four-lane divided bridge and change the geometry at the Mount Vernon Avenue/2nd Street intersection, as follows:

- Addition of southbound left-turn lane
- Addition of a northbound left-turn lane
- Addition of a westbound right-turn lane
- Removal of access from the local frontage road to the intersection (removing the fifth leg at the intersection)

The lane geometry of Mount Vernon Avenue/5th Street and Mount Vernon Avenue/Rialto Avenue would remain the same as under existing conditions. Sidewalks on each side of the new bridge would be six feet wide and would meet Americans with Disabilities Act (ADA) requirements for sidewalk width and slopes. The proposed project will incorporate bicycle facilities within the project limits that are consistent with the City of San Bernardino Bicycle Facilities Master Plan and SBCTA's adopted Non-Motorized Transportation Plan. This could be viewed as a beneficial impact given there are no bike facilities currently within the project limits.

Intersection LOS

An intersection LOS analysis was conducted to evaluate opening-year (2022) no-build conditions and build conditions during weekday AM and PM peak hours. Table 2-19, below, summarizes the findings.

Table 2-19. Opening-Year (2022) Build and No-Build Intersection LOS

Intersections	Peak Hour	Existing (2017) LOS	2022 No-Build LOS	2022 Build LOS
Mount Vernon Avenue/5th Street	AM	D	D	D
	PM	D	D	D
Mount Vernon Avenue/2nd Street	AM	C	C	C
	PM	C	C	D
Mount Vernon Avenue/Rialto Avenue	AM	B	B	B
	PM	B	B	B
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study* (Caltrans 2018a)				

As shown in Table 2-19, all study area intersections in the opening year (2022) No-Build and Build conditions are projected to operate at an acceptable LOS of D or better.

Roadway Segment Capacity

A roadway segment capacity analysis was also conducted to evaluate opening-year (2022) No-Build and Build conditions along Mount Vernon Avenue. The number of lanes provided for the opening-year (2022) No-Build and Build scenarios would be the same as under existing conditions. As shown in Table 2-20, with four lanes, Mount Vernon Avenue is projected to continue to serve travel demand adequately.

Table 2-20. Opening-Year (2022) Build and No-Build Roadway Capacity

Location	Number of Lanes	Capacity	2022 No-Build Weekday Volume	2022 Build Weekday Volume	Volume/ Capacity	Build and No-Build-Project LOS
Mt Vernon Ave between 5th St and 2nd St	4	40,000	18,757	18,757	0.47	A

Source: *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study* (Caltrans 2018a)

Queue Length Analysis

A queue length analysis was completed for opening-year (2022) No-Build conditions during AM and PM peak hours. The results are summarized in Table 2-21.

Table 2-21. Opening-Year (2022) No-Build Queue Length Analysis

Intersection	Direction	Lane	Available Storage Length (feet)	Existing (2017) Queue Length (feet)		2022 No-Build Queue Length (feet)	
				AM Peak	PM Peak	AM Peak	PM Peak
Mount Vernon Avenue/5th Street	Northbound	Left	100	56	114	57	115
		Thru	2,045	93	*164*	95	*173*
	Southbound	Left	80	**101**	**127**	**102**	**130**
		Thru	680	*115*	*128*	*118*	*127*
	Eastbound	Left	150	56	106	56	107
		Thru	1,780	*182*	*178*	*178*	*187*
	Westbound	Left	95	51	95	53	**93**
		Thru	1,460	*144*	*192*	*151*	*197*
Mount Vernon Avenue/2nd Street	Northbound	Thru	680	141	246	157	314
	Southbound	Thru	2,045	191	226	212	265
	Eastbound	Thru	630	24	32	25	33
	Westbound	Left	550	108	150	107	141
		Thru	550	50	69	49	69
Mount Vernon Avenue/Rialto Avenue	Northbound	Left	85	26	35	25	34
		Thru	1,610	54	*108*	*57*	*124*
	Southbound	Left	80	17	20	26	26
		Thru	680	*85*	*98*	94	*105*
	Eastbound	Left	80	*77*	**82**	73	**85**
		Thru	2,420	119	104	123	*107*
	Westbound	Left	90	66	80	70	85
		Thru	1,880	49	*106*	*51*	*113*

Note: Bold indicates queues longer than capacity. Italics indicates the through movement queue is longer than the adjacent turning pocket length.
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study* (Caltrans 2018a).

As indicated in the table, left-turn lane vehicle queues at the Mount Vernon Avenue/2nd Street intersection are projected to be within the available turn-pocket lengths during both peak hours. The through-movement queue adjacent to the left-turn pockets would not extend beyond the existing turn-pocket lengths. Therefore, left-turning vehicles would have no difficulty accessing the left-turn lane. For the Mount Vernon Avenue/5th Street intersection, the left-turn lane vehicle queue lengths at the southbound and westbound approaches are projected to exceed the available

left-turn lane length during both peak hours. For all approaches at the Mount Vernon Avenue/5th Street intersection during both peak hours, through-movement queues would exceed the adjacent left-turn pocket lengths, indicating that through-movement queues might block access to the left-turn lane. For the Mount Vernon Avenue/Rialto Avenue intersection, the left-turn lane queue length at the eastbound approach is projected to exceed the available storage length during the PM peak hour. The through-movement queues would exceed the adjacent left-turn pocket lengths at all approaches during both peak hours.

A queue length analysis was completed for opening-year (2022) build and no-build conditions during AM and PM peak hours. The results are summarized in Table 2-22.

Table 2-22. Opening-Year (2022) Build and No-Build Queue Length Analysis

Intersection	Direction	Lane	Available Storage Length (feet)	2022 No-Build Queue Length (feet)		2022 Build Queue Length (feet)	
				AM Peak	PM Peak	AM Peak	PM Peak
Mount Vernon Avenue/5th Street	Northbound	Left	100	57	115	57	115
		Thru	2,045	95	*173*	*95*	*173*
	Southbound	Left	80	**102**	**130**	**102**	**130**
		Thru	680	*118*	*127*	*118*	*127*
	Eastbound	Left	150	56	107	56	107
		Thru	1,780	*178*	*187*	*178*	*187*
	Westbound	Left	95	53	**93**	53	**93**
		Thru	1,460	*151*	*197*	*151*	*197*
Mount Vernon Avenue/2nd Street	Northbound	Left	150	—	—	16	27
		Thru	680	157	314	144	*333*
	Southbound	Left	150	—	—	100	122
		Thru	2,045	212	265	132	139
	Eastbound	Thru	630	25	33	29	39
	Westbound	Left	550	107	141	70	90
		Thru	550	49	69	69	88
Mount Vernon Avenue/Rialto Avenue	Northbound	Right	150	—	—	8	60
		Left	85	25	34	25	34
		Thru	1,610	*57*	*124*	*57*	*124*
	Southbound	Left	80	26	26	26	26
		Thru	680	94	*105*	93	*105*
	Eastbound	Left	80	73	**85**	72	**85**
		Thru	2,420	123	*107*	*121*	*107*
	Westbound	Left	90	70	85	70	85
		Thru	1,880	*51*	*113*	51	*113*

Note: Bold indicates queues longer than capacity. Italics indicates the through movement queue is longer than the adjacent turning pocket length.
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study* (Caltrans 2018a).

As indicated in Table 2-22, at the Mount Vernon Avenue/5th Street intersection, queues are projected to remain essentially the same as under the no-build conditions. At the Mount Vernon Avenue/Rialto Avenue intersection, queues would be very similar to no-build conditions, with few differences during either peak hour. Queues under the Build Alternative (Preferred

Alternative) at the Mount Vernon Avenue/2nd Street intersection are projected to decrease in length compared with the no-build scenario at most of the approaches, and the proposed turning-pocket lengths of 150 feet would be adequate for the turning-movement vehicle queues. However, the northbound through-movement queues would extend beyond the entrance to the left-turn pocket in the PM peak hour. Drivers may need to use the extended two-way left-turn lane to access the turning lane. Overall, the added turning lanes and protected left-turn phases at the northbound, southbound, and westbound approaches of the Mount Vernon Avenue/2nd Street intersection are projected to improve intersection operations and decrease the length of vehicle queues.

Design Year (2040) Conditions

Intersection LOS

An intersection LOS analysis was conducted to evaluate design-year (2040) build and no-build conditions during weekday AM and PM peak hours. Table 2-23 below summarizes the findings.

Table 2-23. Design-Year (2040) Build and No-Build Intersection LOS

Intersections	Peak Hour	Existing (2017) LOS	2040 No-Build LOS	2040 Build LOS
Mount Vernon Avenue/5th Street	AM	D	D	D
	PM	D	D	D
Mount Vernon Avenue/2nd Street	AM	C	C	C
	PM	C	C	D
Mount Vernon Avenue/Rialto Avenue	AM	B	B	B
	PM	B	B	B
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study* (Caltrans 2018a)				

As indicated in Table 2-23, all intersections in the design year (2040) under build and no-build conditions are anticipated to continue operating at a satisfactory LOS of D or better.

Roadway Segment Capacity

A roadway segment capacity analysis was conducted to evaluate design-year (2040) build and no-build conditions during typical weekday operations. As shown in Table 2-24, the number of lanes in the design year (2040) under build and no-build conditions would remain the same as under existing conditions. With four lanes, Mount Vernon Avenue is projected to continue to serve traffic demand adequately.

Table 2-24. Design-Year (2040) Build and No-Build Roadway Capacity

Location	Number of Lanes	Capacity	2040 No-Build Weekday Volume	2040 Build Weekday Volume	Volume/ Capacity	Build and No-Build LOS
Mt Vernon Ave between 5th St and 2nd St	4	40,000	24,011	24,011	0.60	A
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study* (Caltrans 2018a)						

Queue Length Analysis

A queue-length analysis was completed for design-year (2040) no-build conditions during AM and PM peak hours. Table 2-25 summarizes the findings.

Table 2-25. Design-Year (2040) No-Build Queue Length Analysis

Intersection	Direction	Lane	Available Storage Length (feet)	Existing (2017) Queue Length (feet)		2040 No-Build Queue Length (feet)	
				AM Peak	PM Peak	AM Peak	PM Peak
Mount Vernon Avenue/5th Street	Northbound	Left	100	56	114	61	122
		Thru	2,045	93	*164*	102	*205*
	Southbound	Left	80	101	127	104	129
		Thru	680	*115*	*128*	*132*	*123*
	Eastbound	Left	150	56	106	57	107
		Thru	1,780	*182*	*178*	*155*	*204*
	Westbound	Left	95	51	95	57	123
		Thru	1,460	*144*	*192*	*165*	*214*
Mount Vernon Avenue/2nd Street	Northbound	Thru	680	141	246	161	480
	Southbound	Thru	2,045	191	226	286	342
	Eastbound	Thru	630	24	32	24	35
	Westbound	Left	550	108	150	82	107
		Thru	550	50	69	48	71
Mount Vernon Avenue/Rialto Avenue	Northbound	Left	85	26	35	18	31
		Thru	1,610	54	*108*	64	*222*
	Southbound	Left	80	17	20	56	68
		Thru	680	*85*	*98*	*112*	*158*
	Eastbound	Left	80	77	82	56	109
		Thru	2,420	119	104	*130*	*120*
	Westbound	Left	90	66	80	83	113
		Thru	1,880	49	*106*	61	*146*

Note: Bold indicates queues longer than capacity. Italics indicates the through movement queue is longer than the adjacent turning pocket length.
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study* (Caltrans 2018a).

As indicated in Table 2-25, left-turn lane vehicle queues at the Mount Vernon Avenue/2nd Street intersection are projected to operate within the available turn-pocket lengths during both peak hours. The through-movement queues adjacent to the left-turn pockets would not extend beyond the existing turn-pocket lengths. Therefore, left-turning vehicles would have no difficulty accessing the left-turn lane. For the Mount Vernon Avenue/5th Street intersection, the left-turn lane vehicle queue lengths at the northbound, southbound, and westbound approaches are projected to exceed the available left-turn lane length during both peak hours. For all approaches at the Mount Vernon Avenue/5th Street intersection during either the AM or PM peak hour, or both, through-movement queues are projected to exceed the adjacent left-turn pocket lengths, indicating that through-movement queues might block access to the left-turn lane. For the Mount Vernon Avenue/Rialto Avenue intersection, the left-turn queue lengths at the eastbound and westbound approaches are projected to exceed the available storage length during the PM peak hour. The through-movement queues would also exceed the adjacent left-turn pocket lengths at all approaches during both peak hours.

A queue length analysis was completed for design-year (2040) build conditions during AM and PM peak hours. The results are summarized in Table 2-26.

Table 2-26. Design-Year (2040) Build and No-Build Queue Length Analysis

Intersection	Direction	Lane	Available Storage Length (feet)	2040 No-Build Queue Length (feet)		2040 Build Queue Length (feet)	
				AM Peak	PM Peak	AM Peak	PM Peak
Mount Vernon Avenue/5th Street	Northbound	Left	100	61	122	61	**122**
		Thru	2,045	102	*205*	102	*205*
	Southbound	Left	80	**104**	**129**	**104**	**129**
		Thru	680	*132*	*123*	*132*	*123*
	Eastbound	Left	150	57	107	57	107
		Thru	1,780	*155*	*204*	155	*204*
	Westbound	Left	95	57	**123**	57	**123**
		Thru	1,460	*165*	*214*	*165*	*214*
Mount Vernon Avenue/2nd Street	Northbound	Left	150	—	—	11	18
		Thru	680	161	480	153	508
	Southbound	Left	150	-	-	113	125
		Thru	2,045	286	342	178	139
	Eastbound	Thru	630	24	35	26	40
	Westbound	Left	550	82	107	54	70
		Thru	550	48	71	55	70
		Right	150	—	—	13	64
Mount Vernon Avenue/Rialto Avenue	Northbound	Left	85	18	31	18	31
		Thru	1,610	64	*222*	64	*222*
	Southbound	Left	80	56	68	56	68
		Thru	680	*112*	*158*	*112*	*158*
	Eastbound	Left	80	56	**109**	56	**109**
		Thru	2,420	*130*	*120*	*130*	*120*
	Westbound	Left	90	83	**113**	83	**113**
		Thru	1,880	61	*146*	61	*146*

Note: Bold indicates queues longer than capacity. Italics indicates the through movement queue is longer than the adjacent turning pocket length.
Source: *Mount Vernon Avenue Overhead Replacement Project – Final Traffic/Circulation Study* (Caltrans 2018a).

As indicated in Table 2-26, queues at the Mount Vernon Avenue/5th Street and Mount Vernon Avenue/Rialto Avenue intersections are projected to remain the same as queues under the no-build condition. The project vehicle queues at the Mount Vernon Avenue/2nd Street intersection are projected to decrease in length compared to the no-build scenario at most approaches, and the proposed turning-pocket length of 150 feet would be adequate for turning-movement vehicle queues. The northbound through-movement queue would extend beyond the entrance to the left-turn pocket during the PM peak hour. Drivers may need to utilize the extended two-way left-turn lane to access the turning lane. Overall, the added turning lanes and protected left-turn phases at the northbound, southbound, and westbound approaches to the Mount Vernon Avenue/2nd Street intersection would improve intersection operations and decrease the length of vehicle queues.

The results of the LOS analysis indicate that the proposed project and associated improvements at the Mount Vernon Avenue/2nd Street intersection would operate at acceptable levels of service. The roadway capacity analysis indicates that traffic demand on Mount Vernon Avenue justifies a four-lane facility. The queue length analysis also indicates that the proposed turning-pocket lengths are adequate for the Mount Vernon Avenue/2nd Street intersection.

2.1.8.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The traffic measures listed in the adopted 2011 EA/FONSI would still be applicable, with the exception of the former **TR-4**, which has been updated, based on recommendations in the updated 2018 *Detour Analysis Report*. It is now part of measure **UT-5** (Section 2.1.7.3). In addition, measures **TR-2** and **TR-4** required minor revisions to correct outdated information. The following measures to avoid or minimize traffic and circulation impacts would be incorporated into the project:

TR-1 Notices of the bridge closure, including corresponding vehicle/pedestrian detours, shall be provided and posted at both approaches to the bridge in advance of the scheduled bridge closure. A public awareness campaign and/or community outreach/public involvement program will be conducted to ensure that the public is aware of traffic closures or detours. Emergency response personnel and local school officials will be notified in advance of any planned street closures (including partial and/or full closures) or traffic diversions.

TR-2 San Bernardino County Transportation Authority will make arrangements to provide free bus passes to residents of the area surrounding the bridge. These passes will be valid for travel on Omnitrans buses that serve the area. This will provide mobility to area residents affected by the bridge closure because there will be no pedestrian route across the BNSF rail yard while the bridge is out of service. The bus passes will provide alternative motorized means for pedestrians to travel across the rail yard during that time.

TR-3 A Construction Management Program will be developed and implemented to maintain access to and from the project area through signage, detours, flagmen, etc.

TR-4 During preparation of the TMP, coordination with Omnitrans shall occur to address issues along bus routes that could be affected during construction. Transit Route 1 is adjacent to the southern end of the project and traverses from Mount Vernon Avenue to 2nd Street via Viaduct, 3rd, and J Streets. Because the bridge closure would be on Mount Vernon Avenue between 2nd and 4th Streets, Transit Route 1 may be re-routed to 3rd Street via West King Street, North Giovanola Avenue, and 2nd Street, eliminating a small section of the route along Viaduct Street. To temporarily re-route Transit Route 1, coordination with Omnitrans for input on the TMP would occur.

2.1.9 Visual/Aesthetics

2.1.9.1 REGULATORY SETTING

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all arches safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). To further emphasize this point, the FHWA, in its implementation of NEPA (23 USC 109[h]), directs that final decisions on projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

2.1.9.2 AFFECTED ENVIRONMENT

This section is based on the *Supplemental Visual Impact Assessment Memorandum for the Mount Vernon Avenue Bridge Project* (VIAM), February 2018 (Caltrans 2018c).

Visual Setting

The project would occur at Mount Vernon Avenue Bridge in the city of San Bernardino, San Bernardino County, California (54C-066), in Section 7, Township 1 South, Range 4 West, of the U.S. Geological Survey San Bernardino South 7.5-minute quadrangle map. The study area is relatively flat and open, with minimal vegetation. Adjacent urban development and the BNSF intermodal facility buildings and tracks create an urban environment, with mostly paved surfaces and minimal open areas that support landscaping or ruderal vegetation. Scenic vista views are available from the existing Mount Vernon Avenue Bridge to the surrounding mountain ranges in the background when not obscured by atmospheric haze. However, the foreground views associated with the vistas are dominated by the industrialized landscape associated with the rail facilities, vertical utility poles, and a BNSF smokestack. The bridge itself is most visible in areas west of the project site because of the slightly elevated topography, minimal development, and sparse vegetation. Areas southeast of the project site have the most limited views because of dense residential and commercial development, topography, and heavy vegetation. Views of the bridge are relatively unobstructed from the eastern and western ends of the rail yard.

Land uses in the study area include industrial, commercial, residential, and public facilities. The majority of the study area incorporates the industrial uses surrounding and within the BNSF rail yard. A Metrolink station, parking facilities, and a historical Atchison, Topeka, & Santa Fe passenger and freight depot are adjacent to the project site, within the southeast quadrant of the study area. Commercial uses are situated along Mount Vernon Avenue and 5th Street, north of the rail yard, between Mount Vernon Avenue and Interstate (I-) 215. Residential areas are located mainly within the northwest, northeast, and southeast quadrants of the study area, with a small pocket of residential uses within the southwest quadrant. Public facilities near the study area include Lytle Creek Wash and Channel and Nunez Park, which are west of the project site, and La Plaza Park, which is adjacent to Mount Vernon Avenue and north of the project site.

The primary visual change since the 2009 VIAM and adopted 2011 EA/FONSI is a two-story Metrolink parking garage, which is now located between West 2nd and 3rd Streets and between Mount Vernon Avenue and Metrolink Way. This area was originally unimproved open space that

supported mainly weedy grasses and palms; the area was unused. In addition, south of the West 4th Street cul-de-sac, the location for one crane repair lift has been shifted. One additional crane has been added; therefore, two crane repair lifts would be visible from Kingman Street instead of one. Lastly, the west side of the 500 block of Mount Vernon Avenue, north of the BNSF rail yard between Route 66 and Spruce Street, has undergone redevelopment, including the addition of an ARCO ampm gas station, which has improved the quality of views along this portion of Mount Vernon Avenue by replacing poorly maintained buildings with well-maintained structures and site landscaping.

There are no state or local scenic routes within the study area.

2.1.9.3 ENVIRONMENTAL CONSEQUENCES

*Build Alternative **(Preferred Alternative)***

Temporary

Construction impacts could result from staging areas, warning signage, equipment storage, and night-time construction that requires additional lighting. These construction activities may temporarily obscure views. It is anticipated that project construction would begin in the fall of 2019 and be completed by fall of 2021. Project construction would occur year-round. In addition, the potential exists for some nighttime construction to occur. This would create the need for high-intensity lighting. However, such lighting would not result in adverse impacts at most locations because sensitive residential receptors would be some distance away from or not within sight of the construction area. Furthermore, roadway travelers would be exposed to such lighting very briefly as they pass by. However, if construction activities occur at night in locations that are directly adjacent to residences, then this lighting could shine into residences and disturb residents in their homes. Implementation of avoidance and minimization measures **VIS-3** and **VIS-4** would ensure that nighttime construction would not occur directly adjacent to residences and that the construction contractor would minimize project-related light and glare to the maximum extent feasible during nighttime construction activities.

Reconstructing street access along both sides of Mount Vernon Avenue to match the new road/sidewalk grades between West 2nd Street and Kingman Street would require temporary easements for construction and staging, which would result in minor changes to the visual landscape if landscaping and site features such as fencing, retaining walls, or mailboxes are affected. Implementation of avoidance and minimization measure **VIS-1** would relocate or replace affected landscaping, fencing, and other landscape features to the degree possible, reducing visual impacts. In addition, avoidance and minimization measure **VIS-2** would ensure that staging areas would be screened from residences, minimizing the amount of visual disruption caused by construction staging.

Permanent

As described in the 2009 VIAM and adopted 2011 EA/FONSI, no state or local scenic routes would be affected by the proposed project; this remains the same. Furthermore, the visual impacts discussed in the adopted 2011 EA/FONSI would remain the same. The following discussion concerns the improvements/refinements that have been incorporated into the project since the 2011 EA/FONSI was adopted.

Relocating the Eagle Building and ancillary buildings to the east side of Mount Vernon Avenue; the two existing crane repair pads north of their current location, on the west side of Mount Vernon Avenue; and utility lines to accommodate proposed improvements would only shift the location of existing features in the visual landscape and would not add or remove any features. Realignment of Tracks 216 and 217 would occur along an existing vehicular travel way in the rail yard. Shoofly Tracks 218 and 219 would be built in areas that are currently used for freight storage. These areas are in proximity to the existing tracks; therefore, these changes would not result in a notable change in the visual landscape. The historic depot is south of where Shoofly Tracks 218 and 219 would be built and outside the 2017 limits of disturbance. Views from the depot toward Shoofly Tracks 218 and 219 would be available when rail cars are not parked on the sidings. Views from the depot would not be affected by the proposed changes because the new tracks would not stand out within the existing setting, an area where there are already many tracks within view.

The only notable visual change resulting from the proposed improvements/refinements incorporated since the adopted 2011 EA/FONSI would be related to acquisition and removal of existing residences and businesses located 1) northwest of the rail yard on the block bordered by Kingman Street, West 4th Street, Cabrera Avenue, and Mount Vernon Avenue and 2) southwest of the rail yard on a half block bordered by Mount Vernon Avenue, an alley behind the structures, West 3rd Street, and West 2nd Street. The permanent right-of-way acquisitions northwest of the rail yard would accommodate the proposed BNSF intermodal operations area, which would include a 12-foot-high block wall and a 20-foot-wide landscape buffer along Cabrera Avenue and Kingman Street to obstruct views of the area from adjacent residential locations. The removal of residential dwellings and businesses on the northwest block would expand the view of facilities associated with the rail yard in the vicinity. However, many of the affected parcels are vacant lots with little aesthetic value. The remainder of the affected parcels are occupied properties with residential or small business uses. Many of the occupied properties have well-kept structures and landscaping. However, some of the occupied properties show signs of years of deferred maintenance, with buildings and site features (e.g., fencing, parking areas) that are deteriorated. The properties have degraded visual conditions and little or no landscaping. Similarly, the properties on the southwest half of the block range from being well kept to poorly repaired. The existing visual conditions on the affected blocks are the same as on the surrounding blocks. The removal of residences and businesses on the northwest block and southwest half block would not greatly alter the visual character of the study area because rail facilities and local roadways already dominate the landscape. The conversion of these blocks constitutes a relatively small expansion compared with the overall scale of the existing facilities. However, sensitive residential and commercial receptors would see these changes and would most likely view them negatively. The 12-foot-high block wall and 20-foot-wide landscape buffer along Kingman Street and Cabrera Avenue would improve project aesthetics by providing a vegetative buffer and visual relief from the rail yard for adjacent residents.

No-Build Alternative

Under the No-Build Alternative, no new bridge or other improvements would be constructed at the project site; therefore, neither temporary nor construction-related effects on the existing visual setting or aesthetic condition would occur. However, if the bridge ultimately has be closed to pedestrian and vehicular traffic, this could result in adverse visual impacts, particularly if the bridge were to fall into further disrepair and/or attract graffiti or other vandalism.

2.1.9.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

Avoidance and minimization measures have been identified to ensure that visual impacts are minimized. Measures **CR-6** through **CR-8** and **N-1**, identified in the adopted 2011 EA/FONSI to address visual impacts, would still be applicable to the proposed project (refer to measures listed in Section 2.1.10, Cultural Resources, and 2.2.6, Noise). The following new measures from the 2018 *Supplemental Visual Impact Memorandum* will be implemented. These would be designed and implemented with concurrence from the Caltrans District 8 District Landscape Architect.

VIS-1 **Replace or Relocate Site Features and Landscaping Affected by the Project.** Landscaping and related appurtenances (e.g., fencing, driveway gates, similar features) associated with private properties that are unaffected by relocations will be relocated or replaced where appropriate to the degree possible to reduce visual impacts.

VIS-2 **Install Visual Barriers between Construction Work Areas and Residential Receptors.** Residential receptors have high viewer sensitivity. Therefore, the contractor shall install and maintain temporary visual barriers to obstruct undesirable views of construction activities for residential viewers that are located directly adjacent to or abutting the construction site. The visual barrier may be chain link fencing with privacy slats, fencing with windscreen material, wood, or other similar barriers. The visual barrier shall be a minimum of six feet high to help maintain the privacy of residents and block ground-level views toward construction activities. Although this visual barrier would introduce a visual intrusion, it would greatly reduce visual effects associated with visible construction activities and screen construction staging areas where the protection of privacy is deemed desirable.

VIS-3 **Limit Construction Directly Adjacent to Residences to Daylight Hours.** Construction activities that are located directly adjacent to residences will not take place before or past daylight hours (which vary according to season). This would reduce the amount of construction experienced by residential viewers, because most construction activities would occur during business hours (when most residents are at work), and eliminate the need to introduce high-wattage lighting sources to operate in the dark near residences during construction.

VIS-4 **Minimize Fugitive Light from Portable Sources Used for Construction.** The construction contractor shall minimize project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights will be used. Portable lights will be operated at the lowest allowable wattage and height. For construction occurring on the ground, portable lights will be raised to a height no greater than 20 feet. All lights will be screened and directed downward, toward work activities, and away from the night sky and nearby residents to the maximum extent possible. The number of nighttime lights used will be minimized to the greatest extent possible.

VIS-5: **Apply Aesthetic Design Treatments to Wall.** Aesthetic design treatments shall be applied to the block wall located along Cabrera Avenue and Kingman Street. Design of the block wall shall evaluate similar, local structures with historic value or that are

well-designed and be developed to match and transition to the Mt. Vernon Avenue Streetscape Design Guidelines, detailed within the City's *Paseo Las Placitas Specific Plan and EIR for the Mt. Vernon Corridor* plan document from 1992, to ensure that the wall does not create further visual discordance in the landscape. Following the Mt. Vernon Avenue Streetscape Design Guidelines, the wall shall implement aesthetic design features such as mimicking natural material (e.g., stone or rock surfacing) or architectural stylings (e.g., stucco or plaster over adobe brick) and integral color to reduce visibility and to better blend with the landscape. Wall color will be chosen from the *Paseo Las Placitas Specific Plan and EIR for the Mt. Vernon Corridor*. If the color selection is between two or three colors, then it is suggested that one of the darker shades be selected. Choosing a shade that is darker will allow the surface to recede and blend within the visual landscape whereas lighter colors advance and are more apparent within the visual landscape. Aesthetic treatments for the wall will be submitted to the Caltrans District 8, District Landscape Architect for review and approval. Regardless of the design treatment applied, SBCTA or its contractor will inspect the wall quarterly and perform graffiti abatement to avoid creating a visual nuisance. However, if notified that graffiti is present, graffiti abatement will occur within one week of being notified.

VIS-6: **Apply Best Management Practices to the Landscaping Plan.** Vegetative accents and screening will be installed to aid in a perceived reduction in the scale and mass of the block wall along Cabrera Avenue and Kingman Street, while accentuating the design treatment that will be applied to the wall surface (refer to measure **VIS-5**). Plant selection will be based on its ability to screen the wall and provide aesthetic accents and will include evergreen and deciduous tree and shrub species that would provide multi layering, seasonal variety, and be visually pleasing to improve aesthetics. The design shall be developed to match and transition to the Mt. Vernon Avenue Streetscape Design Guidelines detailed within the City's *Paseo Las Placitas Specific Plan and EIR for the Mt. Vernon Corridor* plan document from 1992. Plant species will be selected from the plant palette identified within the *Landscape Materials* section of the *Paseo Las Placitas Specific Plan and EIR for the Mt. Vernon Corridor*. The landscaping plan will be submitted to the Caltrans District 8, District Landscape Architect for review and approval. Under no circumstances will any invasive plant species be used at any location. Vegetation shall be planted within the first six months following Project completion. An irrigation and maintenance program shall be implemented during the plant establishment period. The irrigation and maintenance program will be submitted to the Caltrans District 8, District Landscape Architect for review and approval.

VIS-7: The aesthetic treatment for the new wall and buffer area in the northwest quadrant of the project site will be developed through workshops and coordination with the San Bernardino County Transportation Authority, Caltrans District 8, the District Landscape Architect, and the City of San Bernardino.

2.1.10 Cultural Resources

2.1.10.1 REGULATORY SETTING

The term "cultural resources," as used in this document, refers to the "built environment" (e.g., structures, bridges, railroads, water conveyance systems, etc.), places of traditional or cultural importance, and archaeological sites (both prehistoric and historic), regardless of significance. Under federal law, cultural resources that meet certain criteria of significance are referred to by various terms including "historic properties," "historic sites," and "traditional cultural properties." Laws and regulations dealing with cultural resources are discussed below.

The National Historic Preservation Act (NHPA) of 1966, as amended, sets forth national policy and procedures for historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for listing on the National Register of Historic Places (NRHP). Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and to allow the Advisory Council on Historic Preservation (ACHP) the opportunity to comment on those undertakings, following regulations issued by the ACHP (36 Code of Federal Regulations [CFR] 800). On January 1, 2014, the First Amended Section 106 Programmatic Agreement (PA) among the Federal Highway Administration (FHWA), the ACHP, the California State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the ACHP's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA's responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Program (23 United States Code [USC] 327).

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties (in Section 4(f) terminology—historic sites). See Appendix A for specific information about Section 4(f).

2.1.10.2 AFFECTED ENVIRONMENT

A *Historic Property Survey Report* (HPSR) was originally completed in August 2001 for the proposed Mount Vernon Avenue Bridge Replacement Project. The SHPO concurred with the 2001 HPSR on March 1, 2002. A *Supplemental Historic Property Survey Report* (SHPSR) was prepared in March 2007 to take into account modifications to the project design, which required changes to the 2001 Area of Potential Effects (APE). The results of the 2007 study found that a building located at 240 North Mount Vernon Avenue, determined eligible for the NRHP in 2001, had been demolished in 2003. Documentation relating to the demolition of the historic property was prepared by Caltrans District 8 Cultural Studies staff. No additional buildings in the 2006 APE required evaluation. Caltrans approved a Finding of Effect for the undertaking in 2007. Because the SHPO did not formally concur on Caltrans' proposed Adverse Effect finding, Caltrans assumed concurrence and proceeded with a Memorandum of Agreement (MOA), signed by the SHPO in 2009 and later by Caltrans in 2011. In addition, an amendment to the MOA was made in March 2018 to include SBCTA as a concurring party.

Because additional project improvements/refinements have been identified that were not included in the first SHPSR in 2007, supplemental Section 106 compliance documents are required. A second SHPSR has been prepared to take into account these proposed improvements/refinements to the project design, which resulted in additional changes to the APE.

Information from this section is based on the 2nd SHPSR (Caltrans 2018d), which included a *Supplemental Archaeological Survey Report* (ASR) (Caltrans 2018e) and a *Supplemental Historic Resources Evaluation Report* (SHRER) (Caltrans 2018f) prepared for this project.

Area of Potential Effect

The APE for the undertaking was originally established in 2000 as part of the original HPSR prepared for the undertaking (approved August 2001). The APE was revised in 2006 in consultation with Christie Hammond, Caltrans District 8 Principal Architectural Historian (PQS), and Sean Yeung, Local Assistance Engineer, to include a revised boundary due to minor design changes determined since the original HPSR was completed.

In accordance with the Section 106 PA (January 2014), Stipulation VIII.A, the second revised (2018) APE for the project was established in consultation with Andrew Walters, Principal Architectural Historian PQS, and David Lee, Project Manager/Local Assistance Planner, on March 22, 2018.

The purpose of the APE is to delineate the geographic areas within which an undertaking may directly or indirectly cause alteration in the character or use of historic properties, if any such properties exist. The project's updated APE has been defined in accordance with 36 CFR 800.16(d) and (i) with the purpose of identifying cultural resources within the project's expanded footprint. The APE boundaries for the proposed project were drawn large enough to encompass all areas subject to ground disturbance or modifications. The APE was established as the limits of proposed construction, including the limits of the current and proposed right of way, temporary construction easements plus a sufficient buffer to allow heavy equipment to maneuver, and potential staging areas. The APE further encompasses the full boundaries of previously recorded or newly identified archaeological sites that are partially within the project limits. The APE was further expanded to encompass entire parcels where previously recorded or newly identified built resources could be sensitive to visual, noise, and vibration effects. The western quadrant of the APE was expanded in particular to include the extents of the Santa Fe railyard, which was evaluated as part of these updated studies. The guiding tenet in delineating the APE is that it be commensurate with the undertaking's potential to affect historic properties, should any exist.

The vertical APE within the project limits is anticipated to range from three feet to 100 feet deep, depending on construction activity. Limited locations may require excavating to depths of up to approximately 80 to 100 feet for bridge pilings as well as associated drilling activities. Depths of up to three to four feet would be required for roadway excavation. Excavations depths of up to five to six feet would be required for retaining walls and 4 to 14 feet for drainage trenching. However, subsurface sensitivity for undiscovered cultural materials is considered low overall for

the project given the APE has been built out, graded, constructed upon, and utilized for numerous construction projects over the past 100 years.

Summary of Identification Efforts

Prior to field investigations, a cultural resource records search was conducted on July 24, 2017 at the South Central Coastal Information Center of the California Historical Resources Information System. This records search was conducted for the project footprint and a 0.25-mile radius around the project footprint. The results of the records search indicate that a total of 26 previous studies have occurred in the records search area. Of these studies, 12 have occurred in, or partially within, the present project APE. In addition, the results of the records search indicate that 22 previously recorded cultural resources occur in the records search area. One previously recorded archaeological site, the Santa Fe Site (36-008695/CA-SBR-8695H), is mapped within the APE. This site consisted of 11 privy deposits and two refuse dumps associated with residences present on the property between 1895 and 1916. The 13 features were discovered during monitoring of demolition and grading activities in 1995–1996, and were recorded and recovered for analysis. Artifacts recovered from the 13 features consisted of a typical domestic assemblage dating to the late 19th and early 20th centuries including glass, ceramics, hardware, food bone, personal items, and construction debris. Because previously identified archaeological deposits were destroyed during the sub-excavation that followed the data recovery of the discovered features and because inspection of the lower strata did not reveal additional archaeological remains, the potential to uncover archaeological features is very low. Because of this, the site is no longer included in the vertical APE. As part of the studies conducted for this project, the site record was updated to reflect the fact that the site is no longer extant.

Additionally, a segment of the California Southern Railroad was also found to be in the APE through the records search. The segment located in the APE was evaluated as part of the Santa Fe rail yard in the SHRER (March 2018) and found ineligible for the NRHP.

Although the records search returned that there were 22 previously recorded cultural resources in the APE, previous studies conducted for this project evaluated 23 other buildings/structures that were found to be ineligible for the NRHP. These are an additional 23 buildings/structures that were not identified in the records search. Thirteen of those were determined to be exempt from evaluation in accordance with Attachment 4 of the Section 106 PA and the other 10 were reevaluated in the SHRER.

In addition, further research revealed that the Metrolink Parking Structure HPSR, prepared by David M. Van Horn in 2009, covers part of the APE. The report revealed that the APE included two ditches that were identified and evaluated for NRHP eligibility: the Santa Fe Ditch (P-36-014221) and Viaduct Boulevard Ditch (P-36-014222). The 2009 HPSR found that neither ditch was eligible for inclusion in the NRHP. SHPO concurred on March 5, 2009, that the ditches were ineligible for listing in the NRHP.

The pedestrian field surveys completed for the Mount Vernon Avenue Bridge project on October 6, 2017, December 21, 2017, and January 10, 2018, revealed that both ditches appear to have been destroyed during the construction of the parking structure.

A former segment of Route 66, now known as West 4th Street, and the Santa Fe rail yard were not identified in the record search results, but both were evaluated as part of these 2018 updated studies and found ineligible for the NRHP. Lastly, the Santa Fe Depot, listed on the NRHP, was also not identified in the APE through the records search; however, it is known to be in the APE. The project is not expected to have an adverse effect on the Santa Fe Depot.

Native American Consultation

A request to the Native American Heritage Commission (NAHC) was made for the project on April 8, 2004. On May 10, 2004, the NAHC responded that a search of its Sacred Lands File for the affected project area failed to indicate the presence of Native American cultural resources in the immediate project area.

Letters were sent to the tribal contacts the NAHC provided as part of consultation efforts in 2004. On September 17, 2004, the San Manuel Band of Mission Indians responded via letter that they had no knowledge of any culturally sensitive locations in the project area. No other tribe responded to consultation attempts.

Although none of the previously contacted tribes identified any concerns regarding the project, updated letters were sent to nine tribes on August 29, 2017. Additionally, calls were made to each individual and group. Lee Clauss of the San Manuel Band of Mission Indians and Anthony Morales of the Gabrieleno/Tongva San Gabriel Band of Mission Indians responded to consultation attempts.

A response was received from Lee Clauss on behalf of the San Manuel Band of Mission Indians in which she sent an email in response to contact attempts to Gary Jones of Caltrans on October 3, 2017. In her email she stated that the project was of interest to the tribe because it is located in the Serrano ancestral territory. In addition, she requested a copy of the Draft ASR and the literature and records search results. These were sent to her on January 9, 2018. Because the tribe has not responded, and because previous disturbance and the record search information acquired for the project indicate a low sensitivity for prehistoric cultural resources, Caltrans is assuming the tribe has no further concerns and is proceeding to the next phase of the undertaking.

In his response, Mr. Morales indicated that monitoring by both archaeologists and Native Americans should be conducted for underground work. A monitoring denial letter was sent to Mr. Morales dated March 5, 2018, which indicated that the project APE was determined to not have a high probability of encountering intact, buried prehistoric cultural deposits, and therefore Native American monitoring was determined to be unnecessary for this project This conclusion is based upon: (1) the results of the records search, which did not identify any prehistoric sites in or near the project; (2) statements from the San Manuel Band of Mission Indians indicating that they have no knowledge of any sites or culturally sensitive locations in the project area; (3) the fact that no prehistoric deposits were identified during the sub-surface data recovery work at CA-SBR-8695H (Swope et al. 1997); and (4) the fact that there was no surface evidence of prehistoric sites found during past or current field surveys. No response has been received to date.

The following individuals were contacted via letter on August, 29 2017, and via phone on September 27 and November 2, 2017; however, no response was received:

- Cindi Alvitre, Ti'at Society
- Michael Contreras, Morongo Band of Mission Indians
- Sam Dunlap, Gabrielino/Tongva Council/Gabrielino/Tongva Nation
- Joseph Hamilton, Ramona Band of Cahuilla Mission Indians
- Anthony Madrigal, Cahuilla Band of Indians
- James Ramos, San Manuel Band of Mission Indians
- Goldie Walker, Serrano Nation of Indians

No further response has been received from these tribes for this project.

Local Government

On August 2, 2017, as part of the 2018 SHPSR, a letter and map set were sent to the City of San Bernardino Historic Preservation Commission, a local government agency. The letter requested information regarding any historic buildings, districts, sites, objects, or archaeological sites of significance within the project area. In addition, a phone call was made to the San Bernardino Landmarks Commission on January 16, 2018. No response was received from either commission.

Local Historic Societies

Updated consultation letters were sent to the same groups as in the 2007 SHPSR, none of whom responded at that time. On August 2, 2017, a letter and map set were sent to the following societies/groups who may have knowledge of or concerns regarding historic properties in the area. The letter requested information regarding any historic buildings, districts, sites, objects, or archaeological sites of significance within the proposed project area.

- San Bernardino Historical and Pioneer Society (San Bernardino History & Railroad Museum)
- San Bernardino Railroad Historical Society
- San Bernardino County Historical Archives
- San Bernardino County Museum
- California Historic Route 66 Association
- California State Railroad Museum
- Historical Society of Southern California
- California Historical Society
- Society of Architectural Historians, Southern California Chapter

- California Preservation Foundation

All parties were contacted again during the week of December 18, 2017, either by phone or email, as follow-up. One organization, the California State Railroad Museum, requested a copy of the original letter, which was sent to the organization on December 18, 2017. In addition, a copy of the letter was re-sent to the California Historic Route 66 Association on December 21, 2017, as efforts to reach this organization via phone or email proved unsuccessful. Only the San Bernardino County Historical Archives responded to the letter, providing resources to research properties in the project APE. No further responses have been received.

Archaeological Field Methods

Intensive archaeological reconnaissance surveys of accessible portions of the project's archaeological APE were conducted by archaeologists on October 6, 2017, December 21, 2017, and January 10, 2018. During the surveys, the archaeologists were able to access many of the vacant lots in the APE to survey them by foot. The total acreage of the 41 surveyed vacant lots was approximately 34 acres. For these vacant lots, transects that were spaced at no more than 10-meter intervals were walked. The APE was also surveyed by foot from the public right of way for all areas that were gated or fenced, with the archaeologists paying particular attention to all open ground.

There were some survey constraints or limitations. The rail yard and rail lines themselves, a completely paved over/built out and gated off area, compose the majority of the APE and access could not be gained to this area. In addition, the homes along West Kingman Street, in the northwest quadrant of the revised APE, could not be fully accessed. Although many of the vacant lots within this neighborhood were surveyed by foot, and archaeologists walked the sidewalks on either side of the street to view into the yards, an intensive pedestrian survey could not be completed for each of these homes. The remaining lots were occupied and permissions to enter these properties were not obtained, so these lots could not be surveyed.

Historic Build Environment

The SHRER (March 2018) investigation resulted in the identification of two previously evaluated historic properties within the APE that were addressed in the previous Historic Resources Evaluation Reports (HRERs): (1) the Atchison, Topeka & Santa Fe Railway passenger and freight depot and (2) the Mount Vernon Avenue Bridge.

1. The existing depot is located west of downtown San Bernardino at 1170 West 3rd Street. The impressive Mission Revival–style building (with Moorish influence) was constructed in 1918. In 1975, the depot was designated a California Point of Historical Interest (CPHI-53). It was later determined eligible for inclusion in the NRHP at the local level under Criterion A for the role the Atchison, Topeka & Santa Fe Railway played in the development of the city, which was headquarters for the railroad's Los Angeles Division, and Criterion C as an example of the Mission Revival style. The period of significance is 1918–1921. It was also listed on the NRHP under Criterion C at the state level as an outstanding example of the Mission Revival style of architecture.

2. The Mount Vernon Avenue Bridge (Bridge Number 54C-0066) is located on Mount Vernon Avenue between West 2nd and West 4th Streets in the western portion of the city of San Bernardino. Originally constructed in 1907, the bridge was rebuilt between 1933 and 1934, salvaging as much steel as possible from the original viaduct for re-use in the new bridge. The Mount Vernon Avenue Bridge was determined eligible for inclusion on the NRHP at the local level of significance under Criterion A for its strong associations with Route 66, a major transportation corridor through the San Bernardino area during the Great Depression. It was also determined eligible at the local level of significance under Criterion C (period of significance 1934–1952) because the structure and its landscaped areas at the northwestern and southeastern ends (contributing elements) retain sufficient integrity with respect to the design, location, materials, workmanship, and feeling associated with its historic period of significance.

In addition to the two historic properties listed above, 87 historical-period built-environment resources were identified in the APE, for a total of 89 properties identified. Twenty-three of those resources were previously determined not eligible for inclusion in the NRHP as a result of previous SHPO consultation on this undertaking. However, due to the passage of time, updated guidelines, and evolving perceptions of the past, these 23 historical-period built-environment resources were reviewed again for the current effort.

As a result of the current study, ten of the previously determined ineligible historical period built-environment resources from the 2007 SHRER were re-evaluated. An additional 29 historical period built-environment properties in the expanded APE were recorded and evaluated for the purposes of this SHRER, resulting in a total of 39 properties being evaluated. It was determined that none of these 39 properties are eligible for the NRHP.

The remaining historical-period built-environment resources within the revised APE, including the remaining 13 previously determined ineligible historical period built-environment resources from the 2007 SHRER (based on the 2001 HPSR) and an additional 35 other historical period built-environment resources present within the expanded APE, were determined to be exempt from evaluation in accordance with the Section 106 PA Attachment 4 (Properties Exempt from Evaluation).

Study Findings and Conclusions

Archaeology

No new prehistoric or historical archaeological resources were identified as a result of the surveys conducted within the project APE. The project APE is currently developed (i.e., largely covered with buildings and pavement or disturbed land surfaces). All of the lots and open ground in the APE showed evidence of previous construction and development, with concrete and asphalt remains present in many cases. No indicators of prehistoric or historical archaeological sites were observed, although there was a previously recorded site, noted above (36-008695/CA-SBR-8695H), which is no longer extant.

Project Area Sensitivity

No new prehistoric or historical archaeological resources were identified during surveys within the project APE as a result of the archaeological studies completed for this project. Most of the

APE is built out, paved over, or covered with active railway. There is little open space remaining in the APE.

Overall, the potential for encountering historical archaeological deposits throughout the APE is low overall and very low for encountering prehistoric deposits. However, using the 50-acre area in the northeastern quadrant of the APE, where the previously recorded archaeological site CA-SBR-8695H was located as a guide, it can be logically inferred that a similar resource potential exists in the northwestern quadrant of the APE. It is possible that historical archaeological features similar to those found at CA-SBR-8695H, such as privies and trash pits, may be present.

The neighborhood in the northwest quadrant of the revised APE has evolved over its existence. There has been considerable alteration to the community over the last two to three generations and the housing styles have changed with the times, reflecting current trends and affordability. This has resulted in a community of mixed architectural periods and styles that reflects the working-class background of the residents. Many of the original homes have been renovated and/or modified, which has diminished the original context. In addition, many have suffered from disrepair, and some have been demolished. This community was not initially planned, with utilities, underground water lines, sewers, and gas lines added as the city developed. Utilities dating to the period of significance would be part of the neighborhood. The underground construction of the utilities would not likely have affected privies and trash pits in backyards of residences. This would have led to the abandonment of privies, which would have, in turn, been backfilled or covered. Thus there is a greater potential to uncover historic archaeological deposits during ground-disturbing activities in this area.

These factors give the northwest quadrant moderate potential to encounter resources. Therefore, a Cultural Review Discovery and Monitoring Plan (CRDMP) was prepared in case of discovery of historical archaeological deposits in this location, if encountered. The second amendment to the MOA, which includes the CDRMP, was approved by SHPO on September 5, 2018 and is included in Appendix G of this Supplemental EA.[5]

Historic Built Environment

Out of the 87 historical period built-environment resources in the APE, 23 historical period built-environment resources were reviewed again for the current effort. As a result of the current study, ten of the previously determined ineligible historical period built-environment resources from the 2007 SHRER were re-evaluated. An additional 29 historical period built-environment properties in the expanded APE were recorded and evaluated for the purposes of the SHRER, resulting in a total of 39 properties being evaluated. It was determined that none of these 39 properties are eligible for the NRHP, which SHPO concurred with on May 1, 2018.

[5] The Memorandum of Agreement (MOA) was signed by the SHPO in 2009 and later by Caltrans in 2011. An amendment to the MOA was completed in March 2018 to extend the expiration date of the original MOA and to replace the City of San Bernardino with SBCTA. A second amendment to the MOA was prepared when Caltrans in consultation with SHPO determined that project scope changes subsequent to execution of the MOA resulted in the expansion of the APE, resulting in the potential to effect subsurface historical archaeological deposits within the northwest quadrant of the APE. As a result, a second amendment to the MOA and a Cultural Resources Discovery and Monitoring Plan to address the potential for subsurface sensitivity for historical archaeological deposits were prepared.

In addition, the studies completed resulted in the identification of one NRHP-listed property within the project's APE, which was addressed in the previous HRERs for the project and discussed in the adopted 2011 EA/FONSI.

- The Atchison, Topeka and Santa Fe (ATSF) passenger and freight depot, 1170 West 3rd Street, San Bernardino, was determined eligible for inclusion in the NRHP at the local level of significance under Criterion A for the role the railroad played in the development of the city, which was headquarters for the railroad's Los Angeles Division, encompassing the majority of Southern California. It was also determined eligible at the local level of significance under Criterion C (period of significance 1918–1921) as an example of the Mission Revival style (Albeyta 2000 in the HPSR [Snyder 2001]). On February 2, 2001, the depot was listed on the NRHP under Criterion C at the state level as an outstanding example of Mission Revival–style architecture (Mellon 2001 in the HPSR [Snyder 2001]). In 1975, it was designated a California Point of Historical Interest (CPHI-53) and considered a historical resource for the purposes of the California Environmental Quality Act. The depot is bordered by West 3rd Street on the south and east, the Metrolink facility on the west, and the BNSF rail yard on the north.

The study resulted in the identification of one NRHP-eligible property within the project's APE, which was addressed in the previous HRERs for the project and discussed in the adopted 2011 EA/FONSI.

- The Mount Vernon Avenue Bridge (Bridge Number 54C-0066), on Mount Vernon Avenue between West 2nd and West 4th Streets, San Bernardino, was determined eligible for inclusion on the NRHP at the local level of significance under Criterion A for its strong associations with Route 66, a major transportation corridor through the San Bernardino area during the Great Depression. The bridge was heralded during that time as the western gateway to San Bernardino. Extending over the BNSF rail yard, the bridge was also determined eligible at the local level of significance under Criterion C (period of significance 1934–1952) because the structure and its landscaped areas at the northwestern and southeastern ends (contributing elements) retain sufficient integrity with respect to the design, location, materials, workmanship, and feeling associated with its historic period of significance (Mellon 2002 in the SHPSR for the Mount Vernon Avenue Project [Feldman 2007]).

Thus, no new historic properties have been identified within the undertaking's APE as a result of the current effort. Therefore, there are only two previously identified historic properties within the APE: (1) the Santa Fe Depot, and (2) the Mount Vernon Avenue Bridge.

2.1.10.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

This alternative has the potential to introduce temporary audible and atmospheric elements during construction, which would be considered temporary and minor impacts on the Santa Fe Depot's historical features. No temporary or permanent changes to the important visual elements of the Santa Fe Depot would occur due to construction of the bridge because the bridge is situated too far from the Santa Fe Depot to have any substantial impacts, even with the expanded

revised 2018 APE. Therefore, there would be No Adverse Effect on the Santa Fe Depot and the project would have an Adverse Effect on the Mount Vernon Avenue Bridge. Therefore, Caltrans has determined that the original Adverse Effect finding for the undertaking as a whole pursuant to Section 106 Programmatic Agreement Stipulation X.C remains valid.

Any effects on the Mount Vernon Avenue Bridge would be permanent in nature, and are discussed below.

Permanent

The Build Alternative (Preferred Alternative) would demolish Mount Vernon Avenue Bridge, a historic property, which would constitute an adverse effect. Based on the proposed construction methods and application of the Criteria of Adverse Effect, Caltrans has determined that historic properties would be affected, pursuant to Section 106 PA Stipulation IX.B, and the project would have an Adverse Effect on Mount Vernon Avenue Bridge. There would be No Adverse Effect on the Santa Fe Depot.

Caltrans, as assigned by FHWA, requested concurrence from the SHPO regarding the finding of adverse effect, pursuant to the Section 106 PA, Stipulation XC, and consulted with the SHPO regarding the resolution of adverse effects, pursuant to Section 106 PA, Stipulation XI, and 36 CFR 800.6(a) and (b)(1). The SHPO concurred with the finding of adverse effect on September 18, 2007, and on May 1, 2018.

Although the proposed project would have a "use" on the Mount Vernon Avenue Bridge, a Section 4(f) resource, the proposed project meets the applicability criteria for the Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges and, therefore, satisfies the requirements of Section 4(f). Refer to Appendix A, Programmatic Section 4(f) Evaluation, for full Section 4(f) analysis.

In addition to the project effects on the two known historic properties discussed above, this effects assessment also addresses the potential for adverse effects on unknown archaeological deposits that may be encountered during construction.

The potential for encountering historical archaeological deposits throughout the APE is low overall. Although no archaeological resources or human remains are anticipated to be encountered, during construction of the proposed project, unknown buried resources could exist in the northwestern quadrant of the APE. The measures outlined in the CRDMP will be followed in the case of inadvertent discoveries in the AMA, and are covered under **CRDMP-1.** If resources are encountered and the Project Archaeologist determines the find as potentially culturally significant, then the CRDMP requires recovery and evaluation of the archaeological resource; this could potentially result in an adverse effect. The CRDMP will address any potential adverse effect through its implementation. Additionally, Caltrans standard measures **CR-A** and **CR-B** would address any other inadvertently discovered resources, if present.

No long-term impacts on historical or archaeological cultural resources would occur.

No-Build Alternative

Under the No-Build Alternative, no modifications to existing structures or land would occur; therefore, no construction or operational effects on historical or archaeological cultural resources would result. If the bridge ultimately has be closed to pedestrian and vehicular traffic, this could eventually result in the removal of the bridge, which is a historic property. This would be similar to what would occur under the Build Alternative (Preferred Alternative).

2.1.10.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The following measures are identified in the 2011 MOA and approved by the SHPO, pursuant to Section 106 PA Stipulation XI and 36 CFR 800.6(a) and (b)(1). In addition, an amendment to the MOA was made in March 2018 to include SBCTA as a concurring party. A copy of the approved MOA and the amendment are included in Appendix F of this Supplemental EA.

MOA CR-1 Prior to the start of any work that could adversely affect any characteristics that qualify the Mount Vernon Avenue Bridge as an historic property, Caltrans shall ensure that the recordation measures specified in Section A of the Memorandum of Agreement are completed.

MOA CR-2 San Bernardino County Transportation Authority shall take large-format (four- by five-inch negative or larger) photographs showing the Mount Vernon Avenue Bridge in context as well as details of its historic engineering features. Photographs shall be processed for archival permanence in accordance with Historic American Engineering Record (HAER) photographic specifications. Views of the Mount Vernon Avenue Bridge shall include (1) contextual views showing the bridge in its setting, (2) elevation views, (3) views of the bridge's approaches and abutments, and (4) detail views of significant engineering and design elements.

MOA CR-3 SBCTA shall make a reasonable and good faith effort to locate historic construction drawings for Mount Vernon Avenue Bridge. If these drawings are located, SBCTA shall photographically reproduce plans, elevations, and selected details from these drawings in accordance with HAER photographic specifications. If they are legible in this format, reduced 8.5- by 11-inch copies of the construction drawings may be included as pages of the report cited in subsection A.3 of the MOA rather than photographed and included as photographic documentation. SBCTA shall promptly notify Caltrans if historic construction drawings for Bridge #54C-0066 cannot be located. In that event, the requirements of this paragraph shall not apply.

MOA CR-4 A written historical and descriptive report for Mount Vernon Avenue Bridge will be completed. This report will provide a physical description of the bridge, discuss its construction and significance under applicable NRHP criteria, and address the historical context for its construction, following the format and instructions in the September 1993 National Parks Service (NPS) HAER Guidelines for Preparing Written Historical and Descriptive Data guidelines for written documentation.

MOA CR-5 Upon completion, copies of the documentation prescribed in subsection A.3 of the MOA shall be retained by Caltrans, District 8, and offered to the California Room of the City's Feldhym Library.

MOA CR-6 Caltrans shall ensure that SBCTA constructs the replacement bridge in accordance with a design developed in consultation with the SHPO and submitted to the SHPO for comments to minimize the indirect visual impact (e.g., from the profile, scale, color, material) of the replacement bridge on the setting of the adjacent NRHP-listed historic property, the Atchison, Topeka & Santa Fe passenger and freight depot (Santa Fe Depot). The proposed bridge replacement design is depicted in Attachment A of the MOA, and simulations for the replacement are included in Attachment B of the MOA. In addition, existing photographs of Mount Vernon Avenue Bridge are provided in Attachment C of the MOA.

MOA CR-7 Caltrans, in consultation with the SHPO, shall ensure that the replacement bridge will be designed with architectural details (e.g., bridge railings, lights, concrete abutments, stairways) that convey the character-defining elements of the original historic structure and are visually compatible with the adjacent depot.

MOA CR-8 Caltrans shall ensure that SBCTA will replace any landscape elements (e.g., fan palm trees [*Washingtonia robusta*]) that were 50 years old or older and contributing to the historic setting of the bridge but removed as a result of the bridge replacement project. Appropriate replacement trees should be planted in planned landscaped areas northwest and southeast of the bridge alignment.

The CRDMP will address any potential adverse effect on inadvertently discovered and culturally significant (as deemed by the Project Archaeologist) historical archaeological deposits in the northwestern quadrant of the APE, if they exist, through its implementation.

CRDMP-1 Archaeological monitoring will occur during any ground disturbing activity in the northwestern quadrant of the APE, which is designated as the archaeological monitoring area. If any resources are encountered during earth-moving activities in this location, then the Project Archaeologist will assess and evaluate the find, as described in Caltrans SSP, Section 14. If the Project Archaeologist finds the deposit may be eligible for the NRHP, then the project will be operating on a presumption of NRHP eligibility for inadvertent discoveries, as determined by the Project Archaeologist. Under this presumption, any important discoveries will be removed during data recovery per PA Stipulation XI and PA Attachment 6. The project will also comply with additional requirements contained in the CRDMP, including the completion of daily monitoring logs, requirements for site record documentation, monitoring report submittal, and data recovery report submittal if applicable.

Additionally, the project proposes other aesthetic measures (**VIS-1** through **VIS-7**) to ensure that the proposed project is consistent in terms of architecture, scale, and size with existing surroundings to the extent feasible.

The following avoidance and minimization measures, which are standard design elements on all Caltrans projects, would also be implemented:

CR-A If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

CR-B In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909)383-2647 and Gary Jones, DNAC: (909)383-7505. Further provisions of PRC 5097.98 are to be followed as applicable.

2.2 Physical Environment

2.2.1 Water Quality and Storm Water Runoff

2.2.1.1 REGULATORY SETTING

Federal Requirements

Clean Water Act

In 1972, Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. This act and its amendments are known today as the Clean Water Act (CWA). Congress has amended the act several times. In the 1987 amendments, Congress directed dischargers of storm water from municipal and industrial/construction point sources to comply with the NPDES permit scheme. The following are important CWA sections:

- Sections 303 and 304 require states to issue water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity that may result in a discharge to waters of the U.S. to obtain certification from the state that the discharge will comply with other provisions of the act. This is most frequently required in tandem with a Section 404 permit request (see below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. Regional Water Quality Control Boards (RWQCBs) administer this permitting program in California. Section 402(p) requires permits for discharges of storm water from industrial/construction and municipal separate storm sewer systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The goal of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters."

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of the USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency's (U.S. EPA) Section 404 (b)(1) Guidelines (40 Code of Federal Regulations [CFR] Part 230), and whether the permit approval is in the public interest. The Section 404(b)(1) Guidelines

(Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that the USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S. and not have any other significant adverse environmental consequences. According to the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures has been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause "significant degradation" to waters of the U.S. In addition, every permit from the USACE, even if not subject to the Section 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4. A discussion of the LEDPA determination, if any, for the document is included in the Wetlands and Other Waters section.

State

Porter-Cologne Water Quality Control Act

California's Porter-Cologne Act, enacted in 1969, provides the legal basis for water quality regulation within California. This act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or gaseous) to land or surface waters that may impair beneficial uses for surface and/or groundwater of the state. It predates the CWA and regulates discharges to waters of the state. Waters of the state include more than just waters of the U.S., like groundwater and surface waters not considered waters of the U.S. Additionally, it prohibits discharges of "waste" as defined, and this definition is broader than the CWA definition of "pollutant." Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA.

The State Water Resources Control Board (SWRCB) and RWQCBs are responsible for establishing the water quality standards (objectives and beneficial uses) required by the CWA and regulating discharges to ensure compliance with the water quality standards. Details about water quality standards in a project area are included in the applicable RWQCB Basin Plan. In California, RWQCBs designate beneficial uses for all water body segments in their jurisdictions and then set criteria necessary to protect those uses. As a result, the water quality standards developed for particular water segments are based on the designated use and vary depending on that use. In addition, the SWRCB identifies waters failing to meet standards for specific pollutants. These waters are then state-listed in accordance with CWA Section 303(d). If a state determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-point source controls (NPDES permits or WDRs), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed.

State Water Resources Control Board and Regional Water Quality Control Boards

The SWRCB administers water rights, sets water pollution control policy, and issues water board orders on matters of statewide application, and oversees water quality functions throughout the state by approving Basin Plans, TMDLs, and NPDES permits. RWQCBs are responsible for protecting beneficial uses of water resources within their regional jurisdiction using planning, permitting, and enforcement authorities to meet this responsibility.

National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of storm water discharges, including Municipal Separate Storm Sewer Systems (MS4s). An MS4 is defined as "any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that is designed or used for collecting or conveying storm water." The SWRCB has identified the Department as an owner/operator of an MS4 under federal regulations. The Department's MS4 permit covers all Department rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

The Department's MS4 Permit, Order No. 2012-0011-DWQ (adopted on September 19, 2012 and effective on July 1, 2013), as amended by Order No. 2014-0077-DWQ (effective July 1, 2014) and Order No. 2015-0036-EXEC (effective April 7, 2015) has three basic requirements:

1. The Department must comply with the requirements of the Construction General Permit (see below);
2. The Department must implement a year-round program in all parts of the State to effectively control storm water and non-storm water discharges; and
3. The Department storm water discharges must meet water quality standards through implementation of permanent and temporary (construction) Best Management Practices (BMPs), to the maximum extent practicable, and other measures as the SWRCB determines to be necessary to meet the water quality standards.

To comply with the permit, the Department developed the Statewide Storm Water Management Plan (SWMP) to address storm water pollution controls related to highway planning, design, construction, and maintenance activities throughout California. The SWMP assigns responsibilities within the Department for implementing storm water management procedures and practices as well as training, public education and participation, monitoring and research, program evaluation, and reporting activities. The SWMP describes the minimum procedures and practices the Department uses to reduce pollutants in storm water and non-storm water discharges. It outlines procedures and responsibilities for protecting water quality, including the selection and implementation of BMPs. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest SWMP to address storm water runoff.

Construction General Permit

Construction General Permit, Order No. 2009-2009-DWQ (adopted on September 2, 2009 and effective on July 1, 2010), as amended by Order No. 2010-0014-DWQ (effective February 14, 2011) and Order No. 2012-0006-DWQ (effective on July 17, 2012). The permit regulates storm water discharges from construction sites that result in a Disturbed Soil Area (DSA) of one acre or greater, and/or are smaller sites that are part of a larger common plan of development. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation result in soil disturbance of at least one acre must comply with the provisions of the General Construction Permit. Construction activity that results in soil disturbances of less than

one acre is subject to this Construction General Permit if there is potential for significant water quality impairment resulting from the activity as determined by the RWQCB. Operators of regulated construction sites are required to develop Storm Water Pollution Prevention Plans (SWPPPs); to implement sediment, erosion, and pollution prevention control measures; and to obtain coverage under the Construction General Permit.

The Construction General Permit separates projects into Risk Levels 1, 2, or 3. Risk levels are determined during the planning and design phases, and are based on potential erosion and transport to receiving waters. Requirements apply according to the Risk Level determined. For example, a Risk Level 3 (highest risk) project would require compulsory storm water runoff pH and turbidity monitoring, and before construction and after construction aquatic biological assessments during specified seasonal windows. For all projects subject to the permit, applicants are required to develop and implement an effective SWPPP. In accordance with the Department's SWMP and Standard Specifications, a Water Pollution Control Program (WPCP) is necessary for projects with DSA less than one acre.

Local Agency Construction Activity Permitting

For local agency transportation projects off the State Highway System (SHS), the local agency (as owner of the land where the construction activity is occurring) is responsible for obtaining the NPDES permit if required and for signing certification statements (when necessary). Local agencies contact the appropriate RWQCB to determine what permits are required for their construction activity. The local agency is also responsible for ensuring that all permit conditions are included in the construction contract and fully implemented in the field. Prior to issuance of any grading permits, SBCTA will prepare a SWPPP and provide proof that a Notice of Construction was filed for the coverage under the state NPDES for construction-related discharges. This evidence will consist of a Waste Discharge Identification Number issued by SWRCB.

Section 401 Permitting

Under Section 401 of the CWA, any project requiring a federal license or permit that may result in a discharge to a water of the U.S. must obtain a 401 Certification, which certifies that the project will be in compliance with state water quality standards. The most common federal permits triggering 401 Certification are CWA Section 404 permits issued by the USACE. The 401 permit certifications are obtained from the appropriate RWQCB, dependent on the project location, and are required before the USACE issues a 404 permit.

In some cases, the RWQCB may have specific concerns with discharges associated with a project. As a result, the RWQCB may issue a set of requirements known as WDRs under the State Water Code (Porter-Cologne Act) that define activities, such as the inclusion of specific features, effluent limitations, monitoring, and plan submittals that are to be implemented for protecting or benefiting water quality. WDRs can be issued to address both permanent and temporary discharges of a project.

2.2.1.2 AFFECTED ENVIRONMENT

The primary source used in the preparation of this section is the *Mount Vernon Avenue Bridge Project Supplemental Initial Site Assessment* (SISA), dated March 2018 (Ninyo & Moore 2018). A

Water Quality Assessment Report (WQAR) was not prepared for the project. There are no surface waters within the anticipated project limits and, therefore, no WQAR was prepared for the project.

The study area is relatively flat and open, with minimal vegetation and consists of urban development and the BNSF Railroad Intermodal Facility buildings and tracks. Site surveys were conducted in 2017 to confirm that the environmental setting within the original project footprint has remained the same. The only major change that occurred was construction of a Metrolink parking structure, which was built immediately outside the southeast quadrant of the 2011 project footprint. This area was originally unused, unimproved open space, with mainly weedy grasses and palms. An open drainage channel that crossed the area supported most of the trees and nonnative shrubs within the open space. A remnant riparian community was adjacent to the drainage channel. This open space area has since been removed and redeveloped with the Metrolink parking structure. No other changes to the surrounding environmental setting have occurred since adoption of the 2011 EA/FONSI.

The project site is located within the Santa Ana River watershed, in the Inland Santa Ana Basin. The RWQCB, Santa Ana Region (Region 8), is responsible for regulating the watercourse in the Santa Ana River watershed. The RWQCB regulates surface water and groundwater quality through the adoption of water quality plans and standards and issuance of wastewater permits.

The Santa Ana River- Reach 5, which flows from northeast to southwest, is located approximately 3.3 miles south of the project site. The project site does not contain natural surface water bodies. The nearest surface water body is Lytle Creek, a concrete-lined channel running northwest-southeast approximately 1,500 feet southwest of the site which flows southeast into the Santa Ana River. A surface drainage channel located immediately outside of the northwest portion of the project area flows to the southeast and connects with the City stormwater system. This channel is located underground through the rail yard and surfaces south of the Metrolink parking lot.

The Santa Ana RWQCB regulates water quality standards, including water quality objectives and beneficial uses, as defined in the Water Quality Control Plan Santa Ana River Basin 8 for the project area. There are no special RWQCB requirements or concerns. None of the direct receiving waters are listed as impaired on the 303(d) lists for the RWQCB. No TMDLs have been established for these water bodies.

There are no sole-source aquifers in San Bernardino County.

Groundwater Plume. According to information obtained from the SWRCB's GeoTracker website for the BNSF facility located at 470 North L Street (adjacent to the north of the site), regional groundwater is expected to exist between approximately 140 and 150 feet below ground surface (bgs) flowing towards the southeast (Ninyo & Moore 2018). According to a Limited Subsurface Investigation (LSI) conducted at the site by Ninyo & Moore in 2013, groundwater was encountered at depths ranging from approximately 23 to 42 feet bgs at the site. Groundwater levels, gradient, and flow direction can fluctuate due to seasonal variations, groundwater withdrawal or injection, changes in land use, and other factors.

The adopted 2011 EA/FONSI documented the presence of a groundwater plume affected with chlorinated solvents from the historic releases at the BNSF/ATSF property. The plume was located approximately 1,000 feet east of the bridge within the existing rail yard. At the time of the 2010 ISA, the extent of the groundwater contamination was still under investigation under the oversight of the RWQCB. The RWQCB issued a case closure (No Further Action [NFA]) letter in April 2011 for the site. Based on the remediation activities that have been conducted and current regulatory status (NFA) of the site, it is unlikely that the groundwater remediation activities reviewed continue to impact the environmental integrity of the site, and they are considered historical recognized environmental conditions (HRECs).[1] However, elevated concentrations of volatile organic compounds (VOCs) were detected in groundwater from boring DP2 (encountered at 42 feet bgs) during Ninyo & Moore's 2013 LSI.

A preliminary vapor encroachment screen was conducted for the 2018 SISA to identify a vapor encroachment condition (VEC), which indicates the presence, or likely presence, of chemicals of concern (COC) in subsurface soils at the site caused by the release of vapors from contaminated soil or groundwater either on or near the site. Based on the results of the Vapor Encroachment Screening Matrix (VESM), a VEC cannot be ruled out beneath the site and is therefore considered a recognized environmental condition (REC). It should be noted that a vapor intrusion screening was not conducted for the site during the 2010 ISA; therefore, this is a new environmental condition identified for the site.

2.2.1.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

Release of Hazardous Materials. The release of hazardous materials could occur as a result of spills from vehicles using the bridge; however, the project is not anticipated to increase the potential for vehicles carrying hazardous materials to travel in the project area or increase the potential for accidents to occur in the project area. Furthermore, the transportation and cleanup of hazardous materials is strictly regulated by the EPA, the state and federal Occupational Health and Safety Administrations (OSHA), and a number of other federal, state, and local agencies. No new impacts are anticipated. Impacts are similar to those described in the adopted 2011 EA/FONSI.

Surface Water Runoff. During project construction, surface water runoff from the project site could increase pollution to local surface waters. Substantial earthwork would be required for the proposed bridge and the other proposed improvements to accommodate the BNSF intermodal operations and parking. In addition, excavation would be required for support columns, foundations, and other improvements for the replacement bridge. Exposed soils associated with grading and excavating activities could increase the potential for erosion and increased sediment loadings on nearby surface waters. In addition, surface water runoff could also result in the discharge of construction-related pollutants—such as petroleum, solvents, and cement—into local

[1] A HREC is defined as "a past release of any hazardous substance or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations [AULs], institutional controls, or engineering controls)."

surface waters. Given the required implementation of BMPs, potential effects on surface water runoff would be minimized. Impacts are similar to those described in the adopted 2011 EA/FONSI. Recommended measures from the adopted 2011 EA/FONSI would still be applicable.

The proposed project would be regulated under the San Bernardino County MS4/NPDES Permit accordance with the CWA. The total DSA for the project is approximately 50.46 acres which is greater than the 2011 DSA of 14.81 acres. Because the project's total DSA exceeds one acre, pursuant to the NPDES permit requirements, a SWPPP would be prepared prior to construction to identify BMPs to be implemented during construction activities. A SWPPP, which would identify BMPs to mitigate water quality effects on receiving waters resulting from surface water runoff from the project site, would be required as part of the General Permit from the SWRCB. Short-term construction effects associated with soil erosion and discharge of other construction-related pollutants into surface waters can be avoided or minimized through the implementation of BMPs for erosion control in compliance with the NPDES permit requirements.

Substantial Erosion or Siltation On Site or Off Site as a Result of Substantial Alteration to the Existing Drainage Pattern. As discussed previously, the drainage channel that was located outside of the southeast quadrant of the 2011 project footprint was removed and redeveloped with the Metrolink parking structure. A drainage/detention basin, constructed sometime between 2009 and 2011, was observed in front of the Metrolink station on the northeast corner of Mount Vernon Avenue and Second Street. The proposed project would require grading of the immediate project area, which could result in the erosion of disturbed earth by wind and/or water. The proposed project would not alter the existing drainage patterns beyond a potentially slight increase in surface runoff. Drainage improvements would be designed in consultation with the appropriate agencies and would not substantially alter the existing conditions.

Exposure to Contaminated Groundwater. Regional groundwater is expected to exist between approximately 140 and 150 feet below ground surface (bgs) flowing towards the southeast (Ninyo & Moore 2018). According to a LSI conducted at the site by Ninyo & Moore in 2013, groundwater was encountered at depths ranging from approximately 23 to 42 feet bgs at the site. Limited locations may require excavating to depths of up to approximately 80 to 100 feet for bridge pilings as well as associated drilling activities.

The adopted 2011 EA/FONSI concluded that there was groundwater contamination beneath the BNSF/ATSF property. The extent of the groundwater contamination was under investigation under the oversight of the RWQCB at the time. Based on the remediation activities that have been conducted and current regulatory status (No Further Action) of the site, it is unlikely that the groundwater remediation activities reviewed continue to impact the environmental integrity of the site, and is considered an historic recognized environmental condition (HREC). A recognized environmental condition (RECs) is defined by ASTM as "the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment." A HREC is defined as "a past release of any hazardous substance or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory

authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations [AULs], institutional controls, or engineering controls)."

As part of the 2018 Supplemental Initial Site Assessment prepared for the proposed project, onsite and offsite properties/facilities listed in the hazardous wastes databases were evaluated as to their potential to impact groundwater at the site. The following properties/facilities were interpreted to represent new potential environmental concerns to the site based on the latest database searches, their proximity to the site, the nature of the database on which they are listed, and/or the assumed direction of groundwater flow in the site vicinity (southeast).

ARCO/ARCO AM/PM: The Arco facility located at 542 North Mount Vernon Avenue is north and up-gradient of the project site. It was listed as containing underground storage tanks (USTs). The USTs were observed during the site reconnaissance, and are not considered a REC unless excavation and earthmoving activities would encroach on this property.

Lords Dry Cleaners: Lords Dry Cleaning, located at 1061 5th Street, is east-northeast and up-gradient of the project site. It was listed as a drycleaner from 1936 to 1990. According to the South Coast Air Quality Management District (SCAQMD) Facility Information Detail (FINDs) website, Lords Dry Cleaners has an inactive permit to operate dry-cleaning equipment that uses tetrachloroethylene (PCE). Violations were not noted. Based on the distance from the site and period of operation, a vapor encroachment condition (VEC) cannot be ruled out beneath the site, which is considered a REC.

Atchison, Topeka & Santa Fe Rail Yard: The Atchison, Topeka & Santa Fe (ATSF) rail yard, located at 1170 3rd Street, was listed on the leaking underground storage tanks (LUST) database for chlorinated solvent, gasoline, and diesel contamination to groundwater. Based on the remediation activities that have been conducted since the preparation of the 2010 ISA and current regulatory status (NFA) of the site, it is unlikely that the groundwater remediation activities reviewed continue to impact the environmental integrity of the site, and it is considered an HREC.

Anita's Mexican Food Corp: Anita's Mexican Food Corp, located at 1390 West 4th Street, was listed as a generator of hazardous waste, including PCB-containing waste, mercury-containing waste, waste oil, asbestos-containing waste, and organic solid waste. Anita's was listed as an active facility under the Statewide Environmental Evaluation and Planning System (SWEEPS) UST and California Facility Inventory Database (CA FID) UST database. Anita's was listed under the Emissions Inventory Database (EMI) in 1990, 1996, and 2012. Anita's was listed under the San Bernardino County Permit database for a permit as a hazardous material handler, which expired November 30, 2013. Lastly, the address 1390 4th Street was listed under the California Hazardous Material Incident Report System (CHMIRS) database for a grease blockage that caused a spill of sewage (approximately 875 gallons were recovered). Based on a review of the FIND database, Anita's had a permit to operate a gasoline storage and dispensing station in 1983 and 1990. Based on the presence of a gasoline UST on the site, and lack of information regarding its removal, this information was considered a REC.

During the survey conducted for the September 2017 ISA, a concrete vault, possibly an oil-water separator, was observed on vacant land north of 4th Street. The oil-water separator was probably used as a wastewater treatment system for the old restaurant, Anita's Mexican Foods Corp, at 1390 West 4th Street. This was considered a REC.

A preliminary vapor encroachment screen (pVES) was conducted for potential chemicals of concern (COCs) that may migrate as vapors onto the site as a result of contaminated soil and/or groundwater near the site. The purpose of the pVES is to identify a VEC, which is the presence or likely presence of COC vapors in subsurface soils at the site caused by the release of vapors from contaminated soil or groundwater either on or near the site. The potential for VEC beneath the site was evaluated using a vapor encroachment screening matrix (VESM). The VESM included performing a Search Distance Test to identify if there are any known or suspect contaminated sites surrounding or up-gradient of the site within specific search radii, a COC Test (for those known or suspect contaminated sites identified within the Search Distance Test) to evaluate whether or not COCs are likely to be present, and a Critical Distance Test to evaluate whether or not COCs in a contaminated plume may be within the critical distance of the site (100 feet for non-petroleum contaminants and 30 feet for petroleum hydrocarbon contaminants). Based on the historical onsite USTs at Anita's Mexican Food, historical chlorinated solvent contamination of groundwater at the ATSF/BNSF facility, up-gradient drycleaner Lords Dry Cleaners at 1061 5th Street that operated between 1936 and 1990, a VEC cannot be ruled out beneath the site, which is considered a REC. The Vapor Encroachment Screening Matrix that was conducted for the project in February 2018 concluded that a VEC currently exists beneath the site.

In 2013 groundwater was encountered at depths ranging from approximately 23 to 42 feet bgs at the site and the proposed project would require excavating to depths of up to approximately 50 to 60 feet. As a result, there is a possibility that groundwater would be impacted and that the groundwater may be contaminated. Exposure to potentially contaminated groundwater during construction activities could result in substantial health effects. Measure **WQ-1** in Section 2.2.1.4 and measures **HAZ-2** through **HAZ-7** in Section 2.2.4.4 are included to avoid exposure to potentially contaminated soils and groundwater, thereby minimizing risk of effects.

Based on existing groundwater depths, it is likely that drilling activities associated with the proposed project could affect existing groundwater and that minimization measures would need to be developed and implemented to minimize project effects on groundwater. Intermediate piers would be founded on larger diameter pile shafts with steel casings. The steel casings would be driven into the ground and would be partially cleaned out: the soil inside the hollow steel casings would be removed to a specified depth. Pile shafts may extend below the groundwater elevation. In the case that some groundwater enters the steel casings, the groundwater inside the steel casings would be removed either by being displaced by the concrete that would be placed to form the pile foundation, or by pumping the water out after first sealing the end of the casing against further water intrusion.

Permanent

The proposed project would result in an additional 7.61 acres of impervious surfaces compared to the adopted 2011 EA/FONSI, thereby contributing to an increase in the amount of onsite runoff. BMPs would be implemented in compliance with the NPDES permit requirements to minimize the potential for project effects on water quality, including the violation of any water

quality standards or waste discharge requirements. Pursuant to the Santa Ana RWQCB and the City of San Bernardino, the proposed project would be required to comply with the requirements of the City of San Bernardino and the NPDES Area-wide Stormwater Program. The proposed project would be required to be consistent with the Project's WQMP, San Bernardino County's Municipal Storm Water Management Program, and the NPDES Permit for San Bernardino County and the incorporated cities of San Bernardino County within the Santa Ana Region. Required compliance would ensure that the proposed project would not violate any water quality standards or waste discharge requirements.

The proposed project would not alter the existing drainage patterns beyond a potentially slight increase in surface runoff. Drainage improvements would be designed in consultation with the appropriate agencies and would not substantially alter the existing conditions.

The water table elevation could affect structure foundation design. During PS&E final design, the geotechnical consultant would make foundation recommendations based on structure loads, soil properties, and the range of groundwater elevations that might be experienced at the project site throughout the life of the structure. The geotechnical stability of the bridge would not be a function of the time of year of construction. The wider footprint of the new bridge would not lead to any uncertainty in its geotechnical stability.

No-Build Alternative

Under the No-Build Alternative, the bridge would not be replaced and no improvements would be made, and may ultimately need to be closed to vehicular and pedestrian traffic after 2024. The No-Build Alternative would not increase impervious area or change in land use; therefore, drainages and surface runoff would remain consistent with current conditions, and roadway runoff in this area would remain unchanged and untreated.

2.2.1.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

All avoidance and minimization measures previously identified in the adopted 2011 EA/FONSI for impacts on water quality and stormwater runoff are still applicable to the project. Measure **WQ-2** has been updated to reflect Regional Water Quality Control Board Order Number R8-2010-0036, which supersedes Order Number R8-2002-012, referenced in the adopted 2011 EA/FONSI. The following measures, which are standard practice on all Caltrans projects, would be implemented. Additional measures **HAZ-2** and **HAZ-4** related to groundwater contamination are also included in Section 2.2.4, Hazardous Waste/Materials.

WQ-1 During the PS&E final design phase of the project, a Geotechnical Report will be prepared to determine if groundwater will be impacted. If groundwater will be impacted, then it will be tested to determine if it is contaminated.

WQ-2 The project will have an addition of more than 5,000 square feet of impervious surface; therefore, in accordance with RWQCB Order Number R8-2010-0036, and San Bernardino County NPDES Permit No. CAS618036, a Water Quality Management Plan (WQMP) will be necessary to establish post construction Best Management Practices (BMPs).

WQ-3 A SWPPP, which will identify water quality BMPs, will be required to address short-term construction effects associated with soil erosion and discharge of other construction-related pollutants.

2.2.2 Geology/Soils/Seismicity/Topography

2.2.2.1 REGULATORY SETTING

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects "outstanding examples of major geological features."

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. Structures are designed using the Department's Seismic Design Criteria (SDC). The SDC provides the minimum seismic requirements for highway bridges designed in California. A bridge's category and classification will determine its seismic performance level and which methods are used for estimating the seismic demands and structural capabilities. For more information, please see the Department's Division of Engineering Services, Office of Earthquake Engineering, Seismic Design Criteria.

2.2.2.2 AFFECTED ENVIRONMENT

No changes to the geologic setting have occurred since adoption of the 2011 EA/FONSI. The proposed project site is located in the City of San Bernardino along Mount Vernon Avenue, between 2nd Street and Rialto Street. The site's elevation is approximately 1,100 feet. The area's general elevation ranges from a maximum of 4,000 feet at a point just inside the northernmost corporate boundary at Bailey Canyon to a minimum of approximately 960 feet at the point where the Santa Ana River passes beneath the Interstate 10 (I-10)/I-215 interchange, south of the project site. The majority of the City lies in the Santa Ana River Valley immediately at the base of the San Bernardino Mountains. The San Bernardino Mountains are a part of the Transverse Range of southern California. Most of the City gently slopes from north-northeast to south-southwest. Steep foothills form a corridor along the northeastern perimeter of the City, roughly parallel to the San Andreas Fault. These foothills define the most abrupt change in topography within the City. The project area itself is generally flat without topographic relief. Drainages originating in mountain canyons have carved channels along their course en route to the valley's main drainage, the Santa Ana River. These drainages, when not completely channelized, result in changes in topography that vary in degree. In particular, Lytle Creek and the Santa Ana River form wide, braided channels with extensive bank systems. The banks and channel bottoms display discernible differences in topography.

Geology or Seismic Hazards

No changes to the seismic setting have occurred since the adoption of the 2011 EA/FONSI. The project site is located in the highly seismic southern California region within the influence of several fault systems that are considered to be active or potentially active. The City of San Bernardino is located between several active fault zones, including the San Andreas Fault, the San Jacinto Fault, the Glen Helen Fault, and the Loma Linda Fault. Each of these faults is

classified as Alquist-Priolo Special Study Zones under the Alquist-Priolo Earthquake Fault Zoning Act (City of San Bernardino, 2005). The San Andreas Fault's main line passes approximately five miles to the northeast of the proposed project site. This fault is capable of a maximum credible earthquake with a magnitude of 8.0 on the Richter scale,[2] which could result in a peak acceleration of 0.9 g (g represents a unit of measurement of the acceleration) for soils in the project site. The San Jacinto Fault, which is located approximately 0.75 mile west of the project, is capable of an earthquake of magnitude 7.5 on the Richter scale. Faults identified to be active or potentially active are not known to be present within the project footprint. The buried inferred trace of the Loma Linda Fault is located approximately 0.3 mile northeast of the site. This buried fault acts locally as a groundwater barrier and trends parallel to the San Jacinto Fault, connecting with the Glen Helen Fault to the northwest. The project site is not located in a State of California-designated earthquake fault zone for ground rupture. However, as previously concluded in the 2011 EA/FONSI, the project site is located within a seismic risk zone as designated by both the City and County for the Loma Linda Fault.

The site is also located in an area currently designated as Moderately High to Moderate for liquefaction susceptibility (City of San Bernardino, 2005).

According to information obtained from the SWRCB's GeoTracker website for the BNSF facility located at 470 North L Street (adjacent to the north of the site), regional groundwater is expected to exist between approximately 140 and 150 feet bgs flowing towards the southeast (Ninyo & Moore 2018). According to a LSI conducted at the site in 2013, groundwater was encountered at depths ranging from approximately 23 to 42 feet bgs at the site (Ninyo & Moore 2018). Groundwater levels, gradient, and flow direction can fluctuate due to seasonal variations, groundwater withdrawal or injection, changes in land use, and other factors.

Soils

According to a LSI conducted at the site in 2013, soils encountered beneath the site consisted of sandy silt, silty sand, and sand from the surface to the total depth explored of 45 feet bgs (Ninyo & Moore 2018). The site is also located within an area of potential ground subsidence (City of San Bernardino 2005).

Seiches and Tsunamis

Seiches are large waves generated in enclosed bodies of water in response to ground shaking. Tsunamis are waves generated in large bodies of water by fault displacement or major ground movement. Based on the absence of enclosed bodies of water near the project limits and distance from the ocean, the seiches and tsunami risks at the project site are considered negligible.

[2] The Richter scale is used to measure the magnitude of earthquakes, as determined by seismograph measurements of the height of ground oscillations during an earthquake. Because the scale is based on a logarithm, every whole-number step in the scale represents about 31 times more energy than the amount represented by the preceding whole number value. The Richter scale has no upper limit; the largest known earthquakes have magnitudes in the 8.8 to 8.9 range (USGS 2000).

2.2.2.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

Temporary impacts would be similar to those described in the adopted 2011 EA/FONSI. During construction of the proposed project, excavated soil would be exposed, increasing the potential for soil erosion. Additionally, during a storm event, unprotected soils including slopes would be subject to erosion. Short-term impacts related to construction activities would occur along the project limits due to grading, grubbing, land clearing, and construction. Construction activities would remain within the project limits of disturbance, primarily in work areas, heavy equipment traffic areas, and material laydown areas.

Earthwork in the project area would be performed in accordance with the latest edition of the Caltrans Standard Specifications and/or the requirements of applicable government agencies.

Permanent

Permanent impacts would be similar to those described in the adopted 2011 EA/FONSI. Because the project site is near known active faults, strong ground motion could occur in the vicinity of the project site in the event of a substantial earthquake. The project area would be subject to strong ground shaking associated with earthquakes on the San Andreas, the San Jacinto, the Glen Helen, and the Loma Linda fault systems. The bridge design would be required to meet the standard construction practices for Caltrans and City of San Bernardino transportation projects, which require compliance with the latest seismic standards. Measures are identified to minimize the potential for effects involving seismically induced strong ground shaking. The most up-to-date Acceleration Seismic Design Criteria (SDC) will be used for the proposed bridge design once the project begins the PS&E final design phase of the project.

The hazard of water erosion is slight, but the soil would blow away if left unprotected. Development of the bridge would cause groundbreaking during construction. As a result, soil could be exposed to rain and wind, potentially causing accelerated erosion and deposition from the project site. Siltation could be an issue for this project because there is a surface drainage channel located in the northwest portion of the project area. The drainage channel flows to the southeast and connects with the City stormwater system. Federal and state jurisdictions require that an approved SWPPP be prepared for projects that involve greater than one acre of disturbance. A SWPPP specifies BMPs that would prevent all construction pollutants from contacting stormwater with the intent of keeping all products of erosion from moving off site into receiving waters. Earthwork in the project area would be performed in accordance with the most current edition of the Caltrans Standard Specifications and/or the requirements of applicable government agencies.

No-Build Alternative

Hazards associated with seismic activity would still exist under the No-Build Alternative. Under the No-Build Alternative, the bridge would not be replaced, no improvements would be made, and the bridge could ultimately be closed to vehicular and pedestrian traffic after 2024. No temporary or permanent effects on geology/soils/seismicity/topography would occur. However, the current bridge does not meet seismic standards and would remain vulnerable to damage during a seismic event, which could increase as the bridge deteriorates further.

2.2.2.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

All avoidance and minimization measures previously identified in the adopted 2011 EA/FONSI for impacts on Geology/Soils/Seismicity/are still applicable to the project with the exception of original **GEO-6**, which is no longer needed since the drainage channel located to the southeast of the project site has been removed with the construction of the Metrolink Parking Structure. **GEO-7** identified in the adopted 2011 EA/FONSI is now **GEO-6**.

To ensure that, during construction, potential effects involving geology, soils, seismicity, and topography are minimized to an acceptable level, the following avoidance, minimization and/or mitigation measures will be implemented.

GEO-1 Detailed earthwork recommendations will be provided in the design geotechnical report, and these recommendations will be incorporated into the project specifications.

GEO-2 The depth of the groundwater table below the site, and the potential for liquefaction, will be further evaluated in the geotechnical report prepared during the PS&E final design phase.

GEO-3 Erosion control measures will include the use of berms to direct runoff away from exposed soils and slopes, and proper grading techniques will be utilized.

GEO-4 For fill slopes, surface water runoff shall be directed to suitable outlets to reduce the likelihood of surficial erosion of the slopes.

GEO-5 Slopes shall be planted with vegetation as soon as feasible after the completion of grading to reduce the amount of erosion on the slope face.

GEO-6 Due to its proximity to the San Andreas Fault, the bridge would be seismically designed to consider a maximum credible earthquake of magnitude of 8.0 on the Richter scale.

2.2.3 Paleontology

2.2.3.1 REGULATORY SETTING

Paleontology is a natural science focused on the study of ancient animal and plant life as it is preserved in the geologic record as fossils. A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized projects.

- 23 United States Code (USC) 1.9(a) requires that the use of Federal-aid funds must be in conformity with all federal and state laws.
- 23 USC 305 authorizes the appropriation and use of federal highway funds for paleontological salvage as necessary by the highway department of any state, in compliance with 16 USC 431-433 above and state law.

2.2.3.2 AFFECTED ENVIRONMENT

The primary source used in the preparation of this section is the *Mount Vernon Avenue Bridge Project Paleontological Identification Report/Paleontological Evaluation Report* (PIR/PER), dated March 2009 (Caltrans 2009). For the adopted 2011 EA/FONSI, a paleontological literature and records review was conducted at the Division of Geological Sciences at the San Bernardino County Museum on September 5, 2007, and a Paleontological Identification Report/Paleontological Evaluation Report was prepared. A review of geological mapping of the study area revealed that the site has low potential to contain significant fossils in the Holocene sediments; however, Pleistocene or older alluvium may be present at depth. If present, this alluvium would have high paleontological sensitivity. The record search of the Regional Paleontology Locality Inventory revealed that one previously recorded paleontological resource is located within 0.5 mile to the south of the project site.

2.2.3.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

There are no temporary impacts on paleontological resources. Any impacts on such resources during the construction period, if they occur, would be considered permanent impacts and are discussed under the permanent impacts heading below.

Permanent

The adopted 2011 EA/FONSI concluded that if excavation is restricted to depths of no more than 15 feet below the existing ground surface, then older Pleistocene sediments are not expected to be encountered. At these depths, no program to address effects on paleontological resources was recommended in the adopted 2011 EA/FONSI. For the proposed project, the vertical excavation within the project limits is anticipated to range from three feet to 100 feet deep, depending on construction activity. Limited locations may require excavating to depths of up to approximately 80 to 100 feet for bridge pilings as well as associated drilling activities. Depths of up to three to four feet would be required for roadway excavation. Excavation depths of up to five to six feet would be required for retaining walls and four to 14 feet for drainage trenching.

Due to the proposed depth of excavation, construction activities could potentially extend into previously undisturbed and paleontologically sensitive sedimentary rock units with high paleontological resource potential/sensitivity. Therefore, impacts on paleontological resources in these areas may occur during project construction. In order to minimize these impacts, a Paleontological Mitigation Plan (PMP), as described in measure **PALEO-1** below, would be prepared by a qualified paleontologist to address this identified area of potential sensitivity.

No-Build Alternative

Under the No-Build Alternative, the bridge would not be replaced, and no improvements would be made. No effects on paleontological resources would occur.

2.2.3.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The following measure, which was not identified in the adopted 2011 EA/FONSI, would be implemented with the project and would minimize or avoid impacts related to paleontological resources.

PALEO-1 Grading, excavation, and other surface and subsurface excavation in the defined proposed project have the potential to affect nonrenewable paleontological resources. A PMP will be prepared during final project design by a qualified paleontologist. The PMP will detail all the measures to be implemented in the event of paleontological discoveries. The PMP will include, at a minimum, the following elements:

a) Required 1-hour preconstruction paleontological awareness training for earthmoving personnel, including documentation of training, such as sign-in sheets, and hardhat stickers, to establish communications protocols between construction personnel and the principal paleontologist.

b) There will be a signed repository agreement with an appropriate repository that meets Caltrans requirements and is approved by Caltrans.

c) A construction monitoring program by a qualified paleontological monitor during excavation activities within sediments of Pleistocene or older alluvium.

d) Field and laboratory methods that meet the curation requirements of the appropriate repository will be implemented for monitoring, reporting, collection, and curation of collected specimens. Curation requirements are available for public review at the appropriate repository.

e) All elements of the PMP will follow the PMP Format published in the Caltrans Standard Environmental Reference.

f) A Paleontological Mitigation Report (PMR) discussing findings and analysis will be prepared by a principal paleontologist upon completion of project earthmoving. The report will be included in the environmental project file and also submitted to the curation facility.

2.2.4 Hazardous Waste/Materials

2.2.4.1 REGULATORY SETTING

Hazardous materials, including hazardous substances and wastes, are regulated by many federal laws. Statutes govern the generation, treatment, storage, and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

The primary federal laws regulating hazardous wastes/materials are the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980 and the Resource Conservation and Recovery Act (RCRA) of 1976. The purpose of CERCLA, often referred to as “Superfund,” is to identify and cleanup abandoned contaminated sites so that

public health and welfare are not compromised. The RCRA provides for "cradle to grave" regulation of hazardous waste generated by operating entities. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)
- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

Section 121(d) of CERCLA requires that remedial action plans include consideration of more stringent state environmental "Applicable or Relevant and Appropriate Requirements" (ARARs). The 1990 National Oil and Hazardous Substances Pollution Contingency Plan (NCP) also requires compliance with ARARs during remedial actions and during removal actions to the extent practicable. As a result state laws pertaining to hazardous waste management and cleanup of contamination are also pertinent.

In addition to the acts listed above, Executive Order (EO) 12088, Federal Compliance with Pollution Control Standards, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

2.2.4.2 AFFECTED ENVIRONMENT

The primary source used in the preparation of this section is the *Supplemental Initial Site Assessment Revalidation for the Mount Vernon Avenue Bridge Project* (SISA), March 2018 (Nino & Moore 2018). The SISA Revalidation was prepared as a supplemental version to the 2010 ISA, with the intent to reconfirm the findings of the past ISA and discuss how site environmental conditions have changed since that time. The study area for the SISA Revalidation is shown in Figure 2-5.

The objective of the supplemental ISA is to evaluate the presence of recognized environmental conditions (RECs), which are defined by the ASTM as "the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to a release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

As defined in ASTM E 1527-13, de minimis conditions are not considered RECs. A de minimis condition is defined as "a condition that generally does not present a threat to human

health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

Identification of RECs fall into three categories: existing RECs (as defined above); Historical RECs (HRECs); or Controlled RECs (CRECs).

- HREC – A HREC is defined as "a past release of any hazardous substance or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations [AULs], institutional controls, or engineering controls)."
- CREC – A CREC is defined as "recognized environmental conditions resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a NFA letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, AULs, institutional controls, or engineering controls)."

Environmental Database Search

Geocoded (Mapped) Listings

As part of the 2018 SISA, a search of selected government databases was conducted using the Environmental Data Resources® DataMap™ Environmental Atlas™ database report (EDR report) system. There were approximately 207 onsite and offsite properties within one mile of the site listed on various regulatory agency databases. These facilities were evaluated for their potential to impact soil, soil vapor, and/or groundwater at the site. To supplement the information in the EDR report, online databases such as the SWRCB GeoTracker website, Department of Toxic Substances Control's (DTSC's) EnviroStor website, and South Coast Air Quality Management District (SCAQMD) Facility Information Database (FIND) website were reviewed. Information from the EDR database report and supplemental sources is included in the facilities of potential concern summaries below. The following onsite properties/facilities were mapped and represent potential RECs to the project (refer to Figure 2-5).

- Viscie Benedict Gas located at 1301 5th Street near the intersection of Mount Vernon Avenue and 5th Street. The site was listed on the EDR Historical Auto Stations (Hist Auto) database in 1936, 1942, 1949, 1969, 1971, 1974-1980, and 1981-1982 as a gasoline service station. This is considered a REC if excavation and earthmoving activities are planned in this area. See Figure 2-5 for the location of this former facility.
- Auto Tune is located at 1230 2nd Street, mapped on the site at the intersection of 2nd Street and N. Giovanola Avenue. The facility was listed on the EDR Hist Auto database in 1936, 1942, 1949, 1969, 1971, 1974-1980, and 1981-1982 as a gasoline service station. This is considered a REC if excavation and earthmoving activities are planned in this area. See Figure 2-5 for the location of this former facility.

- Consolidated Freight Waste Inc./US Xpress Enterprises Corporation is located at 1435 4th Street. The site was listed as a generator of organic solid waste in 2000. US Xpress Enterprises Corp was listed as a generator of inorganic solid waste in 2004. Both listings may be related to the generation of hazardous waste at the BNSF yard.
- ATSF Rail Yard/Southern California Regional Rail Authority/City and County of San Bernardino/San Bernardino Waste Treatment/Downtown San Bernardino Passenger Rail Project/etc. Multiple entities at 1170 3rd Street were mapped on site northwest of the intersection of 3rd Street and Mount Vernon Avenue. However, after further review, these mappings may be erroneous, and the facilities are actually east of Mount Vernon Avenue and off site. San Bernardino Waste Treatment and ATSF rail yard were listed on the HIST UST database for four 10,000-gallon waste oil USTs. ATSF was also listed for a cleanup program site involving solvent contamination of groundwater. However, further information was not provided, and the exact location and status of the four 10,000-gallon waste oil USTs is unknown. Multiple entities were listed as generators of hazardous waste, including asbestos-containing materials, organic solids, inorganic solid waste, and PCB-containing waste. Based on the remediation activities that have been conducted since the preparation of the 2010 ISA and current regulatory status (NFA) of the site, it is unlikely that the groundwater remediation activities reviewed continue to impact the environmental integrity of the site, and is considered an HREC.
- Anita's Mexican Food (Anita's) at 1390 4th Street was listed as a generator of hazardous waste, including PCB-containing waste, mercury-containing waste, waste oil, asbestos-containing waste, and organic solid waste. This site and potential for groundwater contamination is also discussed in Section 2.2.1, Water Quality and Stormwater Runoff.

The following offsite facilities represent a potential environmental concern to the project site, based on their proximity to the site, the nature of the database on which they are listed, and/or the assumed direction of groundwater flow in the site vicinity (southeast).

- ATSF/Groundwater Investigation located at 1260 3rd Street. ATSF was listed for several diesel and waste oil USTs, as well as for a groundwater cleanup effort that began in 1988. This listing is related to the groundwater evaluation at the ASTF rail yard (1170 3rd Street) described above.
- Santa Fe Railway Company/San Bernardino Powerhouse/BNSF Railway located at 470 North L Street. San Bernardino Powerhouse was listed as having 28 historical USTs of various sizes containing diesel, waste oil, and gasoline. The BNSF Railway was listed under the SLIC database (Spills, Leaks, Investigation and Cleanup) database by the California Regional Water Quality Control Board for hydrocarbon and volatile organic compound (VOC) impacts to soil and groundwater.
- The Arco facility at 542 North Mount Vernon Avenue is north and up-gradient of the project site. The Arco facility was listed as containing USTs. Further information, such as contents or capacity, was not noted. The USTs observed during site reconnaissance are not considered a REC, unless excavation and earthmoving activities encroach on this property.
- Lords Dry Cleaners at 1061 5th Street is east-northeast and up-gradient of the project site. The facility was listed as a drycleaner from 1936 to 1990. According to the SCAQMD

FINDs website, Lords Dry Cleaners has an inactive permit to operate dry-cleaning equipment that uses tetrachloroethylene. Violations were not noted. Based on the distance from the site and period of operation, this listing is considered a REC to the project site.

- ATSF rail yard, located at 1170 3rd Street, was listed on the LUST database for chlorinated solvent, gasoline, and diesel contamination to groundwater. Remediation activities and groundwater monitoring has occurred at the site since 1995. A NFA letter was issued to the former BNSF Railway Company Rail Yard Intermodal Facility on April 12, 2011. Based on the remediation activities that have been conducted and current regulatory status (NFA) of the site, it is unlikely that the groundwater remediation activities reviewed continue to affect the environmental integrity of the site and are therefore considered an HREC.

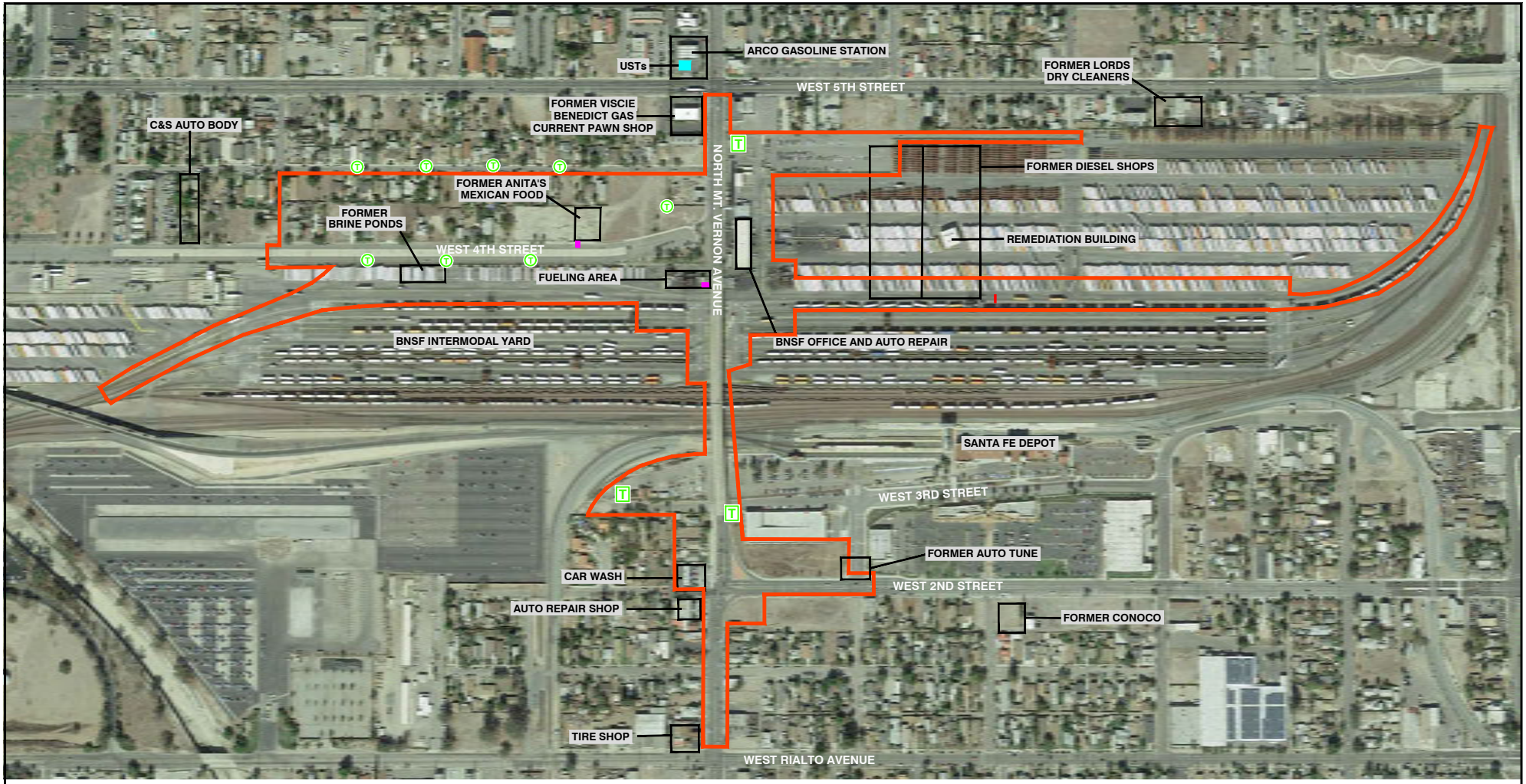
Non-Geocoded (Unmapped) Listings

Six unmapped properties under seven listings were in the EDR report, due to poor or inadequate address information. Unmapped properties are shown by EDR as Orphan Sites. Based on the general location information provided for these properties, the types of databases on which these properties were listed, and/or the approximate distance of these facilities from the site, the 2018 SISA Revalidation concluded that it is unlikely that the environmental integrity of the site has been affected by these unmapped properties; they are not considered a REC or indicator of a REC for the site.

Online Regulatory Databases

Online regulatory databases were reviewed by Ninyo & Moore to supplement the environmental database search conducted by EDR.

SWRCB GeoTracker: The BNSF site was listed under 470 North L Street. In 1984 testing of on- and offsite monitoring wells showed trichloroethylene (TCE) and PCE in the onsite wells. The wastewater being discharged from the ATSF (current BNSF) facility was tested and found to have detectable VOC concentrations. Remediation activities and groundwater monitoring has occurred at the site since 1995. An NFA letter was issued to the former BNSF Railway Company Rail Yard Intermodal Facility on April 12, 2011. Based on the remediation activities that have been conducted and current regulatory status (NFA) of the site, it is unlikely that the groundwater remediation activities reviewed continue to impact the environmental integrity of the site, and is considered an HREC.



LEGEND

- SITE BOUNDARY
- OIL-WATER SEPARATOR
- POLE-MOUNTED TRANSFORMER
- PAD-MOUNTED TRANSFORMER
- BNSF — BURLINGTON NORTHERN AND SANTA FE RAILWAY

NOTE: DIMENSIONS, DIRECTIONS AND LOCATIONS ARE APPROXIMATE. I REFERENCE: GOOGLE EARTH, 2017.

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Figure 2-5
Recognized Environmental Conditions in the Study Area
Mount Vernon Avenue Bridge Project

Source: Geotechnical & Environmental Scienes Consultants

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Previous Reports and Studies

2004 Initial Site Assessment (ISA) 2004

An ISA report for the Mount Vernon Avenue Bridge and Proposed Shoofly Track Area was prepared in August 2004. The 2004 ISA described a chlorinated solvent plume in groundwater which had resulted from historic releases at the BNSF yard that was migrating southeast towards the eastern portion of the shoofly. The report stated that total petroleum hydrocarbons (TPH) and metals-impacted soil beneath the Mount Vernon Avenue Bridge was excavated and/or remediated in place and that regulatory closure was granted by the RWQCB on March 3, 2004. Additionally, two gasoline stations were located within the immediate vicinity of the Mount Vernon Avenue Bridge: on the northeast corner of 5th Street and Mount Vernon Avenue, and on the northwest corner of 2nd Street and Mount Vernon Avenue. Information on the regulatory status of the gasoline stations was not included. In the 2004 ISA report, a review of an ISA prepared by Parsons Brinckerhoff Quade & Douglas, Inc. (PBQ&D) was done. The text of the PBQ&D report concluded that "potential contaminant sources have been identified that may result in adverse impacts associated with the proposed project." However, the text did not specify what those sources were. The ISA Checklist prepared by PBQ&D recommended that "investigations of the rail yard should be completed to detect any contamination due to rail operations." The PBQ&D report provided no specific information regarding hazardous materials releases at the BNSF yard.

2010 Revised ISA

In 2010, a Revised ISA for the Mount Vernon Avenue Bridge and Proposed Shoofly Track Area was prepared. The following summary of findings, opinions, and conclusions associated with the 2010 Revised ISA were reported and the following conditions were documented in the adopted 2011 EA/FONSI:

Mount Vernon Avenue Bridge

- Soil underlying the bridge within BNSF property had been impacted with petroleum hydrocarbons and metals from historical railway operations. Impacted soil underlying portions of the northern end of the bridge was excavated. Regulatory closure for impacted soil was granted in May 2003. Residual herbicides suspected to be used along the railroad tracks may be present in soil beneath the bridge. The 2010 ISA recommended the sampling and analysis of soil (and groundwater if encountered) beneath the bridge within the proposed demolition and construction zones for COCs including petroleum hydrocarbons, metals, VOCs, polychlorinated biphenyl (PCBs), semi-VOCs (SVOCs), and chlorinated herbicides.
- The bridge was approximately 1,000 feet west of a chlorinated solvent plume in groundwater which had resulted from historic releases at the BNSF/ATSF property. The extent of the groundwater contamination was under investigation under the oversight of the RWQCB at the time.
- Two former gasoline stations were located within the immediate vicinity of the bridge: one on the northwest corner of 5th Street and Mount Vernon Avenue, and the other on the northwest corner of 2nd Street and Mount Vernon Avenue. If the proposed demolition construction activities were to impact soil beneath the two former gasoline stations, the ISA recommended the collection and analysis of soil samples for petroleum hydrocarbons and VOCs during the design phase.

Proposed Shoofly Track Area

- The proposed shoofly area east of the bridge was occupied by a roundhouse and diesel and car shops (maintenance) which extended onto the proposed shoofly track area east of Mount Vernon Avenue. The roundhouse and the diesel and car shops were removed in the early 1990s. The 2010 ISA recommended the sampling and analysis of soil (and groundwater, if encountered) beneath the proposed shoofly track area for petroleum hydrocarbons, metals, VOCs, PCBs, SVOCs, and chlorinated herbicides.
- A Vapor Extraction/Vapor Treatment System (VES/VTS) was installed to remediate solvent contaminated soil in the immediate vicinity of the former diesel shops in the proposed shoofly track area on BNSF property. An NFA was issued for solvent contaminated soil by the RWQCB, and a closure letter was issued for the BNSF property on September 9, 2008. The groundwater and extent of contamination was currently under investigation under the oversight of the RWQCB at the time of preparation of the ISA and approved 2011 EA/FONSI.
- A fueling area, wash pad, and an oil/water separator system were adjoining and north of the proposed shoofly track area and west of the bridge. The fueling area contained a 6,000-gallon diesel aboveground storage tank (AST), a 2,000-gallon gasoline AST, two 240-gallon diesel ASTs, two 240-gallon unleaded fuel ASTs, seventeen 55-gallon drums of used filters and motor oil, two 240-gallon ASTs with motor oil, one 240-gallon AST with used motor oil, and a small shed with four 55 gallon drums containing new and used motor oil. In addition, surface staining was observed around the stored petroleum products.
- The wastewater/oil-and-water separator system located on BNSF property north of the proposed shoofly area and west of the Mount Vernon Avenue Bridge consisted of a below grade oil/water separator and an oil recovery AST. Wash water from the wash pads drained into the below grade oil/water separator. The recovered oil was pumped back to an oil recovery AST.
- Soil on BNSF property in the vicinity of the proposed shoofly track area had been impacted with petroleum hydrocarbons and metals from historical railway operations. Impacted soil, west of the bridge, was excavated between October 1988 and May 2003. Regulatory closure of the impacted soil was granted on May 12, 2003.
- Based on the historic use as a rail yard and the common use of herbicides on railroad tracks, the ISA concluded that residual herbicides may be present in soil beneath the asphalt along the proposed shoofly track area.
- The eastern portion of the proposed shoofly track area was in the immediate vicinity of a chlorinated solvent plume in groundwater which has resulted from historic releases at the BNSF/ATSF property. The extent of the groundwater contamination was under investigation under the oversight of the RWQCB during the time of the report.
- Two asbestos-containing materials (ACM) and lead-based paint (LBP) surveys were conducted in 2004 and 2010. Based on the findings of these surveys, LBP and ACM may be encountered during demolition of the Mount Vernon Avenue Bridge.

2013 Limited Site Investigation

In 2013, an LSI was conducted after the adoption of the 2011 EA/FONSI. Soil samples were collected around the shoofly and bridge replacement alignment. Several VOCs, SVOCs, TPHs, and Title 22 Metals exceeded regulatory screening levels in soil samples analyzed. Chlorinated herbicides (with the exception of one minor detection of pentachlorophenol) and organochlorine pesticides (OCPs) were not detected in soil samples analyzed. Concentrations of VOCs and some Title 22 Metals in groundwater exceeded the California Environmental Protection Agency and/or EPA maximum contaminant levels (MCLs) at the site.

Based on the analytical results, the LSI concluded that soil disturbed during earthmoving activities may be classified as a hazardous waste on the shoofly alignment, and special considerations may be necessary for handling some excavated soil for the project. Constituents in soil at the site represented a potential threat to the health of site workers performing earthwork activities. Risks associated with these constituents would need to be mitigated for both construction workers and the community. Four types of soil were expected to require management during earthmoving activities associated with this site: RCRA Hazardous Waste, California-Hazardous Waste, Impacted Non-Hazardous Waste, and Soil Acceptable for Reuse. The LSI provided recommendations for the protection of worker health and safety and well as for proper waste handling, disposal, and reuse of soil disturbed at the site.

2017 Supplemental ISA

A Supplemental ISA for the Mount Vernon Avenue Bridge Project was prepared in September 21, 2017. In addition to the bridge and shoofly, the ISA also included the primarily residential area between 4th Street and Kingman Street, bounded by Mount Vernon Avenue to the east and Cabrera Avenue to the west. This study area comprises the northwestern portion of the current proposed project site. The following RECs were reported during this supplemental ISA.

- Railroad operations were present south and east of the site as early as 1896 and continued through the time of the report. Large ASTs were present in the railroad yard immediately adjacent to the south between 1938 and 1968, which was considered a REC. This is not considered a new REC.
- Based on information gathered from the 2010 ISA, the BNSF property was potentially impacted with petroleum hydrocarbons, metals, herbicides, and a chlorinated solvent groundwater plume. A fueling station was also present adjacent to the southeast of the site, on which staining was observed. The presence of the fueling station and associated staining adjacent to the southeast of the site represented a REC. This is not considered a new REC.
- Mount Vernon Avenue, 4th Street, Cabrera Avenue, and Kingman Street were present in their current location as early as 1938. State Route 66 traversed along the present day 4th Street, which comprises the southern portion of the site. Because the site was adjacent to multiple roadways, including State Route 66, and the BNSF railroad facility to the south and east prior to 1992, when leaded gasoline was utilized, the potential presence of aerially deposited lead (ADL) in shallow unpaved soil at the site represented a REC. This is considered a new REC.
- Anita's Mexican Food Corp at 1390 4th Street was listed on historical UST databases. Additionally, Anita's was issued a SCAQMD permit to operate a gasoline storage and

dispensing station in 1983 and 1990. Based on the presence of a gasoline UST on the site, and lack of information regarding its removal, this information was considered a REC. This is considered a new REC not previously evaluated in the approved 2011 EA/FONSI.

- A concrete vault, possibly an oil-water separator, was observed on vacant land north of 4th Street. The oil-water separator was probably used as a wastewater treatment system for the old restaurant, Anita's Mexican Foods Corp, at 1390 West 4th Street. This was considered a REC. This is considered a new REC not previously evaluated in the approved 2011 EA/FONSI.
- Two onsite historical auto repair facilities were listed on the EDR Hist Auto database (Walker W C Auto Repair at 1304 4th Street and C&S Automotive at 1452 4th Street). These are considered new RECs not previously evaluated in the approved 2011 EA/FONSI.
- A stockpile of crushed concrete was observed at the southern portion of the site. The stockpile was approximately 6,000 cubic yards in volume. Based on correspondence with the client, the stockpile was related to construction work in the rail yard. Beginning on August 18, 2017, the stockpile was loaded onto trailers and hauled off site. Additional information from BNSF on the stockpile was pending at the time of the report. The presence of undocumented fill on the site was a REC. This was considered a REC. This is considered a new REC not previously evaluated in the approved 2011 EA/FONSI.
- Based on the historical research and results of the vapor encroachment screening matrix (VESM), a vapor encroachment condition (VEC) could not be ruled out beneath the site. This was considered a REC. This is considered a new REC not previously evaluated in the approved 2011 EA/FONSI.

The potential presence of ADL in shallow, unpaved soil along Mount Vernon Avenue, 4th Street, and railroad tracks in the BNSF Intermodal Facility represents a new REC to the site. The presence of a historical UST and oil-water separator at Anita's Mexican Food Corp is considered a new REC to the project site. Based on additional information gathered during 2018 SISA Revalidation, the following changes in regards to some of the reported RECs from the September 2017 ISA include:

- The presence of ASTs (historical and current fueling area) on the BNSF Intermodal Facility does not represent a REC to the site, unless excavation and earthmoving activities are planned in this area.
- During the site reconnaissance for the September 2017 ISA, a stockpile of crushed concrete was observed on vacant land. This was classified as "undocumented fill" and considered a REC. During the site reconnaissance on February 1, 2018, the stockpile of crushed concrete was not observed. Therefore, this is no longer considered a REC.
- Two onsite historical auto repair facilities were listed on the EDR Hist Auto database, and were considered RECs in the September 2017 ISA. However, based on new information gathered during the preparation of this current ISA, the mapping of these historical facilities was erroneous. Therefore, this is no longer considered a REC.

2018 Final Supplemental Initial Site Assessment (FISA)

A Final Supplemental Initial Site Assessment (FISA) was prepared for the Mount Vernon Avenue Bridge Project, dated January 8, 2018. The FISA was prepared as a supplemental version to the 2010 ISA conducted by Ninyo & Moore, with the intent to re-evaluate the findings of the past ISA and discuss how environmental conditions have changed since that time and since the 2011 EA/FONSI was adopted. The site area included the bridge and its approaches between 2nd Street and 5th Street, as well as the proposed shoofly traversing east-west along the northern portion of the BNSF Intermodal Facility. The following conclusions were reported.

- Records referring to soil in the vicinity of the bridge impacted with "long-chain hydrocarbons" and lead were found from files provided by the RWQCB. Records indicated that areas of soil on both sides of the northern end of the bridge were excavated up to a depth of 60 feet bgs between May and July 1994 and to depths ranging from 16 to 25 feet bgs between October 1994 and February 1995. Approximately 46,300 cubic yards of TPH-impacted soils were excavated and removed from the site. On February 17, 1995, the RWQCB authorized the backfill of excavations after confirmation sample results were reviewed and confirmed to contain TPH at acceptable levels. Soils located underneath the bridge could not be excavated due to accessibility issues. The potential presence of TPH-impacted soils beneath the northern portion of the bridge was evaluated during Ninyo & Moore's 2013 LSI. The presence of TPH at elevated concentrations was reported in borings DP-3 and DP-4A, which are underneath the northern section of the bridge. The presence of TPH-impacted soil underneath the northern portion of the bridge was considered a REC. This is not considered a new REC to the proposed project.
- Elevated concentrations of constituents of concern were reported in samples collected for the shoofly, SBCTA, and BNSF properties during a LSI conducted in 2013; namely, lead was found at concentrations indicating hazardous characterization. On the shoofly alignment, Ninyo & Moore indicated some of the soil disturbed during earthmoving activities may be classified as a hazardous waste with respect to lead. Therefore, special considerations may be necessary for handling some excavated soil for the project. This was considered a REC. This is not considered a new REC to the proposed project.
- Based on the historic use as a rail yard and the common use of herbicides on railroad tracks, Ninyo & Moore concluded residual herbicides may be present in soil beneath the asphalt along the proposed shoofly track area and beneath the bridge. However, chlorinated herbicides (with the exception of one minor detection of pentachlorophenol) and OCPs were not detected in soil samples along the proposed shoofly track area or beneath the bridge during Ninyo & Moore's 2013 LSI. Therefore, the presence of chlorinated herbicides was not considered a REC to the site.
- Two gasoline stations were located within the immediate vicinity of the bridge: one on the northwest corner of 5th Street and Mount Vernon Avenue (currently an Arco station); and the other on the northwest corner of 2nd Street and Mount Vernon Avenue (former gasoline station). Spills or records of release were not found for these facilities. The presence of these gasoline stations were considered a REC if demolition of the Mount Vernon Avenue Bridge and related excavation work would encroach onto these properties. The Arco Station is outside of the project limits of disturbance. The other gas station is within the project limits of disturbance. This is considered a new REC to the proposed project.

- A VES/VTS was installed to remediate solvent contaminated soil in the immediate vicinity of the former diesel shops in the proposed shoofly track area on BNSF property. An NFA was issued for the solvent contaminated soil and groundwater by the RWQCB and a closure letter was issued for the BNSF property in 2006 and 2011. This was considered an HREC. This is not a new REC.
- A fueling area, an oil/water separator system, and two wash pads were adjacent and north of the proposed shoofly track area and west of the bridge. The fueling area contained a 6,000-gallon diesel AST, a 2,000-gallon gasoline AST, two 240-gallon diesel ASTs, two 240-gallon unleaded fuel ASTs, twenty 55-gallon drums (empty, used filters, antifreeze, motor oil, parts cleaner, hydraulic oil, aerosols) on secondary containment, two 330-gallon ASTs with diesel exhaust fluid, five 300-gallon ASTs (hydraulic fluid, diesel oil, motor oil, transmission oil, detergent), and a small storage shed containing a parts cleaner, two fire closets (aerosols, gasoline, lube oil, paints), and four 55-gallon drums of clean and used motor oil. Surface staining was observed on concrete around the stored petroleum products. This was considered a de minimis condition, and was not considered a REC to the site.
- The wastewater/oil-and-water separator system located on BNSF property north of the proposed shoofly area and west of the Mount Vernon Avenue Bridge consisted of a below grade oil/water separator and an oil recovery AST. Wash water from the wash pads drained into the below grade oil/water separator. The recovered oil was pumped back to an oil recovery AST. This was not considered a REC to the site.
- Soil on BNSF property in the vicinity of the proposed shoofly track area had been impacted with petroleum hydrocarbons and metals from historical railway operations. Portions of impacted soil had been excavated between October 1988 and May 2003. Regulatory closure of the excavation of impacted soil was granted on May 12, 2003 by the RWQCB. This was considered an HREC.
- Based on the results of the VESM, a VEC could not be ruled out beneath the site, and was considered a REC. This is considered a new REC to the proposed project.

Site Reconnaissance

The objective of the site reconnaissance was to obtain information indicating the potential for RECs in connection with the expanded project site. A site reconnaissance was conducted on February 1, 2018. Areas of the site previously observed during the September 2017 and January 2018 ISAs were not observed on February 1, 2018, unless otherwise noted. Results of the site reconnaissance from the September 2017 ISA and January 2018 FISA have been incorporated into the following sections as appropriate.

During the site reconnaissance for the January 2018 FISA, evidence of petroleum products was observed on the site north of the shoofly within BNSF property. Petroleum products observed included a 6,000-gallon diesel AST, a 2,000-gallon gasoline AST, two 240-gallon diesel ASTs, two 240-gallon unleaded fuel ASTs, twenty 55-gallon drums (empty, used filters, antifreeze, motor oil, parts cleaner, hydraulic oil, aerosols) on secondary containment, two 330-gallon ASTs with diesel exhaust fluid, five 300-gallon ASTs (hydraulic fluid, diesel oil, motor oil, transmission oil, detergent), and a small storage shed containing a parts cleaner, two fire closets (aerosols, gasoline, lube oil, paints), and four 55-gallon drums of clean and used motor oil. Fuel

and petroleum products observed are reportedly used for maintenance of cranes and hostler vehicles. Surface staining was observed around the stored petroleum products in the "fueling area" depicted in Figure 2-5.

During the February 2018 site reconnaissance, five ASTs (approximately 250 gallons each) containing oil were observed in the fueling area/vehicle maintenance area east of the bridge, depicted in Figure 2-5.

During the site reconnaissance conducted for the January 2018 FISA, hazardous waste materials observed included a 185-gallon AST containing used motor oil and several 55-gallon drums as described above. In addition, five 55-gallon drums containing non-RCRA hazardous waste were observed north of the hazardous material storage area.

During the site reconnaissance for the September 2017 ISA, eight pole-mounted transformers were observed around the residential neighborhood between 4th Street and Kingsman Street. This is considered a new REC to the proposed project.

During the February 2018 site reconnaissance, potential PCB-containing pad-mounted transformers were observed in three areas of the site: one at the southwest corner of the vacant lot west of Mount Vernon Avenue and north of 3rd Street; one at the parking structure east and adjoining Mount Vernon Avenue; and three transformers at the northern end of the BNSF Intermodal Facility. Staining, discoloration, or other signs of release of PCBs were not observed around the transformers. This is considered a new REC to the proposed project. The locations of transformers are depicted in Figure 2-5.

During the site reconnaissance for the January 2018 FISA, surface staining was observed in the fueling area adjoining west of the bridge and north of the shoofly.

During the site reconnaissance for the January 2018 FISA, a concrete-lined hazardous materials pit was observed north of the proposed shoofly track area and east of the bridge. The pit is used for emergencies resulting from leaking trucks or containers brought into the facility. Substances collected in the hazardous material pit are pumped out by appropriate hazardous waste handlers and do not represent a REC to the project site.

During the September 2017 site reconnaissance, as well as the February 2018 site reconnaissance, a concrete vault that is possibly an oil-water separator was observed on vacant land north of 4th Street. The oil-water separator was probably used as a wastewater treatment system for Anita's Mexican Food Corp at 1390 4th Street. This is considered a new REC to the proposed project.

During the site reconnaissance for the January 2018 FISA, a wastewater/oil and-water separator system was observed at the BNSF facility north of the shoofly and west of the bridge. The wastewater/oil-and-water separator system consists of a below grade oil-water separator and an oil recovery AST. Wash water from both the wash pads drain into the below grade oil-water separator. The recovered oil is pumped back to an oil recovery AST.

Vapor Encroachment/Intrusion

As mentioned in Section 2.2.1.2, in 2018 a preliminary vapor encroachment screen was conducted for potential chemicals of concern that may migrate as vapors onto the site as a result of contaminated soil and/or groundwater near the site. Based on the historical onsite UST at Anita's Mexican Food, historical chlorinated solvent contamination of groundwater at the ATSF/BNSF facility, up-gradient drycleaner Lords Dry Cleaners at 1061 5th Street that operated between 1936 and 1990, a VEC cannot be ruled out beneath the site, which is considered a REC. This is considered a new REC to the proposed project.

2.2.4.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

Exposure to Contaminated Soils and Groundwater. Elevated concentrations of chemicals of concern (metals, PCE, TPH, and SVOCs) were reported in samples collected for the shoofly and in the soils in areas adjoining the north end of the bridge on both the east and west sides of the bridge during a LSI conducted by Ninyo & Moore in 2013. This includes the presence of TPH-impacted soils beneath the northern section of the Mount Vernon Bridge and lead-impacted soil along much of the shoofly, which warrants treatment of soils as hazardous waste. A preliminary vapor encroachment screen was conducted to identify a VEC, which indicates the presence, or likely presence, of COCs in subsurface soils at the site caused by the release of vapors from contaminated soil or groundwater either on or near the site. Based on the results of the VESM, a VEC cannot be ruled out beneath the site and is therefore considered a REC. It should be noted that a vapor intrusion screening was not conducted for the site during the 2010 ISA; this is a new environmental condition identified for the site since the adopted 2011 EA/FONSI. Exposure to potential contaminated soils and groundwater during construction activities could result in substantial health effects. Measure **WQ-1** in Section 2.2.1.4 and measures **HAZ-2** through **HAZ-7** in Section 2.2.4.4 are included to avoid exposure to potentially contaminated soils and groundwater, thereby minimizing risk of effects.

A fueling area, an oil-water separator system, and two wash pads are adjacent and north of the shoofly and west of the bridge. The fueling area contains a 6,000-gallon diesel AST, a 2,000-gallon gasoline AST, two 240-gallon diesel ASTs, two 240-gallon unleaded fuel ASTs, twenty 55-gallon drums (empty, used filters, antifreeze, motor oil, parts cleaner, hydraulic oil, aerosols) on secondary containment, two 330-gallon ASTs with diesel exhaust fluid, five 300-gallon ASTs (hydraulic fluid, diesel oil, motor oil, transmission oil, detergent), and a small storage shed containing a parts cleaner, two fire closets (aerosols, gasoline, lube oil, paints), and four 55-gallon drums of clean and used motor oil. Surface staining was observed on concrete around the stored petroleum products. This is considered a de minimis condition, and is not a REC to the site, unless excavation and earthmoving is proposed in this area which could be possible considering it is near the location of Future Track 219. Measures are identified to avoid exposure to potentially contaminated soils and groundwater, thereby minimizing risk of effects.

The potential presence of ADL in shallow, unpaved soil along Mount Vernon Avenue, Cabrera Avenue, Kingman Street, and 4th Street, and railroad tracks in the BNSF Intermodal Facility represents a new REC to the project. The presence of a historical UST and oil-water separator at Anita's Mexican Food Corporation is also considered a new REC to the project.

Exposure to Asbestos-Containing Materials and Lead-Based Paint. The adopted 2011 EA/FONSI identified hazardous wastes impacts from the presence of ACMs and LBP during the ACM and LBP surveys conducted in 2004 and 2010. The 2018 FSISA concluded that ACMs and LBP are likely to be encountered during demolition of the Mount Vernon Avenue Bridge. Measures from the adopted 2011 EA/FONSI would still be applicable to the proposed project and are discussed in Section 2.2.4.4. These measures would avoid exposure to these substances thereby minimizing risk of effects.

Exposure to Herbicide Contaminated Soils. The BNSF right of way has been present since at least the early 1900s. Herbicides were typically used along railroad rights of way to control weeds. Herbicides may be present in soil in the vicinity of the BNSF right of way. Exposure to potential herbicide-containing soils during construction activities could result in substantial health effects. Measures are identified to avoid exposure to potentially contaminated soils, thereby minimizing risk of effects. However, chlorinated herbicides (with the exception of one minor detection of pentachlorophenol) and organochlorine pesticides were not detected in soil samples collected along the proposed shoofly track area or beneath the bridge during the 2013 LSI. Therefore, the 2018 FSISA has determined that the presence of chlorinated herbicides is not considered a REC to the site.

Permanent

The release of hazardous materials could occur as a result of spills from vehicles using the bridge; however, the project is not anticipated to increase the potential for vehicles carrying hazardous materials to travel in the project area or increase the potential for accidents to occur in the project area. Furthermore, the transportation and cleanup of hazardous materials is strictly regulated by the EPA, the state and federal OSHA, and a number of other federal, state, and local agencies. Therefore, effects are not anticipated.

No-Build Alternative

Under the No-Build Alternative, the bridge would not be replaced and no improvements would be made; therefore, neither temporary nor construction-related effects from hazardous waste/materials would occur. In addition, no long-term effects from hazardous waste/materials would occur.

2.2.4.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The measures listed in the adopted 2011 EA/FONSI still apply to the proposed project, with the exception of **HAZ-3**, **HAZ-6**, **HAZ-7**, and **HAZ-8** which have been updated. Measures **HAZ-14**, **HAZ-15**, and **HAZ-16** have also been added based on the recommendations made in the 2018 SISA. Measure **WQ-1** included in Section 2.2.1.4 also addresses groundwater contamination.

Should access rights be granted by the applicable property owners, all testing for hazardous waste will be done in one mobilization during the PS&E final design phase of the project in order to limit disturbance to property to one occasion (as requested by BNSF). To ensure potential effects involving hazardous materials/waste during construction are avoided or reduced, the following avoidance, minimization, and/or mitigation measures will be implemented. Where applicable, specifications will be included in the PS&E package to include these measures. All measures and specifications relevant to contaminated soils will also be applied to soils cleaned

from the cast-in-place-steel-shell (CISS) piles prior to placement of rebar and pouring of concrete, if contaminated. Studies conducted as part of the Geotechnical Report (prepared during PS&E final design) will further assess whether these soils are contaminated.

HAZ-1 Work on BNSF property requires the completion and submittal of fees for an environmental access permit submitted to the Permit Department of BNSF.

HAZ-2 If contaminated groundwater is encountered, based on the findings of the geotechnical report required under **WQ-1**, then a contaminated groundwater contingency plan should be implemented and should include procedures for segregation, sampling, and chemical analysis. Contaminated groundwater must be disposed of in accordance with dewatering requirements per the National Pollutant Discharge Elimination System (NPDES) process. In the event that disposal requirements are not required as part of the NPDES process, contaminated groundwater will be profiled for disposal and will be transported with appropriate hazardous or non-hazardous waste manifests by a state-certified hazardous material hauler to a state-certified disposal or recycling facility licensed to accept and treat the type of waste indicated by the profiling process.

HAZ-3 If demolition construction activities will impact soil beneath the two former gasoline stations in the immediate vicinity of the bridge, current Arco station, or fueling area in the BNSF Intermodal Facility, soil samples should be collected and analyzed for petroleum hydrocarbons and VOCs during the PS&E final design phase. Refer to **HAZ-6** and **HAZ-7** if contaminated soil is found.

HAZ-4 For work in the immediate vicinity of Mount Vernon Avenue Bridge, soil (and groundwater if encountered) beneath the bridge within the proposed demolition and construction zones should be sampled and analyzed for chemicals of concern (COCs) including petroleum hydrocarbons, metals, volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs), and chlorinated herbicides. Testing should be done during the PS&E final design phase to reduce the impact on BNSF operations. The testing should be done in one mobilization as requested by BNSF.

HAZ-5 For work in the immediate vicinity of the shoofly track area, soil (and groundwater if encountered) beneath the proposed shoofly track area should be sampled and analyzed for petroleum hydrocarbons, metals, VOCs, PCBs, SVOCs, and chlorinated herbicides. All testing should be done during the PS&E final design phase to reduce the impact on BNSF operations. The testing should be done in one mobilization as requested by BNSF. Refer to **HAZ-6** and **HAZ-7** if contaminated soil is found.

HAZ-6 A soil monitoring plan should be prepared prior to construction and should be implemented during all phases of construction. Disturbed soils should be monitored for visual evidence of contamination (e.g., staining or discoloration). If visual evidence of contamination is observed, the soil should be monitored for the presence of VOCs using appropriate field instruments such as organic vapor measurement with photoionization detectors (PIDs) or flame ionization detectors (FIDs).

HAZ-7 If the monitoring procedures indicate the possible presence of contaminated soil, a contaminated soil contingency plan should be implemented and should include procedures for segregation, sampling, and chemical analysis of soil. Contaminated soil will be profiled for disposal and will be transported with appropriate hazardous or non-hazardous waste manifests by a state-certified hazardous material hauler to a state-certified disposal or recycling facility licensed to accept and treat the type of waste indicated by the profiling process. The contaminated soil contingency plan should be developed and in place during all construction activities. In the event that these processes generate any contaminated groundwater that must be disposed of outside of the dewatering/NPDES process, the groundwater should be profiled, manifested, hauled, and disposed of in the same manner.

HAZ-8 A hazardous materials contingency plan should be prepared to address the potential for discovery of unidentified USTs or other underground structures, creosote-treated railroad ties, septic systems, hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes encountered during construction. This contingency plan should address UST decommissioning, field screening and materials testing methods, mitigation and contaminant management requirements, and health and safety requirements.

HAZ-9 Appropriate pre-demolition surveys for ACMs in existing structures to be removed will be conducted. Prior to renovation or demolition work that will disturb identified ACMs, a licensed Cal/OSHA-Certified Asbestos Consultant and abatement removal contractor should remove the ACMs. A Notification will be sent to South Coast Air Quality Management District (SCAQMD) 10 working days prior to any ACM removal or demolition activities as per Rule 1403. In addition the Notification will include applicable fees as per Rule 301.

HAZ-10 Appropriate pre-demolition surveys for LBP in existing structures to be removed will be conducted. The identified LBPs will not be disturbed. Any LBPs in a non-intact condition will be abated and the component properly encapsulated. Prior to demolition work that will disturb identified LBPs, a licensed lead abatement removal contractor will remove the LBPs.

HAZ-11 Applicable laws and regulations will be followed, including those provisions requiring notification to building occupants, renovation contractors, and workers of the presence of asbestos and LBP.

HAZ-12 Per Caltrans requirements, projects involving the removal of yellow traffic striping, thermoplastic paint, will be performed in accordance with Caltrans Department Standard Special Provision (SSP) XE 14-001.

HAZ-13 The OSHA regulations for construction found in Title 29 CFR part 1926 include occupational exposure to lead under the standard number 1926.62. Additional requirements are found in the California standard 8 CCR Section 1532.1. Any employer covered by these standards is obligated to initially determine if any employee may be exposed to lead at or above the action level (29 CFR 1926.62(d)(1)(i) and 8 CCR 1532.1(d)). Additionally, the employer is obligated to

prepare a project specific Lead Compliance Plan (LCP) in accordance with 29 CFR 1926.62 (e)(2). It is recommended that a LCP be developed and implemented for construction related activities associated with this project site.

HAZ-14 Caltrans Standard Special Provisions and Non-Standard Special Provisions will be prepared that provide contractors with guidance on preparing submittals and handling affected materials.

HAZ-15 Demolition or renovation of any structure requires notification and submittal of fees to the South Coast Air Quality Management District.

HAZ-16 The results of the 2013 LSI indicate the presence of TPH-impacted soil underneath the northern portion of the Mount Vernon Avenue Bridge and aerially deposited lead-impacted soil (as well as some TPH and PCE impacts) along much of the shoofly area, Mount Vernon Avenue, Cabrera Avenue, Kingman Street, 4th Street, and railroad tracks in the BNSF Intermodal Facility. The preparation of a hazardous materials contingency plan and soil management plan and pre-demolition construction surveys of the existing structure will be done during the project design/build phase in order to reduce potential risks.

2.2.5 Air Quality

2.2.5.1 REGULATORY SETTING

Federal

Federal Clean Air Act

The Federal Clean Air Act (FCAA), as amended, is the primary federal law that governs air quality while the California Clean Air Act (CCAA) is its companion state law. These laws, and related regulations by the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (ARB), set standards for the concentration of pollutants in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). NAAQS and state ambient air quality standards have been established for six transportation-related criteria pollutants that have been linked to potential health concerns: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM) — which is broken down for regulatory purposes into particles of 10 micrometers or smaller (PM_{10}) and particles of 2.5 micrometers and smaller ($PM_{2.5}$) — and sulfur dioxide (SO2). In addition, national and state standards exist for lead (Pb), and state standards exist for visibility reducing particles, sulfates, hydrogen sulfide (H_2S), and vinyl chloride. The NAAQS and state standards are set at levels that protect public health with a margin of safety, and are subject to periodic review and revision. Both state and federal regulatory schemes also cover toxic air contaminants (air toxics); some criteria pollutants are also air toxics or may include certain air toxics in their general definition.

Federal air quality standards and regulations provide the basic scheme for project-level air quality analysis under the National Environmental Policy Act (NEPA). In addition to this environmental analysis, a parallel "Conformity" requirement under the FCAA also applies.

Conformity

The conformity requirement is based on FCAA Section 176(c), which prohibits the U.S. Department of Transportation (USDOT) and other federal agencies from funding, authorizing, or approving plans, programs, or projects that do not conform to State Implementation Plan (SIP) for attaining the NAAQS. "Transportation Conformity" applies to highway and transit projects and takes place on two levels: the regional (or planning and programming) level and the project level. The proposed project must conform at both levels to be approved.

Conformity requirements apply only in nonattainment and "maintenance" (former nonattainment) areas for the NAAQS, and only for the specific NAAQS that are or were violated. U.S. EPA regulations at 40 CFR 93 govern the conformity process. Conformity requirements do not apply in unclassifiable/attainment areas for NAAQS and do not apply at all for state standards regardless of the status of the area.

Regional conformity is concerned with how well the regional transportation system supports plans for attaining the NAAQS for carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM_{10} and $PM_{2.5}$), and in some areas (although not in California), sulfur dioxide (SO_2). California has nonattainment or maintenance areas for all of these transportation-related "criteria pollutants" except SO_2, and also has a nonattainment area for lead (Pb); however, lead is not currently required by the FCAA to be covered in transportation conformity analysis. Regional conformity is based on emission analysis of Regional Transportation Plans (RTPs) and Federal Transportation Improvement Programs (FTIPs) that include all transportation projects planned for a region over a period of at least 20 years (for the RTP) and four years (for the FTIP). RTP and FTIP conformity uses travel demand and emission models to determine whether or not the implementation of those projects would conform to emission budgets or other tests at various analysis years showing that requirements of the FCAA and the SIP are met. If the conformity analysis is successful, the Metropolitan Planning Organization (MPO), Federal Highway Administration (FHWA), and Federal Transit Administration (FTA) make the determinations that the RTP and FTIP are in conformity with the SIP for achieving the goals of the FCAA. Otherwise, the projects in the RTP and/or FTIP must be modified until conformity is attained. If the design concept and scope and the "open-to-traffic" schedule of a proposed transportation project are the same as described in the RTP and FTIP, then the proposed project meets regional conformity requirements for purposes of project-level analysis.

Project-level conformity is achieved by demonstrating that the project comes from a conforming RTP and TIP; the project has a design concept and scope that has not changed significantly from those in the RTP and TIP; project analyses have used the latest planning assumptions and EPA-approved emissions models; and in PM areas, the project complies with any control measures in the SIP. Furthermore, additional analyses (known as hot-spot analyses) may be required for projects located in CO and PM nonattainment or maintenance areas to examine localized air quality impacts.

2.2.5.2 AFFECTED ENVIRONMENT

The primary source used in the preparation of this section is the *Mount Vernon Avenue Bridge Project Air Quality Report*, dated December 2017 (Caltrans 2017c).

Topography and Climate

The proposed project site is located within the SCAB, an approximately 6,750-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. The terrain and geographical location determine the distinctive climate for the SCAB, which is a coastal plain with connecting broad valleys and low hills.

The topography and climate of Southern California combine to make the SCAB an area of high air pollution potential. A warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cooler surface layer, which traps the pollutants near the ground in an "inversion" layer. Light winds can further limit ventilation. Additionally, abundant sunlight triggers the photochemical reactions that produce ozone and the majority of the particulate matter. The region experiences more days of sunlight than any other major urban area in the nation except Phoenix, Arizona (SCAQMD 2017). The rate at which pollutants are converted to other pollutants—SO_2 gas to sulfate particles or nitrogen oxides (NO_X) and hydrocarbons to O_3—is determined by the availability of sunlight and the presence or absence of clouds (Malm 1999).

Data from the Western Regional Climate Center's San Bernardino climate monitoring station were used to characterize project vicinity climate conditions because it is nearest to the proposed project site (WRCC 2017). The average project area summer (August) high and low temperatures are 96.2 degrees Fahrenheit (°F) and 59.4°F, respectively, while the average winter (January) high and low temperatures are 66.2°F and 38.5°F, respectively. Precipitation in the project area tends to be low, with annual averages of 16.1 inches, most of which occurs from December to March.

The wind monitoring station located nearest to the proposed project site is the Chino Airport Station. Data from this wind monitoring station was used to characterize study wind conditions. Wind patterns in the project vicinity are westerly year round, with an average annual speed of 5.2 miles per hour (WRCC 2017).

Existing Air Quality

Existing air quality conditions in the project area can be characterized in terms of the ambient air quality standards that the State of California and the federal government have established for several different pollutants. For some pollutants, separate standards have been set for different measurement periods. Most standards have been set to protect public health. For some pollutants, standards have been based on other values (such as protection of crops, protection of materials, or avoidance of nuisance conditions).

Figure 2-6, presented below, provides the state and federal ambient air quality standards. Table 2-27, also presented below, provides a summary of the SCAB attainment status for all criteria pollutants. Shown therein, the State of California has designated the southwest San Bernardino county portion of the SCAB as being a nonattainment area for O_3 (both 1-hour and 8-hour standards), $PM_{2.5}$, and PM_{10}. The area is designated as attainment for CO, NO_2, SO_2, and Pb.

EPA has designated this area as being a nonattainment area for O_3 (8-hour standard only), and $PM_{2.5}$; an attainment/maintenance area for PM_{10}; unclassified/attainment areas for NO_2, CO, and Pb; and an attainment area for SO_2.

Figure 2-6. Ambient Air Quality Standards Applicable in California (pg. 1 of 2)

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m³)		0.070 ppm (137 µg/m³)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m³	Gravimetric or Beta Attenuation	150 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m³		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m³	Gravimetric or Beta Attenuation	12.0 µg/m³	15 µg/m³	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m³)		9 ppm (10 mg/m³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m³)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m³)		0.053 ppm (100 µg/m³)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m³)	Ultraviolet Fluorescence	75 ppb (196 µg/m³)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m³)	
	24 Hour	0.04 ppm (105 µg/m³)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m³ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m³		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m³)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m³)	Gas Chromatography			

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990 California Air Resources Board (5/4/16)

Figure 2-6. Ambient Air Quality Standards Applicable in California (pg. 2 of 2)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990 **California Air Resources Board (5/4/16)**

Table 2-27. Attainment Status of the South Coast Air Basin

Pollutants	Federal Classification	State Classification
Ozone (O_3) (1-hour standard)	Not Applicable (no Federal Standard)†	Nonattainment
Ozone (O_3) (8-hour standard)	Nonattainment, Extreme*	Nonattainment
Respirable Particulate Matter (PM_{10})	Attainment/Maintenance	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Nonattainment, Moderate	Nonattainment
Carbon Monoxide (CO)	Unclassified/Attainment	Attainment
Nitrogen Dioxide (NO_2)	Unclassified/Attainment	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead	Nonattainment for Los Angeles County portion only; all other areas have Unclassified/Attainment designation	Attainment

† The South Coast Air Basin was designated non-attainment-extreme for the 1-hour ozone NAAQS before the 8-hour standard replaced it, and has not yet attained the 1-hour standard. The 2012 South Coast Air Basin SIP (approved by EPA in 2014) includes an attainment demonstration for 1-hour ozone, and ozone emissions budgets consistent with both that and scheduled attainment of the 8-hour ozone NAAQS. Regional conformity analysis is based on those budgets for all versions of the ozone NAAQS.

* The attainment status is based on the attainment status under the 2008 standard. The attainment standard under the 2015 standard has not yet been designated but is expected to be nonattainment.

Sources: ARB 2017a

The project site is located in the city of San Bernardino. The air monitoring station closest to the project site is the San Bernardino-East 4th Street Monitoring Station (ARB Station No. 36203, EPA AQS Site ID: 060719004), over 2 miles east of the project site. The station monitors major criteria pollutants including O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$. The existing air quality conditions in the proposed project area can be characterized by monitoring data collected at these stations. Table 2-28 presents air monitoring data from the monitoring stations. As shown in Table 2-28, pollutant concentrations have exceeded state and federal air quality standards multiple times during the previous three year period.

Table 2-28. Monitoring Data Collected from the San Bernardino-E. 4th Street Monitoring Station (ARB Station No. 36203, EPA AQS Site ID: 060719004)

Pollutant Standards	2014	2015	2016
Ozone (O_3)			
Maximum 1-hour concentration (ppm)	0.121	0.134	0.158
Maximum 8-hour concentration (ppm)	0.099	0.117	0.118
Number of Days Standard Exceeded			
CAAQS 1-hour (> 0.09 ppm)	38	52	70
NAAQS 8-hour (> 0.070 ppm)	75	78	106
Carbon Monoxide (CO)			
Maximum 8-hour concentration (ppm)	2.4	1.8	1.7
Number of Days Standard Exceeded			
NAAQS/CAAQS 8-hour (> 9.0 ppm)	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum 1-hour concentration (ppm)	0.0726	0.0714	0.0601
Annual average concentration (ppm); CAAQS = 0.030 ppm	0.018	0.015	0.017
Number of Days Standard Exceeded			
NAAQS 1-hour (> 0.100 ppm)	0	0	0
Particulate Matter (PM_{10})			
National maximum 24-hour concentration ($\mu g/m^3$)	157.2	187.0	277.0
National second-highest 24-hour concentration ($\mu g/m^3$)	141.0	78.0	91.0
State maximum 24-hour concentration ($\mu g/m^3$)	131.0	180.0	N/A
State second-highest 24-hour concentration ($\mu g/m^3$)	61.0	75.0	N/A
National annual average concentration ($\mu g/m^3$)	35.8	33.0	36.7
State annual average concentration ($\mu g/m^3$)	32.7	31.7	N/A
Number of Days Standard Exceeded			
CAAQS 24-hour (> 50 $\mu g/m^3$)	12	19	N/A
NAAQS 24-hour (> 150 $\mu g/m^3$) (estimated days)	1	7	N/A
Particulate Matter ($PM_{2.5}$)			
National maximum 24-hour concentration ($\mu g/m^3$)	32.2	53.5	53.5
National second-highest 24-hour concentration ($\mu g/m^3$)	28.1	35.8	32.5
National third-highest 24-hour concentration ($\mu g/m^3$)	25.7	33.6	32.5
National fourth-highest 24-hour concentration ($\mu g/m^3$)	25.2	32.3	27.1
National annual average concentration ($\mu g/m^3$)	N/A	10.7	11.1
State annual average concentration ($\mu g/m^3$)	N/A	N/A	11.1
Number of Days Standard Exceeded			
NAAQS 24-hour (> 35 $\mu g/m^3$)	N/A	7	3

Notes:
N/A = Insufficient data available to determine value/data not available.
Sources: ARB 2017; EPA 2016; compiled by ICF.

Sensitive Receptor Locations

Some locations are considered more susceptible to adverse impacts from air pollution than others. These locations are commonly referred to as sensitive receptors and include schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, hospitals, retirement homes, and residences. The vicinity of the project is 500 feet or 150 meters from the edge of the nearest traveled lane.

As shown in Figure 2-7, there are several residences located within 150 meters of the project disturbance limits, the closest of which were residences north of West 4th Street and south of West Kingman Street and a small area of residences west of North Mount Vernon Avenue and north of West 2nd Street. Both of these areas are within the project's limits of disturbance.

Other South Coast Air Quality Basin Pollutants

Naturally occurring asbestos (NOA) is present in approximately 44 of California's 58 counties. Asbestos is often found in serpentine rock and ultramafic rock near fault zones. Asbestos is a human health hazard when airborne. Asbestos fibers can be inhaled into lungs, causing inflammation and respiratory ailments and cancers. The proposed project, well within an established urban area, is not near any known major sources of NOA.

2.2.5.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Temporary

Mount Vernon Bridge construction would displace some existing BNSF intermodal operations. As such, shoofly tracks (Tracks 218 and 219) would need to be installed in order for BNSF to maintain operations during bridge construction. These track installations would change the locations where some existing intermodal activity (and related air pollutant emissions) would occur from within the BNSF property during bridge construction. More specifically, this temporary change would move emissions activity closer to some residential use sensitive receptor locations (i.e., residential uses to the north and northwest of proposed improvements), and farther away from other locations during bridge construction. Temporary accommodations would include the installation of two shoofly tracks (Tracks 218 and 219). Please see the Project Description, Section 1.4.1, for detailed discussion of proposed accommodations.

The installation of shoofly tracks during bridge construction would have no effect on intermodal throughput capacity or the existing level of intermodal activity–related air pollutant emissions. Nevertheless, it is important to note that the residential use sensitive receptors located north and northwest of the project site may experience a degradation in local air quality during bridge construction, while the areas located south and southeast may experience an improvement in local air quality. Changes in local air quality are anticipated to be minor because the proposed change to the existing emissions source would be relatively minor.

Criteria Pollutant Emissions during Construction

Construction for this project is anticipated to begin in 2019 and would last approximately 32 months. Temporary construction emissions would result from onsite activities such as grubbing/land clearing, grading/excavation, and drainage/subgrade and bridge construction and paving, as well as offsite activities such as haul truck and construction worker commute trips.

Pollutant emissions would vary daily, depending on the level of activity, specific operations, and prevailing weather.

During construction, short-term degradation of air quality may occur because of the release of particulate emissions (fugitive dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated and would include CO, NO_X, ROG, directly emitted particulate matter (PM_{10} and $PM_{2.5}$), and toxic air contaminants (TACs) (also known as MSATs), such as diesel exhaust particulate matter.

Site preparation and bridge construction would involve clearing, site-work activities, cut-and-fill activities, grading, removing or improving portions of existing roadways, and paving roadway surfaces. Construction-related effects on air quality from most highway/bridge projects would be greatest during the site preparation phase because most heavy construction equipment emissions are associated with the excavation, handling, and transport of soils to and from the site.

An estimate of project construction regional emissions is presented in Table 2-29. The greatest regional emissions would occur during the grading/excavation period, resulting in 5 pounds per day of ROG, 91 pounds per day of CO, 19 pounds per day of NO_X, 27 pounds per day of PM_{10}, and 6 pounds per day of $PM_{2.5}$. Modeling assumptions assume compliance with SCAQMD Rule 403 (Fugitive Dust).

Table 2-29. Estimate of Criteria Pollutant Emissions during Construction (pounds per day)

Construction Phase	ROG	CO	NO_X	PM_{10}	$PM_{2.5}$
Grubbing and Clearing	1	13	4	27	6
Grading/Excavation	5	91	19	27	6
Drainage/Utilities/Sub-Grade	3	61	11	27	6
Paving	1	15	3	1	1
Daily Maximum Regional Mass Emissions*	**5**	**91**	**19**	**27**	**6**
SCAQMD Regional Emissions Threshold	75	550	100	150	55
SCAQMD Local Emissions Threshold	N/A	2,978	303	50	12

* None of the identified construction phases are predicted to occur concurrently or overlap.
Estimates by ICF 2017 (see Appendix C).
N/A = not applicable

Toxic Air Contaminant Emissions

During the construction period, which is scheduled to last approximately 32 months, short-term generation of pollutants from construction vehicles and equipment would occur. However, the construction period is much shorter than the assumed 30-year exposure period used to estimate lifetime cancer risks, as recommended by the California Office of Environmental Health Hazard Assessment (OEHHA). Furthermore, given the linear nature of the proposed project, sensitive receptors would be exposed to pollutants for a small portion of the total construction period because equipment would not be operated at a particular location along the alignment for an extended period of time. The diesel particulate matter generated from construction equipment would be sporadic, transitory, and short term in nature. Therefore, the project would not expose receptors to acute and/or chronically hazardous TAC pollutants.

It is also important to note that there is considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime, as cancer potency factors are based on animal lifetime studies where there is long-term exposure.

Odors

The proposed project does not include any uses identified by ARB as being associated with odors and therefore would not produce objectionable odors that would affect a substantial number of people. Construction activities usually do not emit offensive odors. Potential odor emitters during construction include asphalt paving. However, SCAQMD Rule 1103 limits emissions of volatile organic compounds from cutback asphalt, which are known to be a source of odors. Given mandatory compliance with SCAQMD rules, no construction activities or materials are proposed that would create substantial objectionable odors.

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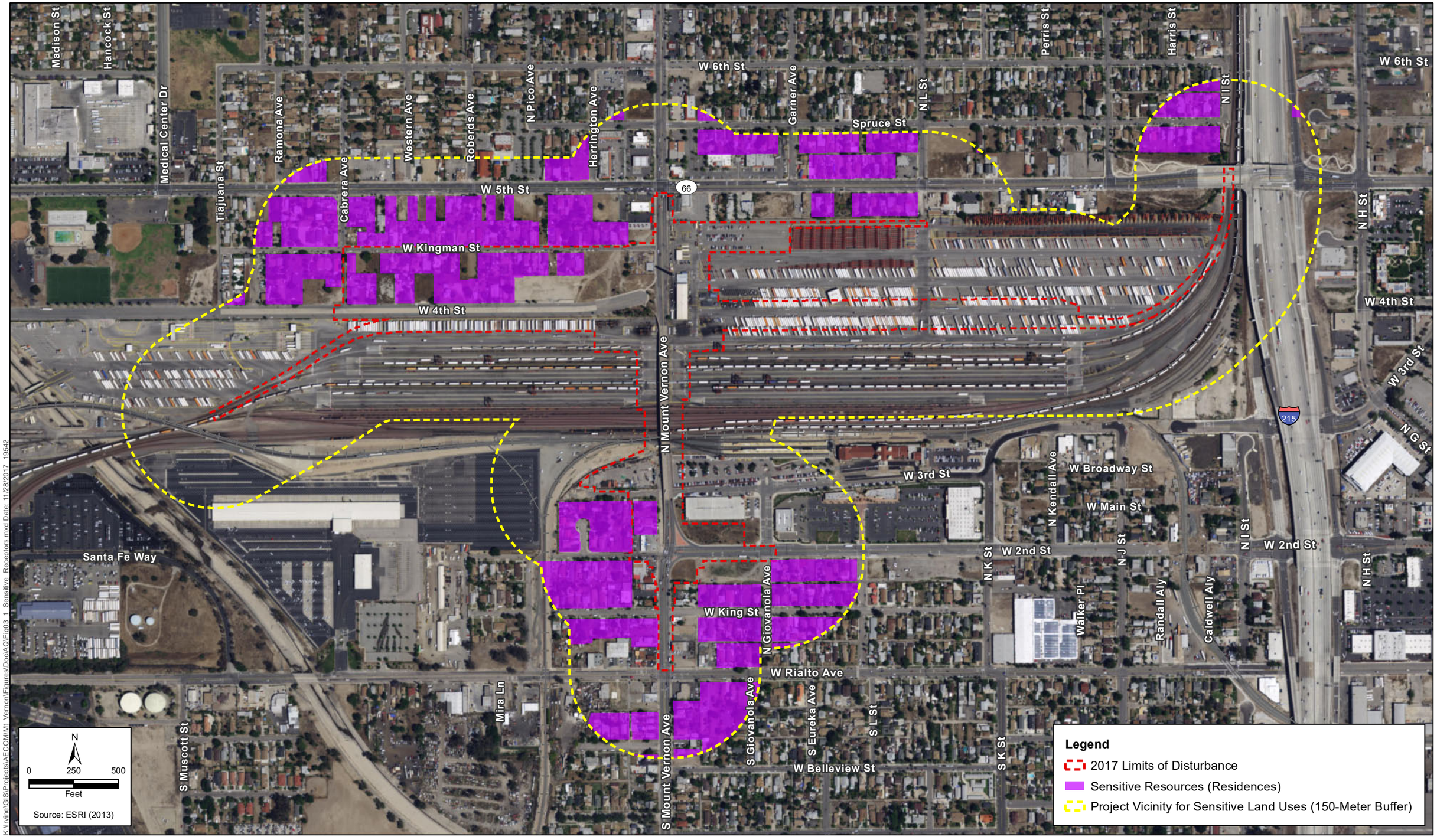

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Figure 2-7
Sensitive Land Use Receptors
Mount Vernon Avenue Bridge Project

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Aerially Deposited Lead

Aerially Deposited Lead (ADL) refers to lead deposited on highway shoulders from past leaded fuel vehicle emissions. Although leaded fuel has been prohibited in California since the 1980s, ADL may still be present in soils adjacent to highways in use prior to that time. It is Caltrans' policy to evaluate and investigate these unpaved areas when they will be impacted by a project, to ensure that workers are properly protected from lead exposure through training and appropriate work practices and to manage ADL-containing soils in compliance with all applicable laws and regulations while minimizing costs to the project and future state liability.

With respect to the proposed project, the ISA that was approved for the proposed project determined ADL may be present in the soil at the project site and surrounding roadways. The ADL may be related to the presence of adjacent roadways, including State Route 66, and the BNSF railroad facility to the south and east prior to 1992, when leaded gasoline was used. The project includes Measure **HAZ-16,** which would ensure proper handling of ADL-impacted soils.

Naturally Occurring Asbestos

Although NOA is common in certain counties of California, it is not likely to be found in the project vicinity of San Bernardino County and no impacts are expected.

Permanent

The replacement of the Mount Vernon Bridge would feature a new facility built to the latest engineering standards. Functionally, the bridge would not increase capacity over current conditions, as no additional lanes would be provided. Data from the project's draft Traffic/Circulation Study (Caltrans 2018a) show virtually no difference in the peak hour intersection volumes and levels of service (LOS) between the Build and No-Build conditions for both opening (2022) and design year (2040). Based on the negligible changes in traffic operations that would result from project implementation, quantification of operational emissions was not undertaken, as there would be no meaningful difference in emissions between the with- and without-project conditions. A qualitative discussion of operational emissions is provided.

Shifting of Existing Emissions Sources

Mount Vernon Bridge construction would permanently move some existing BNSF intermodal operations in the immediate vicinity of Mount Vernon Bridge. These changes would result in permanent changes in locations where existing intermodal activity (and related air pollutant emissions) would occur from within the existing BNSF property configuration. These changes would move emissions closer to some residential use sensitive receptor locations (i.e., locations to the north and northwest of proposed improvements), and farther away from others. Permanent changes would include the realignment of existing tracks (Tracks 216 and 217), and the relocation of some BNSF operations on the BNSF property, among other accommodations. Please see the Project Description, Section 1.4.1, for detailed discussion of proposed accommodations.

These changes would have no effect on intermodal throughput capacity or the existing level of intermodal activity–related air pollutant emissions. Nevertheless, it is important to note that the residential use sensitive receptor locations located north and northwest of proposed improvements may experience a degradation in local air quality, while other areas may

experience an improvement in local air quality. Changes in local air quality are anticipated to be minor because the proposed change to the existing emissions source would be relatively minor.

Regional Criteria Pollutant Emissions

Based on a review of traffic conditions, it was determined that for both the opening year (2022) and design year (2040), there would be no difference in peak-hour intersection vehicle volumes and LOS between the Build and No-Build conditions at key intersections in the project area (see Tables 2-30 and 2-31).

Because there would be no difference in traffic operations between the No-Build and Build conditions during the peak hours, it is reasonable to assume that there would be no difference in traffic operations during the off-peak hours as well. Therefore, no quantification of operational emissions was undertaken, as there would be no meaningful difference in operational emissions resulting from vehicle use in the project vicinity occurring under the Build Alternative (Preferred Alternative) when compared to the No-Build Alternative at project opening year (2022) or project horizon year (2040).

Traffic counts reflecting existing conditions at three nearby intersections were gathered as part of the Traffic/Circulation Study prepared for the proposed project:

- Mount Vernon Avenue/5th Street
- Mount Vernon Avenue/2nd Street
- Mount Vernon Avenue/Rialto Avenue

Traffic volume forecasts for design year 2040 for the Build and No-Build scenarios were developed through a post-processing method (Caltrans 2018a). These forecasts were developed, in part, through the use of the San Bernardino Transportation Analysis Model (SBTAM) and existing (2017) AM and PM peak hours and daily traffic counts. For each study area link in the travel model, modeled 2012 volumes were subtracted from modeled 2040 volumes. This represents 28 years of growth on each link. For design year (2040) volumes, changes in peak hour volumes represent the growth that would be expected in the 23-year span between existing counts (2017) and the design year (2040). The 28 years of growth sum was multiplied by 0.82 (23/28) to develop 23 years of growth. The 23 years of growth sum was then added to the 2017 link volumes (existing counts) to obtain 2040 link volumes. Year 2022 intersection volumes were developed by interpolating between existing volumes and post-processed 2040 volumes.

Once the project is completed, the project is not anticipated to alter traffic patterns within the study area along Mount Vernon Avenue, and the reconstruction of the bridge itself is not anticipated to increase traffic demand along Mount Vernon Avenue or any study area location. Therefore, the intersection volumes with the project would remain the same as without the project.

Table 2-30. AM and PM Peak Hour Intersection Vehicle Volumes—Opening Year (2022)

Intersection	No-Build				Build			
	AM	LOS	PM	LOS	AM	LOS	PM	LOS
Mount Vernon Ave. and 5th St.	2,162	D	2,797	D	2,162	D	2,797	D
Mount Vernon Ave. and 2nd St.	1,233	C	1,814	C	1,233	B	1,814	C
Mount Vernon Ave. and Rialto Ave.	1,658	B	2,323	B	1,658	B	2,323	B
Source: Caltrans 2018a								

Table 2-31. AM and PM Peak Hour Intersection Vehicle Volumes—Design Year (2040)

Intersection	No-Build				Build			
	AM	LOS	PM	LOS	AM	LOS	PM	LOS
Mount Vernon Ave. and 5th St.	2,261	D	2,993	D	2,261	D	2,993	D
Mount Vernon Ave. and 2nd St.	1,536	C	2,251	C	1,536	B	2,251	C
Mount Vernon Ave. and Rialto Ave.	2,003	B	2,841	B	2,003	B	2,841	B
Source: Caltrans 2018a								

Regional and Project-Level Conformity

As discussed previously, the proposed project is not subject to the regional or project-level conformity determination requirement under CAA Section 176(c), as reconstructing bridge projects with no additional travel lanes (such as this project) are exempt from the requirement to determine conformity pursuant to 40 CFR 93.126. However, the project as described in the SCAG 2017 FTIP must be consistent with the project as currently proposed.

Regional Conformity

The proposed project is identified under project number SBD31905 in the currently conforming SCAG 2017 FTIP and described as follows:

> MT. VERNON AVENUE BRIDGE (OVERHEAD) AT BNSF REPLACE GRADE SEPARATION, REPLACE 4 LANE BRIDGE WITH 4 LANE BRIDGE FROM 2ND TO 5TH STREETS (0.2 MILES SOUTH OF RTE. 66) (BRIDGE NO 54C0066)[3]

The proposed project is consistent with the FTIP description. The SCAG 2017 FTIP, Amendment 2, was found to be in conformity with the SIP on February 21, 2017, and the SCAG 2016–2040 RTP/SCS was found to be in conformity with the SIP on June 1, 2016. The project's FTIP and RTP/SCS documentation is provided in Appendix A of the Air Quality Report. On September 6, 2018, SCAG's Regional Council adopted the 2019 FTIP and expects a mid-December 2018 approval of the 2019 FTIP by the federal agencies.

[3] SBCTA submitted an FTIP amendment to SCAG on June 18, 2018, to include the extended project limits. The updated project description is: "MT. VERNON AVENUE BRIDGE (OVERHEAD) AT BNSF REPLACE GRADE SEPARATION, REPLACE 4 LANE BRIDGE WITH 4 LANE BRIDGE FROM RIALTO AVENUE TO 5TH STREET (0.2 MILES SOUTH OF RTE. 66)(BRIDGE NO 54C0066)." The amendment was approved as part of Amendment No. 17-22 to the 2017 FTIP on 8/31/18 by FHWA and FTA.

Project-level Conformity

CO Hot-spots

The CO Protocol includes two flowcharts that illustrate when a detailed CO analysis needs to be prepared. The first flowchart, Figure 1 of the CO Protocol (provided in Appendix D), is used to ascertain the CO modeling requirements for new projects. The following question (shown in the first flowchart) is relevant to the project. The answer to that question is as follows:

> **3.1.1: Is the project exempt from all emissions analyses?**
>
> **Response:** Yes. The project type "widening narrow pavements or reconstructing bridges (no additional travel lanes)" is exempt from the requirement to demonstrate transportation conformity per 40 CFR 93.126. As such, project-level CO conformity requirements have been satisfied.

As shown previously in Table 2-30 and Table 2-31, there would be no change in traffic volumes under the Build Alternative (Preferred Alternative) when compared to the No-Build Alternative at project opening year (2022) or project horizon year (2040). Therefore, there would be no change in intersection CO emissions or related CO concentrations.

Particulate Matter Hot-spots

Although most projects generate construction-related particulate emissions, construction activities that last fewer than five years are considered temporary impacts under the EPA transportation conformity rule and are not required to undergo hot-spot review. It is expected that construction of the proposed project would be completed in approximately 32 months. As such, hot-spot review is limited to project operation. The proposed project is not subject to project-level conformity requirements because it is exempt pursuant to 40 CFR 93.126; however, the same process is used as the basis for fulfilling the requirements of NEPA.

EPA updated its guidance document titled *Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas* in November 2015. A project-level $PM_{2.5}$ and PM_{10} conformity review, based on this most recent EPA guidance, is provided below.

EPA specifies in 40 CFR 93.123(b)(1) that only "projects of air quality concern" are required to undergo a $PM_{2.5}$ and PM_{10} hot-spot analysis. EPA defines projects of air quality concern as certain highway and transit projects that involve significant levels of diesel traffic or any other project that is identified by the $PM_{2.5}$ SIP as a localized air quality concern. A comparison of the proposed project to projects of air quality concern, as defined by 40 CFR 93.123(b)(1), is provided below:

1. **New or expanded highway projects that have a significant number of or significant increase in diesel vehicles.** The proposed project would replace the existing bridge over the BNSF rail yard along Mount Vernon Avenue. Although the project would connect vehicles to and from points on either side of the rail yard, project implementation would not involve any new points of origin or destination of truck trips and would not result in additional roadway capacity. Furthermore, the Traffic/Circulation Study prepared for the proposed project indicates that there would be no change in traffic volumes under the Build Alternative

(Preferred Alternative) when compared to the No-Build Alternative. Therefore, no increase in the number of diesel vehicles is anticipated to occur as a result of project implementation. Given that the proposed project would not result in new origin and destination points and would not create any new access routes to undeveloped land, significant growth in truck traffic volumes would not occur.

2. **Projects affecting intersections that are at LOS D, E, or F with a significant number of diesel vehicles or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project.**

   As shown previously in Table 2-30 and Table 2-31, there would be no change in traffic volumes under the Build Alternative (Preferred Alternative) when compared to the No-Build Alternative, and no deterioration of LOS at project opening year or project horizon year.

3. **New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location.** The proposed project has no bus or rail terminal component, nor would it alter travel patterns to or from any existing or new bus or rail terminal.

4. **Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location.** The proposed project would not expand any bus terminal, rail terminal, or related transfer point that would increase the number of diesel vehicles congregating at any single location.

5. **Projects in or affecting locations, areas, or categories of sites that are identified in the $PM_{2.5}$- or PM_{10}-applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.** The project site is not in or affecting locations, areas, or categories of sites that are identified in a PM_{10} or $PM_{2.5}$ implementation plan. The immediate project area is not considered to be a site of violation or possible violation.

The discussion provided above indicates that the proposed project would not be considered a project of air quality concern, as defined by 40 CFR 93.123(b)(1). Therefore, quantitative $PM_{2.5}$ and PM_{10} hot-spot evaluations are not required. It is unlikely that the proposed project would generate new air quality violations for $PM_{2.5}$ or PM_{10}.

Mobile-Source Air Toxics Emissions

The purpose of this project is to replace an existing bridge that is structurally deficient and functionally obsolete with a new bridge that is structurally safe, meeting current seismic, design, and roadway standards. There would be no change in capacity. This project has been determined to generate minimal air quality impacts for CAA criteria pollutants and has not been linked with any special MSAT concerns. As such, this project would not result in measurable changes in traffic volumes, vehicle mix, basic project location, or any factor that would cause a meaningful increase in MSAT impacts of the project from that of the without-project condition.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES2014a model forecasts a combined reduction of

over 90 percent in the total annual emissions rate for the priority MSAT from 2010 to 2050 while vehicle miles traveled (VMTs) are expected to increase by 45 percent. This will both reduce the background level of MSATs as well as the possibility of even minor MSATs from this project (Federal Highway Administration 2016a).

No-Build Alternative

Under the No-Build Alternative, neither bridge modifications nor replacement would occur. Effects on air quality would not occur. If the bridge ultimately has be closed to pedestrian and vehicular traffic, this could increase VMT in the area because traffic would have to use more circuitous routes to travel from one side of the bridge to the other. This increase in VMT could result in increased air quality emissions.

2.2.5.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The exhaust and fugitive dust emission control measures identified below and those contained within SCAQMD Rule 403 will be implemented. Measure **AQ-1** from the adopted 2011 EA/FONSI would still be applicable for the proposed project. Measure **AQ-2** below would replace Measure **AQ-2** from the adopted 2011 EA/FONSI. Measure **AQ-3** is a new measure identified in the 2018 Air Quality Report.

Particulate Emissions

AQ-1 Prior to renovation or demolition work that will disturb identified ACMs, a licensed Cal/OSHA-Certified Asbestos Consultant and abatement removal contractor should remove the ACMs. A Notification will be sent to South Coast Air Quality Management District (SCAQMD) 10 working days prior to any ACM removal or demolition activities as per Rule 1403. In addition, the Notification will include applicable fees as per Rule 301.

AQ-2 The proposed project will comply with SCAQMD Rule 403 (Fugitive Dust). Per Rule 403 definitions, the proposed project would not be considered a "large operation." As such, the "large operations" control measures identified in Rule 403 would not apply.

Exhaust Emissions

AQ-3 The project will conform to Caltrans construction requirements, as specified in Caltrans' 2015 Standard Specifications, Section 14-9.02 (Air Pollution Control) and Section 14-11.04 (Dust Control), for asphalt concrete emissions and all earthwork, clearing and grubbing, and roadbed activities involving heavy construction equipment. The contractor will comply with all air pollution control ordinances and statutes that apply to any work performed pursuant to the contract, including any air pollution control rules, regulations, ordinances, and statutes, specified in Section 11017 of the Government Code. Exhaust emissions control measures may include, but are not limited to, the following:

1. General contractors will maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues will have their engines turned off when not in use to reduce

vehicle emissions. Construction emissions will be phased and scheduled to avoid emission peaks and discontinued during second-stage smog alerts.

2. All equipment will be properly tuned and maintained in accordance with manufacturers' specifications.
3. All on-road and off-road equipment will comply with ARB commercial vehicle idle regulations.
4. Use electricity from power poles, rather than temporary diesel- or gasoline-powered generators if or where feasible.
5. Use onsite mobile equipment powered by alternative fuel sources (i.e., methanol, natural gas, propane, or butane) as feasible.
6. Use solar-powered signal boards.
7. Develop a construction traffic management plan that includes, but is not limited to: (1) consolidating truck deliveries; (2) providing a rideshare or shuttle service for construction workers; and (3) providing dedicated turn lanes for movement of construction trucks and equipment on and off site.

2.2.6 Noise

2.2.6.1 REGULATORY SETTING

National Environmental Policy Act and 23 CFR 772

The National Environmental Policy Act (NEPA) of 1969 provides the broad basis for analyzing and abating highway traffic noise effects. The intent of this law is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement under NEPA are described below.

For highway transportation projects with Federal Highway Administration (FHWA) involvement (and the Department, as assigned), the Federal-Aid Highway Act of 1970 and its implementing regulations (23 Code of Federal Regulations [CFR] 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations include noise abatement criteria (NAC) that are used to determine when a noise impact would occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA). Table 2-32 lists the noise abatement criteria for use in the NEPA/23 CFR 772 analysis.

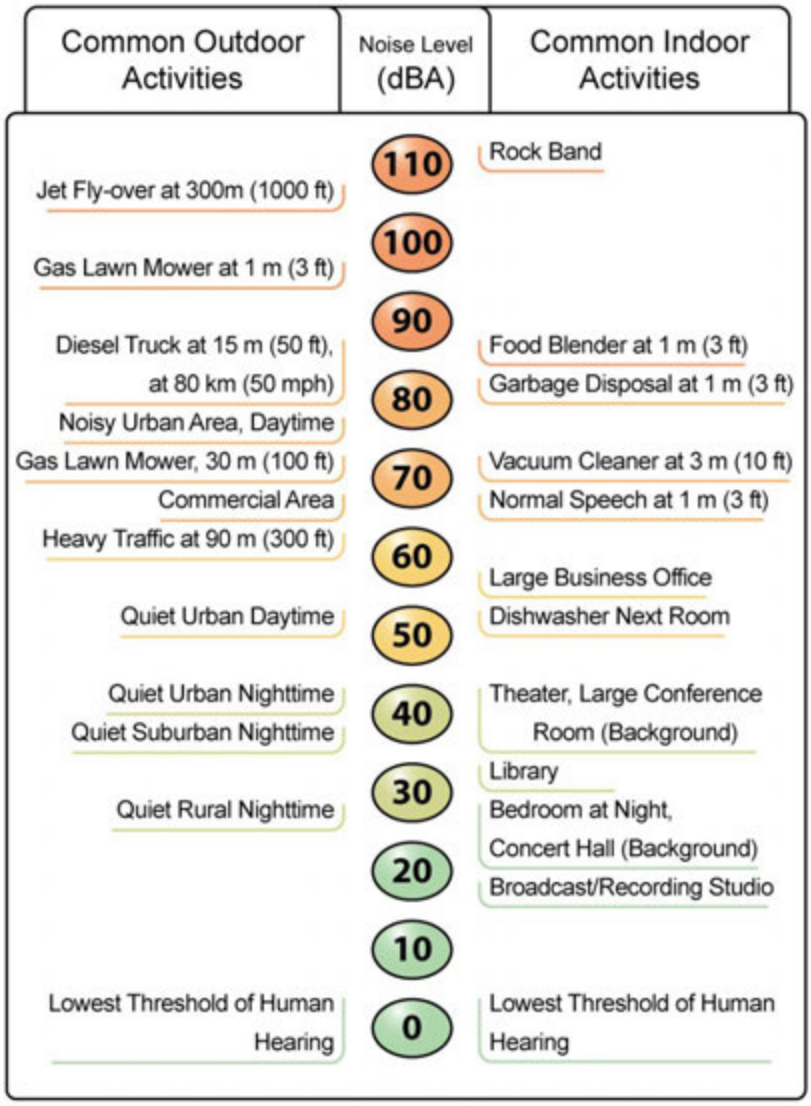
Table 2-32. Noise Abatement Criteria

Activity Category	NAC, Hourly A- Weighted Noise Level, $L_{eq}(h)$	Description of Activity Category
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B1	67 (Exterior)	Residential.
C1	67 (Exterior)	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting

		rooms, public or nonprofit institutional structures, radio studios, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52 (Interior)	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structures, radio studios, recording studios, schools, and television studios.
E	72 (Exterior)	Hotels, motels, offices, restaurants/bars, and other developed lands, properties, or activities not included in A–D or F.
F	No NAC—reporting only	Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical, etc.), and warehousing.
G	No NAC—reporting only	Undeveloped lands that are not permitted.
[1] Includes undeveloped lands permitted for this activity category.		

Figure 2-8 lists the noise levels of common activities to enable readers to compare the actual and predicted highway noise-levels discussed in this section with common activities.

Figure 2-8. Noise Levels of Common Activities



According to the Department's *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects, May 2011*, a noise impact occurs when the predicted future noise level with the project substantially exceeds the existing noise level (defined as a 12 dBA or more increase) or when the future noise level with the project approaches or exceeds the NAC. Approaching the NAC is defined as coming within 1 dBA of the NAC.

If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications. This document discusses noise abatement measures that would likely be incorporated in the project.

The Department's *Traffic Noise Analysis Protocol* sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is basically an engineering concern. A minimum 5 dBA reduction for all impacted receptors in the future noise levels must be achieved for an abatement to be considered feasible. Other considerations include

topography, access requirements, other noise sources, and safety considerations. Additionally, a noise reduction of at least 7 dBA must be achieved at one or more benefited receptors for an abatement measure to be considered reasonable. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include: residents' acceptance and the cost per benefited residence.

2.2.6.2 AFFECTED ENVIRONMENT

The primary source used in the preparation of this section is the *Mount Vernon Avenue Bridge Project Supplemental Noise Study Report* (NSR), January 2018 (Caltrans 2018g).

Basics of Sound

Sound is mechanical energy transmitted by pressure waves in a compressible medium such as air. Noise is generally defined as unwanted or annoying sound that is typically associated with human activity and that interferes with normal activities. Sound levels are measured and expressed in decibels (dB). The human ear does not respond uniformly to sounds at all frequencies, being less sensitive to low and high frequencies than to medium frequencies, which correspond with human speech. In response, the A-weighted noise level (or scale) has been developed. This A-weighted sound level is called the "noise level," which is referenced in units of dBA. Noise is measured on a logarithmic scale; a doubling of sound energy results in a three-dBA increase in noise levels. The human ear, however, does not typically notice changes in noise levels of less than 3 dBA. The equivalent noise level (L_{eq}) is the average A weighted sound level measured over a given time interval. L_{eq} can be measured over any time period, but is typically measured for one-hour periods and is expressed as $L_{eq}(h)$.

Methodology

FHWA defines a Type I project as a proposed federal or federal-aid highway project for the construction of a highway at a new location or the alteration of an existing highway where one or more of the following occurs:

- The physical alteration of an existing highway where there is either:
    - Substantial Horizontal Alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition; or,
    - Substantial Vertical Alteration. A project that removes shielding, thereby exposing the line of sight between the receptor and the traffic noise source. This is done by either altering the vertical alignment of the highway or by altering the topography between the highway traffic noise source and the receptor.
- The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a high-occupancy vehicle (HOV) lane, high-occupancy toll (HOT) lane, bus lane, or truck climbing lane.
- The addition of an auxiliary lane, except when the auxiliary lane is a turn lane.
- The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange.

- Restriping existing pavement for the purpose of adding a through traffic lane or an auxiliary lane.
- The addition of a new or substantial alteration of an existing weigh station, rest stop, ride-share lot, or toll plaza or substantial alteration to such features.
- If a project is determined to be a Type I project under this definition then the entire project area as defined in the environmental document is a Type I project.

The project is determined to be a Type I project under this definition because the proposed project would remove shielding between the roadway and nearby receptors. While horizontal and vertical alteration of the existing bridge and adjacent roadways would be modest, there would be substantial changes to the areas between the roadways and the receptors as a result of right of way acquisition that would remove multiple existing buildings, walls, and fences. These structures currently provide shielding to nearby second-row receptors that would become first-row receptors as a result of the project. Therefore, the entire project area, as defined in the environmental document, is a Type I project. Under 23 CFR 772.11, noise abatement must be considered for Type I projects if the project is predicted to result in a traffic noise impact. In such cases, 23 CFR 772 requires that the project sponsor "consider" noise abatement before adoption of the final NEPA document. This process involves identification of noise abatement measures that are reasonable, feasible, and likely to be incorporated into the project as well as the identification of noise impacts for which no apparent solution is available.

A field investigation was conducted to identify land uses that could be subject to traffic and construction noise impacts from the project. Land uses in the project area were categorized by land use type; activity category, as defined in Table 2-32; noise abatement criteria; and the extent of frequent human use. Noise measurements were conducted along the alignment using one Larson Davis Model LxT sound-level meter (SLM) and one Larson Davis Model 831 SLM (serial numbers 0004005 and 0003786, respectively). All procedures for conducting noise measurements required by the Caltrans' Technical Noise Supplement (TeNS) were followed during field measurements. All relevant traffic data from each short-term measurement were classified and counted using video recordings and/or manual traffic counts gathered in the field for use in calibrating the project noise model.

Traffic noise levels were predicted using the FHWA Traffic Noise Model (TNM), version 2.5. This computer model is based on two FHWA reports: FHWA-PD-96-009 and FHWA-PD-96-010 (FHWA 1998a, 1998b). Key geometric inputs for the TNM were ground type and the locations of roadways, shielding features (e.g., topography and buildings), noise barriers, and receivers. Geometry associated with the following future projects was also included in the TNM modeling.

Noise Measurement Sites

Existing noise levels were measured from Wednesday, June 28, to Thursday, June 29, 2017, using Caltrans-approved methodology for sampling noise. Short-term monitoring (16 minutes in duration each) was conducted at 10 locations along the project area, and long-term monitoring (10-minute intervals taken for 24 hours or more) was conducted at two locations (LT1 and LT2). The measured and modeled locations are identified in Figure 2-9.

Noise monitoring sites (ST-1 through ST-10) were selected to be representative of ambient noise conditions near the Mount Vernon Avenue project study corridor. Table 2-33 summarizes the results of the short-term noise monitoring conducted in the project study area.

Table 2-33. Summary of Short-Term Noise Measurements

Receiver	Address	Land Uses/Activity Category	Start Date/Time	Duration (minutes)	L_{eq} (dBA)
ST-1	240 N Mt Vernon Ave San Bernardino, CA	Residential/B	06-29-2017/10:04 a.m.	16	58.6
			06-29-2017/10:22 a.m.	16	54.7
			06-29-2017/10:40 a.m.	16	54.0
ST-2	1323 W 3rd St San Bernardino, CA	Residential/B	06-29-2017/10:04 a.m.	16	52.6
			06-29-2017/10:22 a.m.	16	52.0
ST-3	1335 W 2nd St San Bernardino, CA	Residential/B	06-28-2017/9:54 a.m.	16	52.2
			06-28-2017/10:14 a.m.	16	52.1
ST-4	1323 W 2nd St San Bernardino, CA	Residential/B	06-28-2017/9:54 a.m.	16	51.1
			06-28-2017/10:14 a.m.	16	51.3
ST-5	1320 W King St San Bernardino, CA	Residential/B	06-28-2017/10:58 a.m.	16	55.1
			06-28-2017/11:18 a.m.	16	56.5
ST-6	1278 W King St San Bernardino, CA	Residential/B	06-28-2017/10:58 a.m.	16	53.5
			06-28-2017/11:18 a.m.	16	54.9
ST-7	1293 W 5th St San Bernardino, CA	Nightclub/F	6-29-17/8:54 a.m.	16	63.5
			6-29-17/9:14 a.m.	16	62.4
ST-8	1328 W Kingman St San Bernardino, CA	Residential/B	6-29-17/8:54 a.m.	16	54.1
			6-29-17/9:14 a.m.	16	53.5
ST-9	1414 W Kingman St San Bernardino, CA	Vacant Lot/G	6-28-17/2:26 p.m.	16	56.5
			6-28-17/2:46 p.m.	16	54.7
ST-10	1328 W Kingman St San Bernardino, CA	Residential/B	6-28-17/2:26 p.m.	16	63.9
			6-28-17/2:46 p.m.	16	64.9

Long-term monitoring was conducted at eight locations (LT-1 through LT-8) along the project alignment. The long-term measurement locations, peak hour noise levels and times, and quietest hour noise levels and times at each measurement location are shown in Table 2-34, below.

Table 2-34. Long-Term Noise Measurement Data Summary

Site ID	Measurement Location	Date	Peak Noise Hour Leq (dBA)	Quietest Hour L_{eq} (dBA)
LT-1	1278 W King St San Bernardino, CA	06-28-2017– 06-29-2017	57.7 (4:00 – 6:00 PM)	47.6 (2:00 – 3:00 AM)
LT-2	1328 W Kingman St San Bernardino, CA	06-28-2017– 06-29-2017	55.5 (7:00 – 8:00 PM)	50.3 (2:00 – 3:00 AM)
Source: Mount Vernon Avenue Bridge Project, Supplemental Noise Study Report, 2018.				

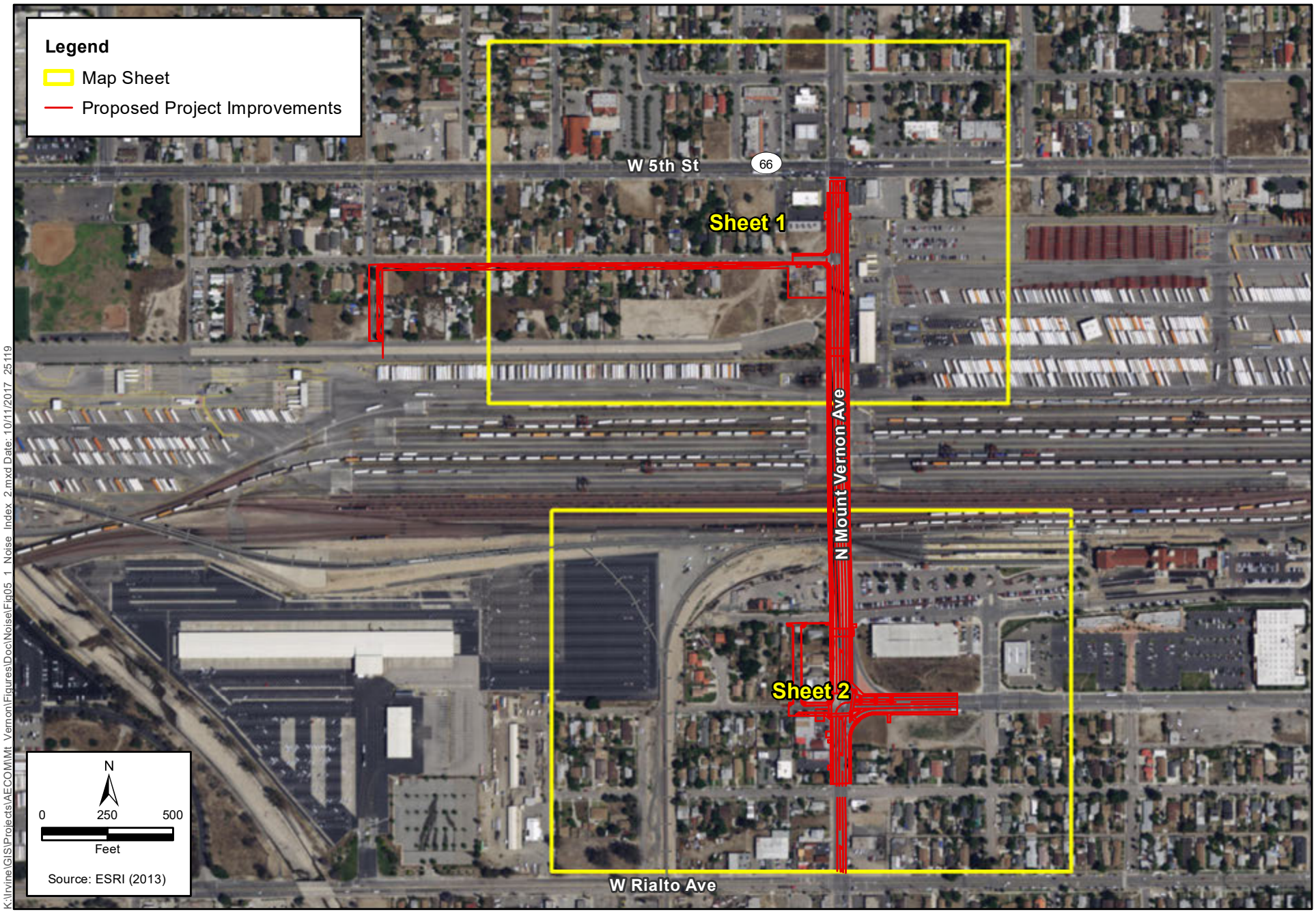


Figure 2-9 - Sheet Index
Noise Measurement and Modeling Locations
Mount Vernon Avenue Bridge Project

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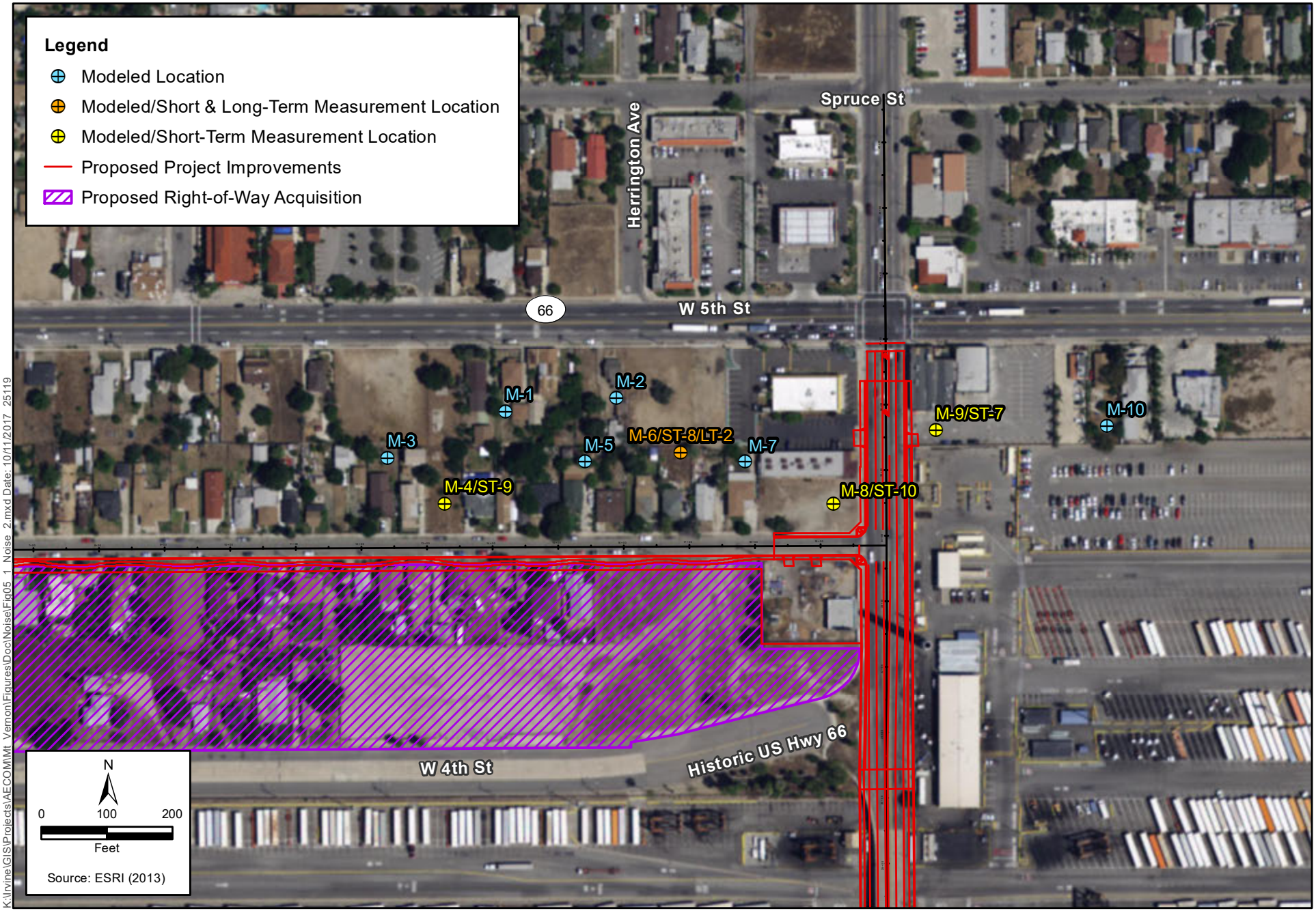

Figure 2-9 - Sheet 1
Noise Measurement and Modeling Locations
Mount Vernon Avenue Bridge Project

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Figure 2-9 - Sheet 2
Noise Measurement and Modeling Locations
Mount Vernon Avenue Bridge Project

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The long-term noise measurement sites were selected in order to document the diurnal traffic noise pattern, which was dominated by traffic noise on Mount Vernon Avenue and the other surrounding roadway network. The purpose of the long-term noise measurements was to determine the changes in noise levels within the project area throughout a typical day. Using the peak hour identified by the long term noise measurements helped to identify the peak hour traffic volume (AM peak hour or PM peak hour dependent on the peak hour identified in the long term measurement) from the approved Traffic/Circulation Study (T/CS) to be analyzed in TNM modeling. The long-term sound level data were collected over 24-hour periods at various times between Tuesday, June 28, and Wednesday, June 29, 2017. Long-term noise measurements were only conducted on Tuesday through Thursday as directed by Caltrans' Technical Noise Supplement (TeNS). The results of the long-term monitoring are summarized in Table 2-35 and Table 2-37 and Figure 2-10 and Figure 2-11.

Table 2-35. Summary of Long-Term Monitoring at Location LT1

Date	Beginning Hour	Hourly dBA (L_{eq}[h])	Difference from Loudest Hour
6/28/2017	9:00 AM	54.3	-3.5
	10:00 AM	54.5	-3.2
	11:00 AM	53.8	-3.9
	12:00 PM	54.7	-3.0
	1:00 PM	56.2	-1.5
	2:00 PM	56.3	-1.4
	3:00 PM	56.8	-0.9
	4:00 PM	**57.7**	**0.0**
	5:00 PM	**57.7**	**0.0**
	6:00 PM	57.3	-0.4
	7:00 PM	56.2	-1.5
	8:00 PM	56.3	-1.4
	9:00 PM	55.1	-2.7
	10:00 PM	53.4	-4.3
	11:00 PM	51.4	-6.3
6/29/2017	12:00 AM	52.0	-5.8
	1:00 AM	52.0	-5.7
	2:00 AM	47.6	-10.2
	3:00 AM	51.3	-6.4
	4:00 AM	51.4	-6.3
	5:00 AM	55.7	-2.0
	6:00 AM	55.0	-2.8
	7:00 AM	56.0	-1.7
	8:00 AM	54.4	-3.3
	9:00 AM	54.6	-3.1
	10:00 AM	54.2	-3.5
Maximum		57.7	
Minimum		47.6	
Note: Worst-hour noise levels are bolded.			

Figure 2-10. Long-Term Monitoring at Location LT1

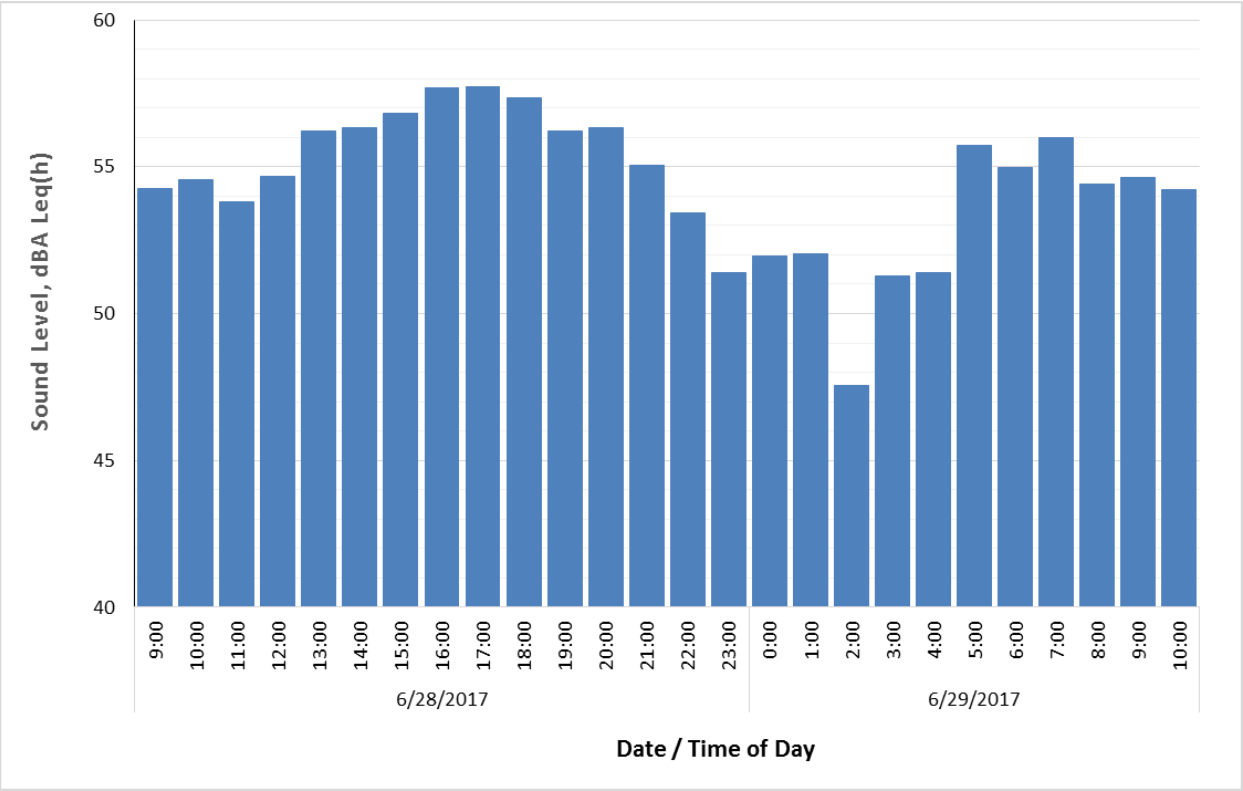
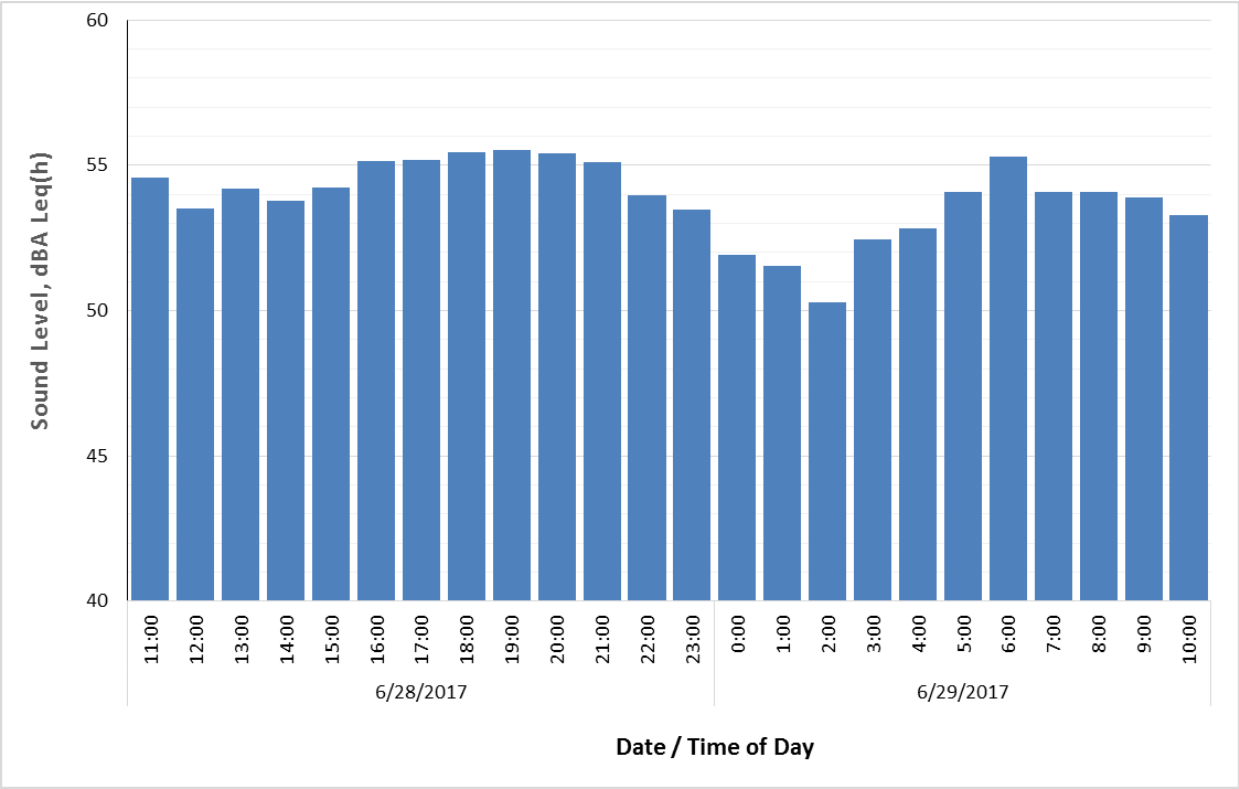


Table 2-36. Summary of Long-Term Monitoring at Location LT2

Date	Beginning Hour	Hourly dBA (L_{eq}[h])	Difference from Loudest Hour
6/28/2017	11:00 AM	54.6	-0.9
	12:00 PM	53.5	-2.0
	1:00 PM	54.2	-1.3
	2:00 PM	53.8	-1.7
	3:00 PM	54.2	-1.3
	4:00 PM	55.1	-0.4
	5:00 PM	55.2	-0.3
	6:00 PM	55.4	-0.1
	7:00 PM	**55.5**	**0.0**
	8:00 PM	55.4	-0.1
	9:00 PM	55.1	-0.4
	10:00 PM	54.0	-1.5
	11:00 PM	53.5	-2.0
6/29/2017	12:00 AM	51.9	-3.6
	1:00 AM	51.5	-4.0
	2:00 AM	50.3	-5.2
	3:00 AM	52.5	-3.0
	4:00 AM	52.8	-2.7
	5:00 AM	54.1	2.6
	6:00 AM	55.3	-0.2
	7:00 AM	54.1	-1.4
	8:00 AM	54.1	-1.4
	9:00 AM	53.9	-1.6
	10:00 AM	53.3	-2.2
Maximum		55.5	
Minimum		50.3	
Note: Worst-hour noise levels are bolded.			

Figure 2-11. Long-Term Monitoring at Location LT2



TNM 2.5 was used to compare measured traffic noise levels with modeled noise levels at field measurement locations using the traffic count data collected at the time of the noise measurements. Table 2-37 compares measured and modeled noise levels at each measurement location. The comparison was made by subtracting the modeled sound level from the measured sound level to quantify the difference. This calculation was repeated for both of the measurement runs at each location, and the average (arithmetic mean) difference was used to determine the K-factor (if any) to be used for that location. If the average "measured minus predicted" value was 2.0 dBA or less for a given measurement location, then the TNM result was not adjusted for that receiver. The K-factor for each additional modeled receiver (i.e., location where ST noise measurements were not obtained) were based on the K-factor for the measurement site that was closest and/or most acoustically equivalent.

Table 2-37. Comparison of Measured and Modeled Sound Levels in the TNM 2.5 Model

Measurement Site	Run	Measured Sound Level (dBA)	Predicted Sound Level (dBA)	Measured minus Predicted (dB)	Average Measured Minus Predicted (dB)	K-Factor Used	K-Factor Applied to Additional Modeled Receiver(s)
ST1 (M11)	2	54.7	53.0	+1.7	+1.4	0	—
	3	54.0	53.0	+1.0			
ST2 (M13)	1	52.6	49.3	+3.3	+2.5	+2.5	M12, M14, M15, M16
	2	52.0	50.3	+1.7			
ST3 (M18)	1	52.2	49.5	+2.7	+2.1	+2.1	M19
	2	52.1	50.7	+1.4			
ST4 (M20)	1	51.1	48.3	+2.8	+2.6	+2.6	—
	2	51.3	49.0	+2.3			
ST5 (M21)	1	55.1	54.3	+0.8	+1.5	0	M22
	2	56.5	54.3	+2.2			
ST6/LT1 (M23)	1	53.5	55.4	-1.9	-1.2	0	—
	2	54.9	55.4	-0.5			
ST7 (M9)	1	63.5	59.9	+3.6	+3.1	+3.1	M10
	2	62.4	59.8	+2.6			
ST8/LT2 (M6)	1	54.1	57.6	-3.5	-4.3	-4.3	M5, M7
	2	53.5	58.6	-5.1			
ST9 (M4)	1	56.5	54.3	+2.2	+0.2	0	M1, M2, M3
	2	54.7	56.6	-1.9			
ST10 (M8)	1	63.9	60.0	+3.9	+4.1	+4.1	—
	2	64.9	60.6	+4.3			

2.2.6.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

The geometry of the project study area relative to nearby existing land uses was modeled and future permitted land uses were identified by contacting San Bernardino County and the local City planning staff.

The traffic noise modeling results in Table B-1 of the NSR indicate worst-hour traffic noise levels at the modeled receivers are predicted to be in the range of 49 to 68 dBA $L_{eq(h)}$ in the design year (2040) for both No-Build and Build conditions. The increase in noise levels under No-Build conditions relative to existing conditions is predicted to be in the range of 0 to 2 dB. The change in noise levels under Build conditions relative to existing conditions is predicted to be in the range of +1 to +3 dB (i.e., a 1 to 3 dB increase).

Temporary

During construction of the Build Alternative (Preferred Alternative), noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction noise is regulated by Caltrans' provisions in Section 14-8.02, "Noise Control," of the 2015 Standard Specifications and Special Provisions (SSP 14-8.02). The Standard Special Provision (SSP) would be edited specifically for this project during the plans, specifications, and estimates phase.

Two types of short-term noise impacts would occur during project construction. The first type would be from construction crew commutes and the transport of construction equipment and materials to the project site, which would incrementally raise noise levels on access roads leading to the project construction site. The pieces of heavy equipment for grading and construction activities would be moved on site, would remain for the duration of each construction phase, and would not add to the daily traffic volume in the project vicinity. A high single-event noise exposure potential of 87 dBA maximum noise level (L_{max}) from trucks passing at 50 feet would exist. However, the projected construction traffic would be minimal when compared with existing traffic volumes along affected streets, and the associated long-term noise level change would not be perceptible. Therefore, construction-related worker commutes and equipment transport noise impacts would be short term and would not be adverse.

The second type of short-term noise impact would be from construction activities. Construction is performed in distinct steps, each of which has its own mix of equipment and consequently its own noise characteristics. These various sequential phases would change the character of the noise generated and the noise levels along the project alignment as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 2-38 lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor.

Table 2-38. Typical Construction Equipment Noise Levels

Type of Equipment	Range of Maximum Sound Levels (dBA L_{max} at 50 feet)	Suggested Maximum Sound Levels for Analysis (dBA L_{max} at 50 feet)
Pile Drivers	81 to 96	93
Rock Drills	83 to 99	96
Jackhammers	75 to 85	82
Pneumatic Tools	78 to 88	85
Pumps	74 to 84	80
Scrapers	83 to 91	87
Haul Trucks	83 to 94	88
Cranes	79 to 86	82
Portable Generators	71 to 87	80
Rollers	75 to 82	80
Dozers	77 to 90	85
Tractors	77 to 82	80
Front-End Loaders	77 to 90	86
Hydraulic Backhoe	81 to 90	86
Hydraulic Excavators	81 to 90	86
Graders	79 to 89	86
Air Compressors	76 to 89	86
Trucks	81 to 87	86

Source: Bolt, Beranek & Newman 1987
dBA = A-weighted decibels
L_{max} = maximum instantaneous noise level

During construction of the project, noise from construction would intermittently dominate the noise environment in the vicinity of construction activities. Table 2-38 summarizes noise levels produced by construction equipment that is anticipated to be used for the project. Standard construction equipment is expected to generate maximum noise levels ranging from 74 to 90 dBA at a distance of 50 feet, while pile driving would generate maximum noise levels of approximately 101 dBA at 50 feet. Noise produced by construction equipment would be reduced at a rate of about 6 dB per doubling of distance.

Construction of the proposed project is expected to require the use of earthmovers, bulldozers, paving machines, water trucks, dump trucks, concrete trucks, rollers, and pickup trucks. Noise associated with the use of construction equipment is estimated to be between 79 and 89 dBA L_{max} at a distance of 50 feet from the active construction area for the grading phase. As seen in Table 2-38, the maximum noise level generated by each earthmover is assumed to be approximately 86 dBA L_{max} at 50 feet from the earthmover in operation. Each bulldozer would generate approximately 85 dBA L_{max} at 50 feet. The maximum noise level generated by water trucks and pickup trucks is approximately 86 dBA L_{max} at 50 feet from these vehicles. Each doubling of the sound source with equal strength increases the noise level by 3 dBA.

Each piece of construction equipment operates as an individual point source. The worst-case composite noise level at the nearest residence during this phase of construction would be 91 dBA L_{max} (at a distance of 50 feet from an active construction area).

In addition to the standard construction equipment, the project will require the use of pile drivers. As shown in Table 2-38, pile driving generates noise levels of up to 96 dBA L_{max} at 50 feet.

No adverse noise impacts from construction are anticipated because construction would be conducted in accordance with applicable local noise standards and Caltrans' provisions in Section 14-8.02, "Noise Control," of the 2015 Standard Specifications and Special Provisions and applicable local noise standards.

Construction noise would be short-term, intermittent, and overshadowed by local traffic noise. Furthermore, implementation of the measures listed in Section 2.2.6.4 would further minimize the temporary noise impacts from construction.

Permanent

The results of the traffic noise analysis in Table 2-39 indicate that predicted traffic noise levels for the Design Year (2040) would not approach (i.e., be within 1 dB) or exceed the NAC of 67 dBA $L_{eq(h)}$ at any modeled land uses, which fall under Activity Categories B (residential) and C (recreation) during the Design Year Build condition.

The previous 2011 EA/FONSI found no land use that would approach or exceed the NAC at any modeled noise sensitive location. The findings in the 2018 Supplemental Noise Study Report (SNSR) which are included in this EA noise section are fundamentally consistent with the results from the original 2006 NSR and 2011 EA/FONSI. Findings in both documents show slight variation due to the differences in geometry, modeling, traffic volumes, traffic speeds, and other factors. Therefore, the findings of this Supplemental EA are consistent with the 2011 EA/FONSI.

Shifting of Existing Noise Sources

With the acquisition of the properties between Kingman Street and West 4th Street and from Cabrera Avenue to Mount Vernon, various existing structures (residences and businesses) would be removed and BNSF operations would be displaced into this newly-acquired area. The homes immediately north of Kingman Street and west of Cabrera Avenue would then become front-row receptors with respect to railyard operations (as opposed to their existing condition of being separated from the yard by one or more rows of intervening properties and structures). These changes, which would include the realignment of existing tracks (Tracks 216 and 217), and the relocation of some BNSF operations on the BNSF property, would move noise sources closer to some sensitive receptor locations, and farther away from others. Please see the Project Description, Section 1.4.1, for detailed discussion of proposed changes.

These changes would have no effect on intermodal throughput capacity or the overall level of intermodal activity–related noise. Nevertheless, it is important to note that some sensitive receptor locations may experience higher operational noise levels, while others may experience a decrease in noise levels. The new front row receptors to the northwest of the project site would be shielded from BNSF operations by the proposed 12-foot-high block wall that would be constructed along Kingman Street and Cabrera Avenue as part of the project. This shielding, combined with the distance provided by the proposed 20-foot-wide landscape buffer and the width of the exiting streets, would minimize the noise increases at the affected receivers.

No-Build Alternative

Under the No-Build Alternative, no changes would be made to Mount Vernon Avenue in the project area.

The traffic noise modeling results in Table B-1 of the NSR indicate worst-hour traffic noise levels at the modeled receivers are predicted to be in the range of 49 to 68 dBA $L_{eq(h)}$ in the design year (2040) No-Build. The increase in noise levels under No-Build conditions relative to existing conditions is predicted to be in the range of 0 to 2 dB. The results indicate that none of the predicted noise levels would approach or exceed the applicable NAC for any of the land uses and Activity Categories affected by traffic noise under the No-Build Alternative.

If the bridge ultimately has be closed to pedestrian and vehicular traffic, this would most likely result in traffic being rerouted on adjacent streets, which could result in increased traffic noise along these adjacent streets.

Table 2-39. Noise Levels for Existing, Future No-Build, and Future Build

Receiver ID	Measurement Location	Activity Category	Existing (2017) Noise Level (dBA)	Design Year (2040) Noise Level without Project (No-Build) (dBA)	Design Year (2040) Noise Level with Project (Build) (dBA)	Noise Impact Requiring Abatement Consideration
M1	--	B (67)	56	57	57	None
M2	--	B (67)	61	61	62	None
M3	--	B (67)	56	56	56	None
M4	ST9	G (-)	55	55	55	None
M5	--	B (67)	53	54	54	None
M6	ST8 (LT2)	B (67)	55	55	55	None
M7	--	B (67)	48	49	49	None
M8	ST10	G (-)	67	68	68	None
M9	ST7	E (72)	66	67	67	None
M10	--	B (67)	63	63	63	None
M11	ST1	G (-)	56	58	57	None
M12	--	B (67)	53	54	55	None
M13	ST2	B (67)	56	57	59	None
M14	--	B (67)	52	54	54	None
M15	--	B (67)	56	57	59	None
M16	--	G (-)	54	56	56	None
M17	--	G (-)	63	64	62	None
M18	ST3	B (67)	55	56	56	None
M19	--	B (67)	49	51	51	None
M20	ST4	B (67)	52	54	54	None
M21	ST5	B (67)	56	57	57	None
M22	--	B (67)	56	58	58	None
M23	ST6 (LT1)	B (67)	57	58	58	None

2.2.6.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

The proposed project would not result in any operational noise impacts and therefore abatement measures are not necessary for operational noise. Measures N-1 and N-2 from the 2011 EA/FONSI would still be applicable to the proposed project. In addition, measure N3, recommended in the 2018 Supplemental NSR, would also be implemented to ensure that noise effects are minimized during construction. The contractor will adhere to the following minimization measures:

N-1 Retaining walls will be landscaped, potentially with creeping fig, to attenuate any secondary noise reflection along both sides of the north bridge approach between Kingman Avenue and West 4th Street which accommodate an approximate 9.87 and 1.43 foot change in roadway elevation.

N-2 To minimize potential construction noise effects, the construction contractor will adhere to BMPs to minimize construction noise levels, including the following BMPs:

1. Construction activities adjacent to residential units will be limited as necessary to prevent noise impacts. (14.8.1, City of San Bernardino General Plan).
2. Construction activities will employ feasible and practical techniques that minimize the noise impacts on adjacent uses. (14.8.2, City of San Bernardino General Plan).
3. No person shall be engaged or employed, or cause any other person to be engaged or employed, in any work of construction, erection, alteration, repair, addition, movement, demolition, or improvement to any building or structure except within the hours of 7:00 a.m. and 8:00 p.m. (San Bernardino Municipal Code Section 8.54.070) (Ord. MC-1246, 5-21-07).
4. The operation or use between the hours of 10 p.m. and 7 a.m. of any pile driver, steam shovel, pneumatic hammers, derrick, steam or electric hoist, power driven saw, or any other tool or apparatus, the use of which is attended by loud and excessive noise, is prohibited, except with the approval of the Mayor and Common Council (San Bernardino Municipal Code Section 8.54.020(L)).
5. The creation of loud and excessive noise in connection with the loading or unloading of motor trucks and other vehicles is prohibited (San Bernardino Municipal Code Section 8.54.020(I)).
6. The unnecessary or excessive blowing of whistles, sounding of horns, ringing of bells or use of signaling devices by operators of railroad locomotives, motor trucks, and other transportation equipment is prohibited (San Bernardino Municipal Code Section 8.54.020(H)).
    - The shouting and crying of peddlers, hawkers and vendors which disturbs the peace and quiet of any considerable number of persons or neighborhood is prohibited (San Bernardino Municipal Code Section 8.54.020(J)).

- All construction activities shall be conducted in accordance with Department provisions in 14-8.02 (Noise Control), of the Standard Specifications and Special Provisions (SSP) S5-310, in order to ensure that noise generated during construction activities is minimized. The SSP will be edited specifically for this project during the PS&E final design phase. This includes the provisions that the contractor shall ensure that all equipment shall have sound-control devices that are no less effective than those provided on the original equipment, and no equipment shall have an unmuffled exhaust.
- Adherence to local ordinances and codes relating to construction equipment, sound levels, and hours of operation is required.
- Installation and maintenance of effective mufflers on construction equipment is required.

N-3 Sound control shall conform to the provisions in Section 14-8.02, "Noise Control," of Caltrans' 2015 Standard Specifications and Special Provisions. The contractor shall not exceed 86 dBA L_{max} at 50 feet from the job site from 9:00 p.m. to 6:00 a.m. Internal combustion engines shall be equipped with the manufacturer-recommended muffler. Internal combustion engines shall not be operated on the job site without the appropriate muffler.

2.3 Biological Environment

2.3.1 Natural Communities

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, not individual plant or animal species. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

Habitat areas that have been designated as critical habitat under the Federal Endangered Species Act are discussed below in Section 2.3.5, Threatened and Endangered Species. Wetlands and other waters are discussed in Section 2.3.2.

2.3.1.1 AFFECTED ENVIRONMENT

Information used in this section is based on the *Mount Vernon Avenue Supplemental Natural Environment Study/Minimal Impact* (NES/MI), approved in August 2017 (Caltrans 2017d). The information related to biological resources in the adopted 2011 EA/FONSI has been updated to reflect current site conditions and that information is presented in this section.

The biological study area (BSA) is the area that was evaluated for biological resources. It consists of the work area footprint of the proposed project and up to a 300-foot buffer (Figure 2-12). The terms *proposed project*, *project area*, and *project impact area* are defined as the areas that have been proposed for direct impact, including permanent and temporary impacts. This is where construction would take place, including staging, storage, and access areas.

Prior to field studies, the California Natural Diversity Database (CNDDB) (California Department of Fish and Wildlife [CDFW] 2017) and the California Native Plant Society (CNPS) Electronic Inventory (CNPS 2017) were queried for natural communities in California that have special regulatory or management status and could occur in the vicinity of the BSA. Specifically, the database searches were conducted for lands that occur on the U.S. Geological Survey (USGS) 7.5-minute quadrangle map on which the BSA appears (San Bernardino South) and the surrounding or adjacent quadrangles. In addition to these resources, the original 2006 project NES/MI and supporting documentation were reviewed prior to field studies.

A supplementary field review was conducted on June 26, 2017. During the field review, the biologist conducted a windshield survey of the BSA and walked portions of the project site. The temperature was 108 degrees Fahrenheit, winds were three to five miles per hour, and cloud cover was zero percent.

The biologist reviewed the original project area as well as areas that have been proposed to be included in the project area. The BSA was carefully examined to determine (1) if any changes to biological conditions (i.e., physical conditions as well as vegetation and wildlife habitat and resources) have occurred since preparation of the 2006 NES/MI and adopted 2011 EA/FONSI and (2) the current biological conditions in all new work areas. In addition to field surveys, aerial imagery of the project BSA was reviewed to further evaluate site conditions.

Consistent with the original project NES/MI (2006) and adopted 2011 EA/FONSI, the BSA exists within a highly developed industrial and urbanized area, composed of single-family residential units, one multi-family residential building, roads and bridges, rail facilities, and a Metrolink station. The topography of the BSA is generally flat, ranging from approximately 1,080 to 1,100 feet in elevation (Google Earth 2017). Soils in the BSA generally consist of sandy loams (U.S. Department of Agriculture 2017). The BSA is within the Santa Ana River watershed. No evidence of hydrology was observed in the BSA. Consistent with the original project NES/MI (2006), the BSA consists primarily of developed, urbanized, and highly disturbed areas, which are dominated by roads, bridges, railroad facilities, houses, and ornamental landscaping (i.e., nonnative vegetation).

The following nine depleted natural communities are known to occur within the project region, based on database searches: Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Mixed Riparian Forest, Southern Riparian Forest, Southern Riparian Scrub, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, Southern California Arroyo Chub/Santa Ana Sucker Stream, and Riversidian Alluvial Fan Sage Scrub.

Consistent with the original project NES/MI (2006) and adopted 2011 EA/FONSI, no natural vegetation communities were observed in the BSA during the field surveys. Vegetation in the BSA consists of nonnative ornamental landscape vegetation along roadways, on residential properties, and in public access areas. Several undeveloped lots are present in the BSA and vegetated by nonnative and ruderal plant species. Because of the developed environment within the BSA, no habitat or natural communities of special concern exist within the BSA or surrounding area.

Because of the highly developed nature of the BSA and the absence of habitat and natural communities, drainages, or other features that may be used by wildlife for movement, the project area is not considered to be located within or near a wildlife corridor and does not provide connectivity to wildlife.

2.3.1.2 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

There are no impacts on essential fish habitat, federally protected wetlands, federally protected riparian habitats, or wildlife corridors because these resources do not exist within the project BSA. No temporary or permanent impacts on natural vegetation communities of concern or animal movement/habitat fragmentation would occur. Impacts are the same as those described in the adopted 2011 EA/FONSI.

No-Build Alternative

Under the No-Build Alternative, no impacts on essential fish habitat, federally protected wetlands, federally protected riparian habitats, wildlife corridors, natural vegetation communities of concern, or animal movement/habitat fragmentation would occur.

2.3.1.3 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No natural communities were found; therefore, avoidance and minimization measures are not necessary.

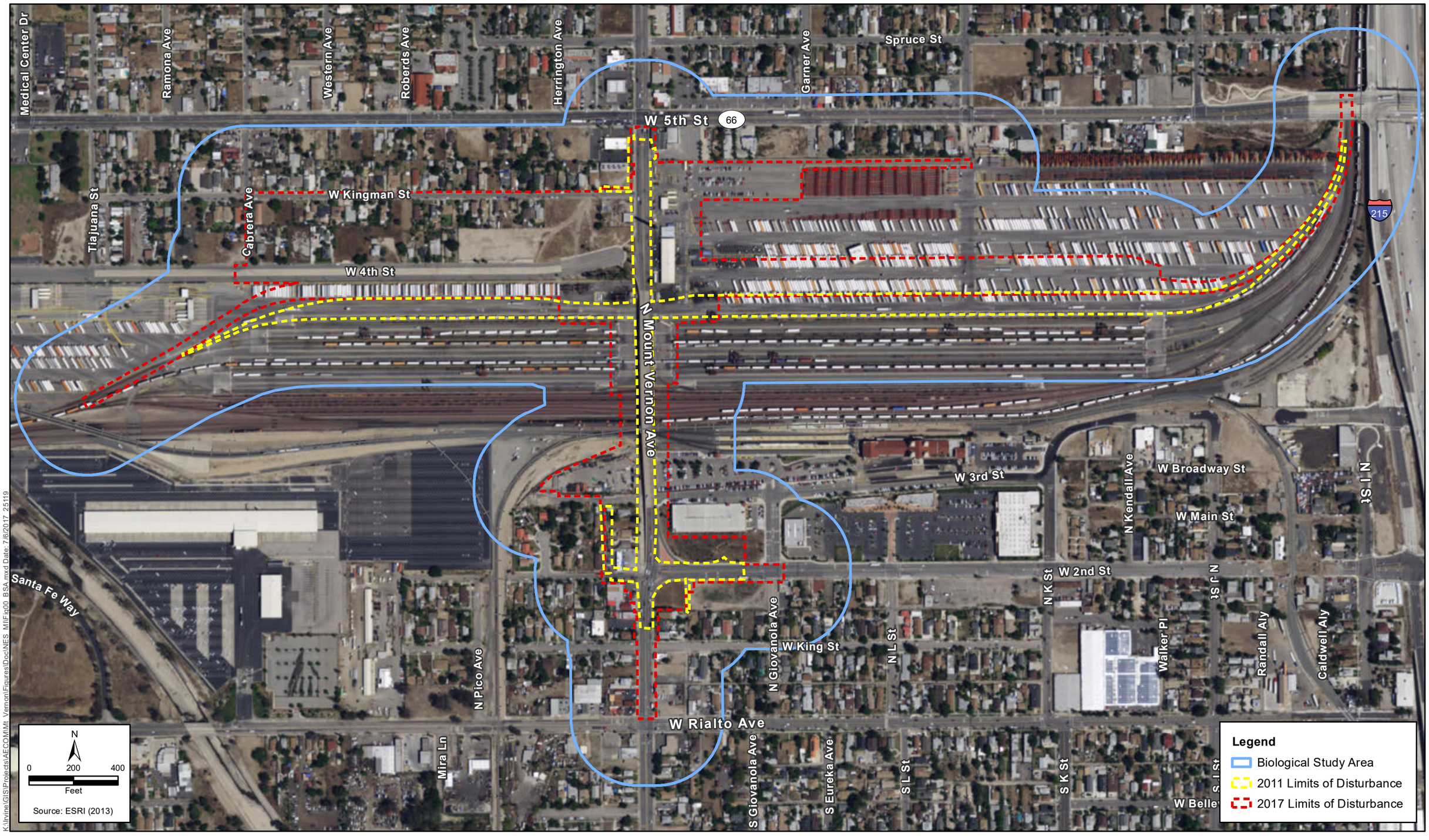


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Figure 2-12
Biological Study Area
Mount Vernon Avenue Bridge Project

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2.3.2 Wetlands and Other Waters

2.3.2.1 REGULATORY SETTING

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Federal Water Pollution Control Act, more commonly referred to as the Clean Water Act (CWA) (33 United States Code [USC] 1344), is the primary law regulating wetlands and surface waters. One purpose of the CWA is to regulate the discharge of dredged or fill material into waters of the U.S., including wetlands. Waters of the U.S. include navigable waters, interstate waters, territorial seas, and other waters that may be used in interstate or foreign commerce. The lateral limits of jurisdiction over non-tidal water bodies extend to the ordinary high water mark (OHWM), in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils formed during saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that discharge of dredged or fill material cannot be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the U.S. Environmental Protection Agency (U.S. EPA).

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide. Regional permits are issued for a general category of activities when they are similar in nature and cause minimal environmental effect. Nationwide permits are issued to allow a variety of minor project activities with no more than minimal effects.

Ordinarily, projects that do not meet the criteria for a Regional or Nationwide Permit may be permitted under one of USACE's Individual permits. There are two types of Individual permits: Standard permits and Letters of Permission. For Individual permits, the USACE decision to approve is based on compliance with U.S. EPA's Section 404(b)(1) Guidelines (40 Code of Federal Regulations [CFR] 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a "least environmentally damaging practicable alternative" (LEDPA) to the proposed discharge that would have lesser effects on waters of the U.S., and not have any other significant adverse environmental consequences.

The Executive Order for the Protection of Wetlands (EO 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, EO 11990 states that a federal agency, such as FHWA and/or the Department, as assigned, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: (1) that there is no practicable alternative to the construction and (2) the proposed project includes all practicable measures to minimize harm. A Wetlands Only Practicable Finding must be made.

The Regional Water Quality Control Boards (RWQCBs) were established under the Porter-Cologne Water Quality Control Act to oversee water quality. Discharges under the Porter-Cologne Act are permitted by Waste Discharge Requirements (WDRs) and may be required even when the discharge is already permitted or exempt under the CWA. In compliance with Section 401 of the CWA, the RWQCBs also issue water quality certifications for activities which may result in a discharge to waters of the U.S. This is most frequently required in tandem with a Section 404 permit request. Please see the Water Quality section for more details.

2.3.2.2 AFFECTED ENVIRONMENT

Information used in this section is based on the approved *Mount Vernon Avenue NES/MI*, approved in August 2017 (Caltrans 2017d). The information related to biological resources in the adopted 2011 EA/FONSI has been updated to reflect current site conditions, and that information is presented in this section.

The BSA was evaluated for the presence of aquatic resources that are under the jurisdiction of USACE, the RWQCB, and CDFW. A drainage/detention basin, constructed sometime between 2009 and 2011, was observed in front of the Metrolink station on the northeast corner of Mount Vernon Avenue and Second Street. This detention basin is not shown as a USGS blue line feature, is surrounded by developments, has negligible biological function and value, and is not considered jurisdictional, based on the judgment of the reviewing biologist. Consistent with the original project NES/MI (2006) and adopted 2011 EA/FONSI, no aquatic resources were observed in the BSA.

2.3.2.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

No jurisdictional wetlands or waters were observed in the BSA, and no jurisdictional waters are anticipated to be affected by the proposed project. No temporary or permanent impacts are anticipated. Impacts (or lack thereof) are the same as those described in the approved 2011 EA/FONSI.

No-Build Alternative

Under the No-Build Alternative, no impacts on wetlands or waters would occur.

2.3.2.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No wetland or other waters were found; therefore, avoidance and minimization measures are not necessary.

2.3.3 Plant Species

2.3.3.1 REGULATORY SETTING

The U.S. Fish and Wildlife Service (USFWS) is responsible for the protection of federally listed special-status plant species. “Special-status” species are selected for protection because they are rare and/or subject to population and habitat declines. “Special status” is a general term for species that are provided varying levels of regulatory protection. The highest level of protection

is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA). Please see Section 2.3.5, *Threatened and Endangered Species*, in this document for detailed information about these species.

This section of the document discusses all federally protected special-status plant species, including USFWS candidate species.

The regulatory requirements for FESA can be found at 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402.

2.3.3.2 AFFECTED ENVIRONMENT

Information used in this section is based on the approved *Mount Vernon Avenue NES/MI*, approved in August 2017 (Caltrans 2017d). The information related to biological resources in the adopted 2011 EA/FONSI has been updated to reflect current site conditions, and that information is presented in this section.

Sixty-six non-listed special-status plant species are known to occur in the project region (see Table 2-40). The plants are considered to be of special concern based on (1) federal, state, or local laws regulating their development; (2) limited distributions; and/or (3) the presence of habitat required by the special-status plants occurring on the site.

Table 2-40. Special-Status Plant Species with Potential to Occur in the Region

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Plants				
Chaparral Sand-Verbena (*Abronia villosa* var. *aurita*)	-/-/1B.1	Annual herb. Sandy soils in chaparral, coastal scrub, and desert dunes; 75–1,600 meters (246–5,248 feet). Blooming period: January–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Parish's Oxytheca (*Acanthoscyphus parishii* var. *parishii*)	-/-/4.2	Annual herb. Sandy or gravelly soils in chaparral and lower montane coniferous forest; 1,220–2,600 meters (4,000–8,500 feet). Blooming Period: June–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Mt. Pinos Onion (*Allium howellii* var. *clokeyi*)	-/-/1B.3	Perennial bulbiferous herb. Found in Great Basin scrub, pinyon and juniper woodland, meadows and seeps (edges). 1,385–1,800 meters (4,543–5,905 feet). Blooming period: April–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Singlewhorl Burrobrush (*Ambrosia monogyra*)	-/-/2B.2	Perennial shrub. Sandy soils in chaparral, coastal sage scrub, Sonoran desert scrub, and washes; 10–500 meters (328–1,640 feet). Blooming period: August–November.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
San Diego Ambrosia (*Ambrosia pumila*)	E/-/1B.1	Rhizomatous herb. Sandy loam or clay soils in chaparral, coastal sage scrub, valley and foothill grassland, vernal pools; often in disturbed areas or sometimes alkaline areas. Can occur in creek beds, seasonally dry drainages, and floodplains; 20–415 meters (66–1,362 feet). Blooming period: April–October.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Marsh Sandwort (*Arenaria paludicola*)	E/E/1B.1	Perennial stoloniferous herb. Sandy soils and openings in marshes and swamps (freshwater or brackish); 3–170 meters (10–550 feet). Blooming Period: May–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
San Diego Sagewort (*Artemisia palmeri*)	-/-/4.2	Perennial deciduous shrub. Sandy, mesic soils in chaparral, coastal scrub, riparian forest, riparian scrub, riparian woodland; 15–915 meters (50–3,000 feet). Blooming Period: February–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Western Spleenwort (*Asplenium vespertinum*)	-/-/4.2	Perennial rhizomatous herb. Rocky soils in chaparral, cismontane woodland, and coastal scrub; 180–1,000 meters (600–3,300 feet). Blooming Period: February–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Horn's Milk-vetch (*Astragalus hornii* var. *hornii*)	-/-/1B.1	Annual herb. Lake margins and alkaline soils in meadows, seeps, and playas; 60–850 meters (197–279 feet). Blooming period: May–October.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Nevin's Barberry (*Berberis nevinii*)	E/E/1B.1	Evergreen shrub. Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub; 274–825 meters (898–2,707 feet). Blooming period: March–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Thread-leaved Brodiaea (*Brodiaea filifolia*)	T/E/1B.1	Perennial bulbiferous herb. Often found in clay soils in openings in chaparral, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools; 25–1,120 meters (82–3,673 feet). Blooming period: March–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Round-leaved Filaree (*California macrophylla*)	-/-/1B.2	Annual herb. Clay soils in cismontane woodland and valley and foothill grassland; 15–1,200 meters (50–3,936 feet). Blooming period: March–May.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Catalina Mariposa Lily (*Calochortus catalinae*)	-/-/4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland; 15–700 meters (50–2,300 feet). Blooming Period: February–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Palmer's Mariposa Lily (*Calochortus palmeri* var. *palmeri*)	-/-/1B.2	Perennial bulbiferous herb. Mesic soils in chaparral, lower montane coniferous forests, meadows and seeps; 1,000–2,390 meters (3,280–7,839 feet). Blooming period: April–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Plummer's Mariposa Lily (*Calochortus plummerae*)	-/-/4.2	Perennial bulbiferous herb. Granitic and rocky areas in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland; 100–1,700 meters (328–5,576 feet). Blooming period: May–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Bristly Sedge (*Carex comosa*)	-/-/2B.1	Perennial rhizomatous herb. Coastal prairie, marshes and swamps around lake margins, and valley and foothill grassland; 0–625 meters (0–2,000 feet). Blooming period: May–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
San Bernardino Mountains Owl's-clover (*Castilleja lasiorhyncha*)	-/-/1B.2	Hemiparasitic annual herb. Mesic areas in chaparral, upper montane coniferous forest, pavement pebble plain, riparian woodland, and meadows and seeps; 1,300–2,390 meters (4,269–7,839 feet). Blooming period: May–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Payson's Jewel-flower (*Caulanthus simulans*)	-/-/4.2	Annual herb. Sandy and granitic soils in chaparral and coastal scrub; 90–2,200 meters (295–7,218 feet). Blooming period: February–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Smooth Tarplant (*Centromadia pungens* ssp. *Laevis*)	-/-/1B.1	Annual herb. Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland; 0–640 meters (0–2,100 feet). Blooming period: April–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Salt Marsh Bird's-beak (*Chloropyron maritimum* ssp. *Maritimum*)	E/E/1B.1	Hemiparasitic annual herb. Coastal dunes and coastal salt marshes and swamps; 0–30 meters (0–90 feet). Blooming period: May–October.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Peninsular Spineflower (*Chorizanthe leptotheca*)	-/-/4.2	Annual herb. Alluvial fans or granitic areas in chaparral, coastal scrub, and lower montane coniferous forest; 300–1,900 meters (984–6,232 feet). Blooming period: May–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Parry's Spineflower (*Chorizanthe parryi* var. *parryi*)	-/-/1B.1	Annual herb. Sandy or rocky openings in in chaparral, coastal scrub, cismontane woodland, and valley and foothill grassland; 275–1,220 meters (902–4,001 feet). Blooming period: April–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
White-bracted Spineflower (*Chorizanthe xanti* var. *leucotheca*)	-/-/1B.2	Annual herb. Sandy or gravelly soils in coastal scrub alluvial fans, Mojavean desert scrub, and pinyon and juniper woodland; 300–1,200 meters (984–3,936 feet). Blooming period: April–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Small-flowered Morning-glory (*Convolvulus simulans*)	-/-/4.2	Annual herb. Friable clay soils or serpentine seeps in chaparral openings, coastal scrub, and valley and foothill grassland; 30–700 meters (98–2,297 feet). Blooming period: March–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Peruvian Dodder (*Cuscuta obtusiflora* var. *glandulosa*)	-/-/2B.2	Annual parasitic vine. Freshwater marshes and swamps, 15–280 meters (49–918 feet). Blooming period: July–October.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Snake Cholla (*Cylindropuntia californica* var. *californica*)	-/-/1B.1	Perennial stem succulent. Chaparral and coastal scrub; 30–150 meters (100–500 feet). Blooming Period: April–May.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Paniculate Tarplant (*Deinandra paniculata*)	-/-/4.2	Annual herb. Usually found in vernally mesic soils in coastal scrub, valley and foothill grassland, and vernal pools; 25–940 meters (82–3,084 feet). Blooming period: April–November.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Slender-horned Spineflower (*Dodecahema leptoceras*)	E/E/1B.1	Annual herb. Sandy soils in chaparral, cismontane woodland, and alluvial fan coastal scrub; 200–760 meters (656–2,493 feet). Blooming period: April–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Santa Ana River Woollystar (*Eriastrum densifolium* ssp. *Sanctorum*)	E/E/1B.1	Perennial herb. Sandy to gravelly soil in chaparral and coastal scrub in alluvial fans; 91–610 meters (299–2,001 feet). Blooming period: April–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Southern Sierra Woolly Sunflower (*Eriophyllum lanatum* var. *obovatum*)	-/-/4.3	Perennial herb. Sandy loam soils in lower montane coniferous forest and upper montane coniferous forest; 1,114–2,500 meters (3,600–8,200 feet). Blooming Period: June–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Hot Springs Fimbristylis (*Fimbristylis thermalis*)	-/-/2B.2	Perennial rhizomatous herb. Meadows and seeps (alkaline, near hot springs); 110–1,340 meters (360–4,400 feet) Blooming Period: July–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Pine Green-gentian (*Frasera neglecta*)	-/-/4.3	Perennial herb. Lower montane coniferous forest, pinyon and juniper woodland, upper montane coniferous forest; 1,400–2,500 meters (4,500–8,200 feet). Blooming Period: May–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Alvin Meadow Bedstraw (*Galium californicum* ssp. *Primum*)	-/-/1B.2	Perennial herb. Granitic to sandy soil in chaparral and lower montane coniferous forests; 1,350–1,700 meters (4,428–5,576 feet). Blooming period: May–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Johnston's Bedstraw (*Galium johnstonii*)	-/-/4.3	Perennial herb. Chaparral, lower montane coniferous forest, pinyon and juniper woodland, riparian woodland; 1,220–2,300 meters (4,001–7,544 feet). Blooming period: June–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Los Angeles Sunflower (*Helianthus nuttallii* ssp. *Parishii*)	-/-/1A	Perennial rhizomatous herb. Marshes and swamps (coastal salt and freshwater); 10–1,675 meters (30–5,500 feet). Blooming Period: August–October.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Urn-flowered Alumroot (*Heuchera caespitosa*)	-/-/4.3	Perennial rhizomatous herb. Rocky soils in cismontane woodland, lower montane coniferous forest, riparian forest (montane), upper montane coniferous forest; 1,155–2,650 meters (3,800–8,700 feet). Blooming Period: May–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Parish's Alumroot (*Heuchera Parishii*)	-/-/1B.3	Perennial rhizomatous herb. Found in lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest, alpine boulder and rock field. 1,340–3,505 meters (4,396–11,499 feet). Blooming period: June–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Mesa Horkelia (*Horkelia cuneata* var. *puberula*)	-/-/1B.1	Perennial herb. Sandy and gravelly soils within maritime chaparral, cismontane woodland, and coastal scrub; 70–810 meters (229–2,657 feet). Blooming period: February–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Silver-haired Ivesia (*Ivesia argyrocoma* var. *argyrocoma*)	-/-/1B.2	Perennial herb. Found in Meadows and seeps, pebble plains, upper montane coniferous forest in pebble plains and meadows with other rare plants. 1,490–2,960 meters (4,888–9,711 feet). Blooming period: June–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Parry's Sunflower (*Hulsea vestita* ssp. *Parryi*)	-/-/4.3	Perennial herb. Granitic or carbonate, rocky, openings in lower montane coniferous forest, pinyon and juniper woodland, upper montane coniferous forest; 1,370–2,895 meters (4,500–9,500 feet). Blooming Period: April–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
California Satintail (*Imperata brevifolia*)	-/-/2B.1	Perennial rhizomatous herb. Mesic soils in chaparral, coastal scrub, Mojavean desert scrub, riparian scrub, meadows and seeps (often alkali); 0–1,215 meters (0–3,985 feet). Blooming period: September–May.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Southern California Black Walnut (*Juglans californica*)	-/-/4.2	Deciduous tree. Alluvial areas in chaparral, cismontane woodland, and coastal scrub; 50–900 meters (164–2,952 feet). Blooming period: March–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Duran's Rush (*Juncus duranii*)	-/-/4.3	Perennial rhizomatous herb. Mesic soils in montane coniferous forest, meadows, and seeps; 1,768–2,804 meters (5,799–9,197 feet). Blooming period: July–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Coulter's Goldfields (*Lasthenia glabrata* ssp. *Coulteri*)	-/-/1B.1	Annual herb. Coastal salt marsh, coastal salt swamps, playas, vernal pools; 1–1,220 meters (3–4,001 feet). Blooming period: February–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Robinson's Pepper-grass (*Lepidium virginicum* var. *robinsonii*)	-/-/4.3	Annual herb. Openings in chaparral and sage scrub; below 885 meters (2,900 feet). Blooming Period: January–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Ocellated Humboldt Lily (*Lilium humboldtii* ssp. *Ocellatum*)	-/-/4.2	Perennial bulbiferous herb. Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland; 30–1,800 meters (98–5,904 feet). Blooming period: March–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Lemon Lily (*Lilium parryi*)	-/-/1B.2	Perennial bulbiferous herb. Mesic areas in upper and lower montane coniferous forest, meadows and seeps, and riparian forest; 1,220–2,745 meters (4,001–9,003 feet). Blooming period: July–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Parish's Desert-thorn (*Lycium parishii*)	-/-/2B.3	Perennial shrub. Coastal scrub and Sonoran desert scrub; 135–1,000 meters (440–3,280 feet). Blooming Period: March–April.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Parish's Bush-mallow (*Malacothamnus parishii*)	-/-/1A	Deciduous shrub. Chaparral, coastal scrub; 305–455 meters (1,000–1,500 feet). Blooming period: June–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Hall's Monardella (*Monardella macrantha* ssp. *Hallii*)	-/-/1B.3	Perennial rhizomatous herb. Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland; 730–2,195 meters (2,394–7,199 feet). Blooming period: June–October.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Pringle's Monardella (*Monardella pringlei*)	-/-/1A	Annual herb. Coastal scrub; 300–400 meters (984–1,312 feet). Blooming period: May–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Rock Monardella (*Monardella saxicola*)	-/-/4.2	Perennial rhizomatous herb Rocky, usually serpentinite soils in closed-cone coniferous forest, chaparral, lower montane coniferous forest; 500–1,800 meters (1,640–6,000 feet). Blooming Period: June–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
California Muhly (*Muhlenbergia californica*)	-/-/4.3	Perennial rhizomatous herb. Mesic soils and seeps and streambeds; 100–2,000 meters (328–6,560 feet). Blooming period: June–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Little Mousetail (*Myosurus minimus* ssp. *Apus*)	-/-/3.1	Annual herb. Valley and foothill grassland as well as alkaline vernal pools; 20–640 meters (65–2,100 feet). Blooming period: March–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Gambel's Water Cress (*Nasturtium gambelii*)	E/T/1B.1	Perennial rhizomatous herb. Freshwater to brackish marshes and swamps; 5–330 meters (15–1,200 feet). Blooming period: April–October.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Short-joint Beavertail (*Opuntia basilaris* var. *brachyclada*)	-/-/1B.2	Perennial stem succulent. Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland; 425–1,800 meters (1,400–6,000 feet). Blooming Period: April–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Parish's Yampah (*Perideridia parishii* ssp. *Parishii*)	-/-/2B.2	Perennial herb. Lower montane coniferous forest, meadows and seeps, upper montane coniferous forest; 1,465–3,000 meters (4,800–9,800 feet). Blooming Period: June–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Mojave Phacelia (*Phacelia mohavensis*)	-/-/4.3	Annual herb. Sandy or gravelly soils in cismontane woodland, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland; 1,400–2,500 meters (4,500–8,200 feet). Blooming Period: April–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Brand's Star Phacelia (*Phacelia stellaris*)	C/-/1B.1	Annual herb. Coastal dunes, coastal scrub; 1–400 meters (3–1,312 feet). Blooming period: March–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Woolly Chaparral-pea (*Pickeringia montana* var. *tomentosa*)	-/-/4.3	Evergreen shrub. Gabbroic, granitic, or clay soils in chaparral; 0–1,700 meters (0–5,577 feet). Blooming period: May–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Narrow-petaled Rein Orchid (*Piperia leptopetala*)	-/-/4.3	Perennial herb. Cismontane woodland, lower and upper montane coniferous forest; 380–2,225 meters (1,246–7,298 feet). Blooming period: May–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Parish's Gooseberry (*Ribes divaricatum* var. *parishii*)	-/-/1A	Perennial deciduous shrub. Riparian woodland; 65–300 meters (200–1,000 feet). Blooming Period: February–April.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Coulter's Matilija Poppy (*Romneya coulteri*)	-/-/4.2	Perennial rhizomatous herb. Chaparral and coastal scrub; often in burned areas; 20–1,200 meters (65–3,936 feet). Blooming period: March–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Black Bog-rush (*Schoenus nigricans*)	-/-/2B.2	Perennial herb. Marshes and swamps (often alkaline); 150–2,000 meters (500–6,550 feet). Blooming Period: August–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Chaparral Ragwort (*Senecio aphanactis*)	-/-/2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub, and alkaline flats; 15–800 meters (49–2,624 feet). Blooming period: January–April.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
San Gabriel Ragwort (*Senecio astephanus*)	-/-/4.3	Perennial herb. Rocky slopes in coastal bluff scrub and chaparral; 400-1,500 meters (1,300-5,000 feet). Blooming Period: May–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Bear Valley Checkerbloom (*Sidalcea malviflora* ssp. *Dolosa*)	-/-/1B.2	Perennial herb. Lower montane coniferous forest (meadows and seeps), meadows and seeps, riparian woodland, upper montane coniferous forest (meadows and seeps); 1,495-2,685 meters (6,300–8,800 feet). Blooming Period: May–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Salt Spring Checkerbloom (*Sidalcea neomexicana*)	-/-/2B.2	Perennial herb. Alkaline and mesic soils within chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas; 15–1,530 meters (49–5,020 feet). Blooming period: March–June.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Chickweed Oxytheca (*Sidotheca caryophylloides*)	-/-/4.3	Annual herb. Sandy soil in lower montane coniferous forest; 1,114–2,600 meters (3,654–8,528 feet). Blooming period: July–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Prairie Wedge Grass (*Sphenopholis obtusata*)	-/-/2B.2	Perennial herb. Mesic soils within cismontane woodland as well as meadows and seeps; 300–2,000 meters (984–6,562 feet). Blooming period: April–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Laguna Mountains Jewel-flower (*Streptanthus bernardinus*)	-/-/4.3	Perennial herb. Chaparral and lower montane coniferous forest; 670–2,500 meters (2,198–8,202 feet). Blooming period: May–August.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Southern Jewel-flower (*Streptanthus campestris*)	-/-/1B.3	Perennial herb. Rocky areas in chaparral, lower montane coniferous forest, pinyon and juniper woodland; 900–2,300 meters (2,953–7,546 feet). Blooming period: April–July.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
San Bernardino Aster (*Symphyotrichum defoliatum*)	-/-/1B.2	Perennial rhizomatous herb. Near ditches, streams, and springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernally mesic valley and foothill grassland; 2–2,040 meters (7–6,693 feet). Blooming period: July–November.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Sonoran Maiden Fern (*Thelypteris puberula* var. *sonorensis*)	-/-/2B.2	Perennial rhizomatous herb. Meadows, seeps, and streams; 50–610 meters (164–2,001 feet). Blooming period: January–September.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

[a] Status Codes

Federal

E = Federally listed; Endangered
PE = Proposed Endangered
T = Federally listed; Threatened
FC = Federal Candidate for Listing
FSC = Federal Species of Concern
D = Delisted

State

T = State listed; Endangered
E = State listed; Threatened
SC = State Candidate for Listing
R = Rare (Native Plant Protection Act)
CSC = California Species of Special Concern
SA = California Special Animal
CFP = California Fully Protected Species
WL = Watch List

CNPS

1A = Plants that are presumed extinct in California
1B = Plants that are rare, threatened, or endangered in California and elsewhere
2 = Plants that are rare, threatened, or endangered in California but more common elsewhere
3 = Plants about which we need more information
4 = Limited distribution (Watch List)
0.1 = Seriously endangered in California
0.2 = Fairly endangered in California
0.3 = Not very endangered in California

CNDDB = Vegetation communities classified as depleted

[b] Habitat Presence/Absence Codes

P = The species is present
HP = Habitat is or may be present. The species may be present
HA = No habitat present, and no further work needed
A = This species is absent

2.3.3.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)
No federally listed, state listed, or non-listed special-status plants have the potential to occur in the BSA or be affected by the proposed project. No temporary or permanent impacts on federally listed, state listed, or non-listed special-status plants species would occur. Impacts (or lack thereof) are the same as described in the adopted 2011 EA/FONSI.

No-Build Alternative
Under the No-Build Alternative, neither bridge modifications nor replacement would occur; therefore, neither temporary nor construction-related effects on plant species would occur.

2.3.3.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No measures are required.

2.3.4 Animal Species

2.3.4.1 REGULATORY SETTING

Many federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with animals not listed or proposed for listing under the federal Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 2.3.5, below. All other federally protected special-status animal species are discussed here, including USFWS or NOAA Fisheries Service candidate species.

Federal laws and regulations relevant to wildlife include the following:

- National Environmental Policy Act
- Migratory Bird Treaty Act
- Fish and Wildlife Coordination Act

2.3.4.2 AFFECTED ENVIRONMENT

Information used in this section is based on the approved *Mount Vernon Avenue NES/MI*, approved in August 2017 (Caltrans 2017d). The information related to biological resources in the adopted 2011 EA/FONSI has been updated to reflect current site conditions, and that information is presented in this section.

Non-Listed Special-Status Animal Species
Forty-six non-listed special-status animal species are known to occur in the project region based on known range and the presence of suitable habitat (see Table 2-41). Several special-status animal species were determined to have the potential to be present in the BSA, with

Table 2-41. Regional Animal Species and Their Habitats Present

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Invertebrates				
Crotch bumble bee (*Bombus crotchii)*	–/SA/–	Nests underground. Coastal California east to the Sierra–Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Morrison bumble bee (*Bombus morrisoni*)	–/SA/–	From the Sierra–Cascade Ranges into Southern California and eastward across the intermountain west. Food plant genera include Cirsium, Cleome, Helianthus, Lupinus, Chrysothamnus, and Melilotus.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Busck's Gallmoth (*Carolella busckana)*	–/SA/–	Stem boring moth known to occur in southern California. May be a stem borer of native weed and scrub species.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Desert Cuckoo Wasp (*Ceratochrysis longimala*)	–/SA/–	California endemic species known to occur in southern California in Los Angeles and Riverside counties in chaparral and scrub habitats. Hosts unknown.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Greenest Tiger Beetle (*Cicindela tranquebarica viridissima*)	-/SA/-	Riparian woodlands. Inhabits the woodlands adjacent to the Santa Ana River basin. Usually found in open spots between trees.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Andrew's Marble Butterfly *(Euchloe hyantis andrewsi*)	–/SA/–	Lower montane coniferous forest. Inhabits yellow pine forest near Lake Arrowhead and Big Bear Lake in the San Bernardino Mountains, San Bernardino County, at elevations of 5,000 to 6,000 ft. Host plants are *Streptanthus bernardinus* and *Arabis holboellii* var. *pinetorum*; larval foodplant is *Descurainia richardsonii*.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Delhi Sands Flower–loving Fly (*Rhaphiomidas terminatus abdominalis*)	E/–/–	Found within 12 distinct locations within the cities of Colton, Rialto, and Fontana. Only found in areas with Delhi sands and is typically associated with the following native plants: California Buckwheat (*Eriogonum fasciculatum*), Telegraph Plant *(Heterotheca grandiflora*), and California Croton (*Croton californica*). Low tolerance to disturbances.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Riverside Fairy Shrimp (*Streptocephalus woottoni*)	E/-/-	Restricted to deep seasonal vernal pools, vernal pool–like ephemeral ponds, and stock ponds as well as other human-modified depressions. Species prefers warm water pools that have low to moderate dissolved solids, are less predictable, and remain filled for extended periods of	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
		time. Basins that support Riverside fairy shrimp are typically dry a portion of the year but usually filled by late fall, winter, or the spring rains. All known habitat lies within annual grasslands, which may be interspersed through chaparral or coastal sage scrub vegetation. In Riverside County, found in pools formed over the following soils: Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils.		
Fish				
Santa Ana Sucker (*Catostomus santaanae*)	T/CSC/-	Previously found in the Los Angeles, San Gabriel, and Santa Ana river systems of Southern California. Most streams are fairly small and shallow, with currents ranging from swift to sluggish. Streams are subject to periodic severe flooding. Species is abundant where waters are cool and unpolluted, though it can occur where waters are fairly turbid. Often occurs where boulders, rubble, and sand are the main bottom materials. Associated with growths of filamentous algae and chara. The species feeds mostly on algae, especially diatoms, and detritus; small numbers of aquatic insect larvae are also taken, mostly by the larger individuals. Spawning takes place from early April to early July. The combination of early maturity, a protracted spawning period, and high fecundity allows Santa Ana Suckers to quickly repopulate streams following periodic severe floods, which can decimate the populations. Small tributaries of the Santa Ana River are potentially important spawning habitat.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Arroyo Chub (*Gila orcuttii*)	-/CSC/-	Occurs within warm, fluctuating streams and slow-moving sections of streams containing sandy or muddy bottoms. In Riverside County, occurs within Santa Ana and Santa Margarita River tributaries.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Santa Ana Speckled Dace (*Rhinichthys osculus* ssp. 3)	-/CSC/-	Formerly widespread in mountain portions of the Santa Ana, San Gabriel, and Los Angeles watersheds. Populations were scattered in foothill areas and rare in lowlands. This subspecies of speckled dace is assumed extirpated from most of the Santa Ana River. They were last seen in the Santa Ana River near Rialto in 2001.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Amphibians				
San Gabriel Slender Salamander (*Batrachoseps gabrieli*)	-/CSC/-	Only known to occur in the San Gabriel Mountains. Can be found hiding in moist places under rocks and in wood, fern fronds, and soils at the base of talus slopes. Occurs on talus slopes surrounded by conifer and montane hardwood species. It is found at elevations of 1,200–5,085 feet.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
California Red-legged Frog (*Rana aurora draytonii*)	T/CSC/-	This large frog inhabits the quiet pools of streams, marshes, and ponds up to about 4,920 feet in elevation. Adults feed on aquatic and terrestrial insects, snails, and a wide variety of other aquatic prey. Will also move up to 1 mile through riparian communities under wet conditions, such as rainfall. It prefers shorelines with extensive vegetation, and is probably very vulnerable to the introduction of exotic competitors such as bullfrogs (*Rana catesbeiana*), crayfish, and a variety of nonnative fish.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Southern Mountain Yellow-legged Frog (*Rana muscosa*)	E/E/-	Southern California population persists as remnants in small streams in the San Gabriel, San Bernardino, and San Jacinto Mountains. Species' historical elevation range was about 1,200–7,500 feet, with remaining populations only toward the upper end of that range. Inhabits varied lakes and streams but avoids the smallest streams. Shows a tendency toward open stream and lakeshores that slope gently for the first 2 to 3 inches of depth. Rarely found far from water, though data on movement and ability to recolonize sites are lacking.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Western Spadefoot (*Spea hammondii)*	-/CSC/-	Found primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools and seasonal ponds are essential for breeding and egg laying. It is found at sea level to 4,500 feet in elevation.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Reptiles				
Silvery Legless Lizard (*Anniella pulchra pulchra*)	-/CSC/-	Habitat is primarily areas with sandy or loose, loamy soils, under the sparse vegetation of beaches, chaparral, or pine-oak woodland or open, well-shaded terraces in mature riparian natural communities. Leaf litter is commonly present. Soil disturbances (e.g., from agriculture or mining) as well as requirements for soil moisture and relatively cool microclimates limit distribution and account, in part, for local decline and extirpation.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Southern California Legless Lizard (*Anniella stebbinsi*)	-/CSC/-	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation in broadleaved upland forest, chaparral, coastal dunes, and coastal scrub. Distinct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
California Glossy Snake (*Arizona elegans occidentalis*)	-/CSC/-	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular Ranges south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Orange-throated Whiptail *(Aspidoscelis hyperythra)*	-/CSC/-	Most California populations occur on or adjacent to floodplains or the terraces of streams that are in or by open sage scrub and chaparral communities. The presence of perennial shrubs appears to be important, with the most strongly associated species being California buckwheat (*Eriogonum fasciculatum*), chamise (*Adenostoma fasciculatum*), white sage (*Salvia apiana*), and black sage (*S. mellifera*). Termites are reported to constitute 57%–95% of the diet, and foraging microsites are primarily under shrubs in leaf litter.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Coastal Whiptail *(Aspidoscelis tigris stejnegeri)*	-/-/-	Habitats include a disturbed coastal sage scrub-chaparral mix and cleared areas of chaparral with a sandy/rocky substrate.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Southern Rubber Boa *(Charina umbratica*)	-/T/-	Limited to San Bernardino and San Jacinto Mountains. Occurs in a variety of montane forest habitats and montane chaparral and wet meadow habitats. Typically found near streams or wet meadows. Species requires moist, loose soil for burrowing. Has also been known to find cover in rotting logs.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
San Diego Banded Gecko (*Coleonyx variegatus abbotti*)	-/CSC/-	Found in granite or rocky outcrops in coastal scrub and chaparral habitats.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Red-diamond Rattlesnake *(Crotalus ruber*)	-/CSC/-	Occurs as far north as Puente Hills in Yorba Linda and as far south as Loreto in Baja California, Mexico. Occurs within chaparral, woodland, grassland, and desert areas. Prefers boulders and rock outcrops in areas of heavy brush, such as chamise chaparral.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
San Bernardino ringneck snake (*Diadophis punctatus modestus*)	-/SA/-	Most common in open, relatively rocky areas. Often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous vegetation.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Western Pond Turtle (*Emys marmorata*)	-/CSC/-	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6,000 feet. Needs basking sites and suitable (e.g., sandy banks or grassy open fields) upland habitat up to 0.5 kilometer from water for egg laying.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Coast Horned Lizard (*Phrynosoma blainvillii*)	-/CSC/-	Found in arid and semi-arid climates in chaparral and coastal sage scrub, primarily below 2,000 feet in elevation. Critical factors are loose soils with a high percentage of sand; an abundance of native ants or other insects, especially harvester ants (*Pogonomyrmex* spp.); and the availability of both sunny basking spots and dense cover for refuge.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Coast Patch-nosed Snake (*Salvadora hexalepis virgultea*)	-/CSC/-	Brushy or shrubby vegetation in coastal Southern California scrub. Requires small mammal burrows for refuge and overwintering sites.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Two-striped Garter Snake (*Thamnophis hammondii*)	-/CSC/-	It is often in water and rarely found far from it, though it is also known to inhabit intermittent streams having rocky beds bordered by willow thickets or other dense vegetation. It will also inhabit large riverbeds if riparian vegetation is available and even occur in artificial impoundments if both aquatic vegetation and suitable prey (small amphibians and fish) are present.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Birds				
Cooper's Hawk (*Accipiter cooperii*)	-/WL/-	This medium-sized hawk specializes in hunting small birds in closed quarters. The species is now a locally common breeder throughout the Los Angeles Basin in residential and even urban habitats if tall trees are present.	Breeding: HP Migrants/ Foraging: HP	Potential breeding habitat is present in the ornamental trees; potential foraging habitat is present throughout the BSA.
Tricolored Blackbird (*Agelaius tricolor*)	-/CSC/-	Range is restricted to the Central Valley and surrounding foothills throughout coastal and some inland localities in Southern California; also scattered sites in Oregon, western Nevada, central Washington, and western coastal Baja California. Breeds in dense colonies and may travel several kilometers to secure food for nestlings; males defend small territories within colonies and mate with one to four females. They are itinerant breeders, nesting more than once at different locations during the breeding season.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Southern California Rufous-crowned Sparrow (*Aimophila ruficeps canescens*)	-/WL/-	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Bell's Sage Sparrow (*Artemisiospiza belli belli*)	-/WL/-	Typically found in chaparral, sagebrush, and other open habitat with shrubs. A casual transient along the coast of Southern California.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Burrowing Owl (*Athene cunicularia*)	-/CSC/-	Inhabits open, dry, and nearly or quite level grassland. Prairie, the desert floor, and shrubland should be considered potential habitat if shrub cover is below 30%. In coastal Southern California, a substantial fraction of the birds are found in microhabitats that have been highly altered by man, including flood control and irrigation basins, dikes, and banks; abandoned fields surrounded by agriculture; and road cuts and margins. Strong association between burrowing owls and burrowing mammals, especially ground squirrels (*Spermophilus* spp.); however, they also occupy man-made niches such as banks and ditches, piles of broken concrete, and even abandoned structures.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Oak Titmouse (*Baeolophus inornatus*)	-/SA/-	Cavity nester found in oak woodlands.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Ferruginous Hawk (*Buteo regalis*)	-/WL/-	This large relative of the common red-tailed hawk is primarily a winter visitor to California, with the bulk of its breeding range in the Great Basin to the east. Small numbers breed in the northeast corner of the state. Ferruginous hawks feed on a variety of prey but mostly small mammals, hunting in open country from low perches.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Swainson's Hawk (*Buteo swainsoni*)	-/T/-	This slim relative of the common red-tailed hawk nests today primarily in low-intensity agricultural areas of the western United States, migrating through Central America to Argentina and Brazil each fall and spring.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Western Yellow-billed Cuckoo (*Coccyzus americanas occidentalis*)	FC/E/-	Only a handful of tiny populations remain in all of California today. Losses are tied to the obvious loss of nearly all suitable habitat, but other factors may also be involved. Relatively broad, well-shaded riparian forests are utilized, although it tolerates some disturbance. A specialist to some degree on tent caterpillars, with a remarkably fast development of young covering only 18 to 21 days from incubation to fledging.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Southwestern Willow Flycatcher (*Empidonax traillii extimus*)	E/E/-	Highly restricted distribution in Southern California as a breeder. It occupies extensive riparian forests, wet meadows, and lower montane riparian habitats, primarily below 4,000 feet. Occurs in riparian habitats along rivers, streams, or other wetlands where dense growths of willows (*Salix* spp.), *Baccharis* spp., Arrowweed (*Pluchea* spp.), buttonbush (*Cephalanthus* spp.), tamarisk (*Tamarix* spp.) Russian olive (*Eleagnus* spp.), or other plants are present, often with a scattered overstory of cottonwood (*Populus* spp.).	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
California Horned Lark (*Eremophila alpestris actia*)	-/WL/-	Breeds throughout coastal California and the San Joaquin Valley. This small bird breeds in bare and short-grass areas in open grassland, desert washes, wetland edges, areas above the tree line in mountains, along dirt roads and other disturbed areas, and even in recently burned areas. It is well adapted to certain types of human disturbance, such as agriculture and cattle grazing, though it cannot tolerate intensive activity at the nest site, which is located directly on the ground.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Merlin (*Falco columbarius*)	-/WL/-	Clumps of trees or windbreaks are required for roosting in open country. Found within estuaries, Great Basin grassland, valley and foothill grassland, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, and farms and ranches.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Bald Eagle (*Haliaeetus leucocephalus*)	D/E,CFP/-	Primarily in or near sea coasts, rivers, swamps, and large lakes. Eats mainly fish and carrion. Formerly nested locally along the coast of Southern California. This species is a localized winter resident and rare migrant, with only very rare breeding efforts in coastal Southern California (e.g., Lake Skinner, Riverside County).	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Yellow-breasted Chat (*Icteria virens*)	-/CSC /-	Nests in low thickets in dense riparian habitats. It eats a variety of invertebrates. It is a local and uncommon breeder and rare migrant across Southern California.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Loggerhead Shrike (*Lanius ludovicianus*)	-/ CSC /-	Found as a common resident and winter visitor throughout California in lowland and foothill habitats where it frequents open areas with sparse shrubs and trees.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Coastal California Gnatcatcher (*Polioptila californica californica*)	T/CSC/-	Generally prefers open sage scrub with California sagebrush (*Artemisia californica*) as a dominant or co-dominant species. Nest placement typically in areas with less than 40% slope gradient. Monogamous pairs tend to stay in the same locale. Both parents build the nest, incubate, and care for young.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Yellow Warbler (*Setophaga petechia*)	-/CSC/-	Nests in the upper story of riparian habitats in Southern California. It is also a common, widespread migrant in spring and fall, occupying a wide variety of habitats at that time.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Lawrence's Goldfinch (*Spinus lawrencei*)	-/WL/-	Nests in open oak or other arid woodland and chaparral near water. Nearby herbaceous habitats used for feeding. Closely associated with oaks.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Least Bell's Vireo (*Vireo bellii pusillus*)	E/E/-	Found as a summer resident of Southern California where it inhabits low riparian growth in the vicinity of water or dry river bottoms below 2,000 feet. Species selects dense vegetation low in riparian zones for nesting, most frequently in riparian stands between 5 and 10 years old. When mature riparian woodland is selected, vireos nest in areas with a substantial robust understory of willows as well as other plant species.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Mammals				
Pallid Bat (*Antrozous pallidus*)	-/CSC/-	Throughout Southern California, from coast to mixed conifer forest, grassland, shrubland, woodland, and forest habitats. Most common in open, dry habitats with rocky areas for roosting; year-long resident in most of range. The species is not thought to migrate; therefore, maternity colonies and winter roosts are expected to occur in the vicinity of each other. Roost sites are rock crevices, old buildings, bridges, caves, mines, and hollow trees.	HP	Potentially suitable habitat is present within bridge crevices and openings in the BSA.
Northwestern San Diego Pocket Mouse (*Chaetodipus fallax fallax*)	-/CSC/-	Sandy herbaceous areas, usually in association with rocks and course gravel in southwest California, including coastal and desert border areas in San Bernardino, Riverside, and San Diego Counties. Elevation ranges from sea level to 6,000 feet. Vegetation community preferences include sage scrub, chamise-redshank chaparral, mixed chaparral, sage brush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, annual grassland.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Pallid San Diego Pocket Mouse (*Chaetodipus fallax pallidus*)	-/CSC/-	Found on the margins of the Mojave Desert, the slopes of the San Bernardino Mountains, and the edge of the Colorado Desert, ranging south to Mexico. Species prefers chaparral but will occur in open sandy areas.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
San Bernardino Kangaroo Rat (*Dipodomys merriami parvus*)	E/CSC/-	Prefers soils of sandy loam, occasionally sandy gravel, in open to moderately shrubby habitats, especially intermediate seral stages of alluvial fan sage scrub up to 1,970 feet from active channels.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Stephens' Kangaroo Rat (*Dipodomys stephensi*)	E/T/-	Stephens' kangaroo rat is found almost exclusively in open grasslands or sparse shrublands with cover of less than 50% during the summer. Species avoids dense grasses (e.g., nonnative bromes [*Bromus* spp.]) and is more likely to inhabit areas where annual forbs disarticulate in the summer and leave more open areas. Soil type also is an important habitat factor. As a fossorial (burrowing) animal, the species typically is found in sandy and sandy loam soils with a low clay-to-gravel content, although there are exceptions where it can utilize the burrows of Botta's pocket gopher (*Thomomys bottae*) and California ground squirrel (*Spermophilus beecheyi*). Tends to avoid rocky soils. Slope is a factor in occupation; tends to use flatter slopes (i.e., < 30%) but may be found on steeper slopes in trace densities (i.e., < 1 individual per hectare). Furthermore, the species may use steeper slopes for foraging but not for burrows. In general, the highest abundances of species occur on gentle slopes of less than 15%.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Western Mastiff Bat (*Eumops perotis californicus*)	-/CSC/-	Found throughout the coastal lowlands up to drier mid-elevation mountains; avoids the Mohave and Colorado Deserts. Habitats include dry woodlands, shrublands, grasslands, and occasionally even developed areas. This big bat forages in flight, primarily taking insects of the order Hymenoptera (bees, wasps, and ants). Most prey species are relatively small, low to the ground, and weak-flying. For roosting, appears to favor rocky, rugged areas in lowlands where abundant suitable crevices are available for day roosts. There appears to be little use of night roosts. Roost sites may be in natural rock, tall buildings, large trees, or elsewhere but must be at least 2 inches wide and 12 inches deep, narrowing to, at most, 1 inch at the upper end. Nursery roosts must be deeper yet. All roosts open well up on a cliff or other steep face, at least 10 feet vertically above the substrate, to allow flight from the roost. Roosts may be communal (with up to 100 individuals) or solitary but commonly include other species of bats. This species appears to not migrate but performs seasonal movements.	HP	Potentially suitable habitat is present within bridge crevices and openings in the BSA.
San Bernardino Flying Squirrel (*Glaucomys sabrinus californicus*)	-/CSC/-	Known from black oak– or white fir–dominated woodlands between 5,200–8,500 feet in the San Bernardino and San Jacinto Mountains. May be extirpated from San Jacinto Mountains. Need cavities in trees/snags for nests and cover. Needs nearby water.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
Western Yellow Bat (*Lasiurus xanthinus*)	-/CSC/-	Some populations may be migratory, although some individuals appear to be present year-round. Species probably does not hibernate. Associated with water features in open grassy areas and scrub as well as canyon and riparian situations. Thought to be noncolonial. Individuals usually roost in trees, hanging from the underside of a leaf, and are commonly found in the southwestern U.S. roosting in the skirt of dead fronds in both native and nonnative palm trees.	HP	Potentially suitable habitat is present within palm trees and other trees in the BSA.
San Diego Black-tailed Jackrabbit (*Lepus californicus bennettii*)	-/CSC/-	Common throughout state, except at high elevations in herbaceous and desert shrub areas, sage scrub, grasslands, open chaparral, and woodland/forest areas; relatively disturbance tolerant.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
San Diego Desert Woodrat (*Neotoma lepida intermedia*)	-/CSC/-	Dry and/or sunny shrublands, especially areas with cacti and abundant rocks and crevices (but not required). Does not require a source of drinking water. Sage scrub communities are frequently occupied.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Pocketed Free-tailed Bat (*Nyctinomops femorosaccus*)	-/CSC/-	Rarely found in southwestern California. Found in southeastern deserts of California, with portions of western Riverside County apparently on the periphery of its range. Species roosts in high rock crevices and on bridges, roofs, buildings, and cliffs. Forages primarily on large moths, especially over water. Habitats are arid.	HP	Potentially suitable habitat is present within bridge crevices and openings in the BSA.
Southern Grasshopper Mouse (*Onychomys torridus ramona*)	-/CSC/-	Wide variety of dry to moderately dry scrub, grassland, and woodland habitats across Southern California, exclusive of the more mesic coastal areas from Ventura County north.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
White-eared Pocket Mouse (*Perognathus alticolus alticolus*)	-/CSC/-	Known only to occur in the western portion of the San Bernardino Mountains, at high altitudes from approximately 3,400–6,000 feet. It is found in sage brush and other shrubs in open yellow-pine forest where bracken fern grows and pinyon-juniper woodland habitat; also chaparral and sage scrub areas. Most common on northern slopes of San Bernardino and San Gabriel Mountains. Habitat consists of north-facing slopes within chaparral and sage scrub habitats.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.
Los Angeles Pocket Mouse (*Perognathus longimembris brevinasus*)	-/CSC/-	Habitat requirements for this subspecies are poorly known. It inhabits areas of open ground but prefers fine sandy soils (for burrowing). Is also found commonly on gravel washes and stony soils, within brush and woodland habitats. It is rarely found on sites with a high cover of rocks.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

Common/ Scientific Name	Status[a] Fed/State/ CNPS	Species Requirements	Specific Habitat[b] Present/ Absent	Rationale
American Badger (*Taxidea taxus*)	-/CSC/-	Associated with large grassland and sparse sage scrub habitats. Occupies large dens/burrows and forages on small mammals (e.g., ground squirrels, rabbits), snakes, birds, and insects.	HA	No suitable habitat is present within the BSA. This species is not expected to occur. No further constraint is present.

[a] Status Codes

Federal

E = Federally listed; Endangered
PE = Proposed Endangered
T = Federally listed; Threatened
FC = Federal Candidate for Listing
FSC = Federal Species of Concern
D = Delisted

State

T = State listed; Endangered
E = State listed; Threatened
SC = State Candidate for Listing
R = Rare (Native Plant Protection Act)
CSC = California Species of Special Concern
SA = California Special Animal
CFP = California Fully Protected Species
WL = Watch List

CNPS

1A = Plants that are presumed extinct in California
1B = Plants that are rare, threatened, or endangered in California and elsewhere
2 = Plants that are rare, threatened, or endangered in California but more common elsewhere
3 = Plants about which we need more information
4 = Limited distribution (Watch List)
0.1 = Seriously endangered in California
0.2 = Fairly endangered in California
0.3 = Not very endangered in California

CNDDB = Vegetation communities classified as depleted

[b] Habitat Presence/Absence Codes

P = The species is present
HP = Habitat is or may be present. The species may be present
HA = No habitat present, and no further work needed
A = This species is absent

several additional species discussed in the supplemental NES/MI that were not discussed in the original 2006 NES/MI or adopted 2011 EA/FONSI. These species are discussed below. All avoidance and minimization measures from the adopted 2011 EA/FONSI have been updated to account for these additional species and ensure that all measures are consistent with current standard practices. These species and updated measures are discussed below.

Consistent with the original project NES/MI (2006) and adopted 2011 EA/FONSI, suitable wildlife habitat in the BSA is limited to nonnative ornamental trees and the Mount Vernon Avenue Bridge. The potential for wildlife in the BSA is limited primarily to the bat and bird roosting and nesting habitat that exists at the bridge and in the ornamental vegetation within the BSA (e.g., palm trees). Bridge hinges and pier rafters may provide nesting and/or roosting habitat for bats and birds, and bridge/pier surfaces may serve as potential nesting habitat for birds. Trees may provide both nesting and roosting habitat for bats and birds. No wildlife was observed during supplemental field surveys. Wildlife observed during the 2006 surveys included American crow (*Corvus brachyrhynchos*), house sparrow (*Passer domesticus*), California ground squirrel (*Spermophilus beecheyi*), and painted lady (*Vanessa cardui*).

Cooper's Hawk

Cooper's hawk (*Accipiter cooperii*) is a medium-sized hawk that specializes in hunting small birds in close quarters. It is a CDFW Watch List species (California Watch List species are species that were once California Species of Special Concern but no longer merit such status; they are monitored for additional information to clarify status). This species is a locally common breeder in residential and even urban habitats throughout Southern California if tall trees are present.

Although no Cooper's hawk were observed during original or supplemental field visits, the species is known to occur in the project region and may use the ornamental trees in the BSA for nesting. Therefore, it has the potential to occur in the BSA.

Western Yellow Bat

Western yellow bat (*Lasiurus xanthinus*), a CDFW Species of Special Concern, is a solitary tree-roosting bat that may be migratory or present year-round throughout Southern California, although little information is known about its range. This species is typically associated with water features in open grassy areas and scrub as well as canyons and riparian habitats. Individuals usually roost in trees, hanging from the underside of leaves. They are commonly found in the southwestern United States, roosting in a skirt of dead palm fronds in native or nonnative palm trees.

Suitable roosting habitat is present within the BSA in the large palm trees. The potential exists for this species to roost in these trees as migrants or year-round inhabitants.

Crevice-Dwelling Species

Crevice-dwelling species, such as some bat and bird species, are known to use bridge hinges and joints for roosting, nesting, and rearing young. Bridge crevices, which provide shelter for these species in the absence of natural crevice habitat, are commonly used by a variety of crevice-dwelling species. Crevice-dwelling species with potential to occur in the BSA, and

designated as CDFW species of special concern, include pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and various bird species (e.g., swifts and swallows).

The existing bridge joints/hinges within the bridge may provide roosting or nesting habitat for crevice-dwelling species such as bats and birds. Because of the level of traffic and disturbance in the area, as well as the disturbed and urban nature of the BSA, the potential for these species to occur is low to moderate. Although there is low to moderate potential for these species to occur at the bridge, some species are well adapted to disturbance and may have higher potential to occur.

2.3.4.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Cooper's Hawk

The potential exists for direct and indirect impacts during construction. Direct impacts could result from the removal of occupied trees (i.e., active nesting sites) or construction noise, which could physically harm individuals. Indirect impacts generally are further removed in time or distance. These include activities and disturbances that may cause a species to avoid the BSA and/or interfere with reproduction or foraging. Measure **BIO-1** listed below would ensure that project impacts would be avoided and minimized to the greatest extent possible.

Western Yellow Bat

Direct or indirect disturbance during construction, in the form of tree disturbance, tree removal, or noise adjacent to trees, may affect this species. Measure **BIO-2** listed below would ensure that project impacts would be avoided and minimized to the greatest extent possible.

Crevice-Dwelling Species

During construction, removal of the bridge has the potential to directly affect species that may be roosting or nesting within the bridge joints and hinges, potentially causing direct mortality to any species that may be present. Measures **BIO-3** and **BIO-4** would ensure that project impacts would be avoided and minimized to the greatest extent possible.

No-Build Alternative

Cooper's Hawk

The No-Build Alternative would not modify existing conditions and, as such, would not result in impacts on the Cooper's Hawk.

Western Yellow Bat

The No-Build Alternative would not modify existing conditions and, as such, would not result in impacts on the Western Yellow Bat.

Crevice-Dwelling Species

The No-Build Alternative would not result in impacts on crevice-dwelling species or potentially suitable habitat. If the bridge ultimately has be closed to pedestrian and vehicular traffic, this could eventually result in removal of the bridge, which could result in impacts on crevice-dwelling species if they are present.

2.3.4.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

All avoidance and minimization measures previously identified in the adopted 2011 EA/FONSI for impacts on animal species have been updated to ensure that all measures are consistent with current standard practices.

BIO-1 Within 7 days prior to the commencement of construction activities (if between January 15 and September 1), a qualified biologist shall perform a nesting bird survey that will consist of one site visit to determine whether there are active songbird nests within 200 feet of the project footprint and raptor nests within 500 feet of the project footprint. This survey shall also identify the species, and to the degree feasible, nesting stage (e.g., incubation of young, feeding of young, near fledging). Nests shall be mapped (not by using GPS because close encroachment may cause nest abandonment). If active nests are found, construction shall not occur within 200 feet of the songbird's nest or within 500 feet of a raptor's nest, or within an appropriate buffer established by the qualified biologist, until the nesting attempt has been completed and/or abandoned because of non-project-related reasons. The qualified biologist can subsequently reduce this buffer based on professional experience related to observations of behavior and specific construction activities occurring near the nest.

BIO-2 To avoid impacts on any bats that may be roosting in palm trees within the project area, all direct impacts on palm trees shall be avoided during construction, and highly vibrative and/or noisy work shall be avoided near palm trees. If it is not possible to avoid direct impacts (e.g., tree removal, tree disturbance, tree trimming) or indirect impacts (e.g., noise, vibrations near trees) on palm trees, a qualified bat biologist shall survey the trees (e.g., conduct acoustic nighttime surveys) prior to disturbance to determine whether bats are roosting in the trees. If bats are found to be present, the bat biologist shall monitor construction activities to ensure that no bats are affected during construction. The qualified bat biologist may also provide other avoidance measures to ensure that all impacts on this species are avoided and minimized.

BIO-3 A qualified bat biologist who is familiar with crevice-dwelling bat and bird species shall survey the project disturbance limits and Mount Vernon Avenue Bridge in June, prior to construction, to assess the potential for the bridge's use for bat roosting, bat maternity roosting, and bird roosting/nesting because maternity roosts and nests are generally formed in spring. The qualified bat biologist shall also perform pre-construction surveys within two weeks prior to construction because bat and bird roosts can change seasonally. These surveys will include a combination of structure inspections, exit counts, and acoustic surveys.

BIO-4 If recommended by the qualified bat biologist, to avoid indirect disturbance of bats and birds while roosting in areas that would be subject to, or adjacent to, impacts from construction activities, any portion of the structure that is deemed by a qualified bat biologist to have the potential bat or bird roosting habitat and may be affected by the proposed project shall have temporary bat and bird eviction and exclusion devices installed under the supervision of a qualified and permitted bat biologist prior to the

initiation of construction activities. Eviction and subsequent exclusion will be conducted during the fall (September or October) to avoid trapping flightless young bats inside during the summer months or hibernating/overwintering individuals during the winter. Such exclusion efforts are dependent on weather conditions, take a minimum of two weeks to implement, and must be continued to keep the structures free of bats and birds until the completion of construction. All eviction and/or exclusion techniques shall be coordinated between the qualified bat biologist and the appropriate resource agencies (e.g., CDFW).

2.3.5 Threatened and Endangered Species

2.3.5.1 REGULATORY SETTING

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC) Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA) (and the Department, as assigned), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement or a Letter of Concurrence. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

2.3.5.2 AFFECTED ENVIRONMENT

Information used in this section is based on the approved *Mount Vernon Avenue NES/MI*, approved in August 2017 (Caltrans 2017d). The information related to biological resource in the adopted 2011 EA/FONSI has been updated to reflect current site conditions, and that information is presented in this section.

An unofficial USFWS Information, Planning, and Conservation (IPaC) System species list (USFWS 2017) was obtained on July 13, 2017. An updated USFWS species list was obtained on February 14, 2018 and August 6, 2018. Copies of the species lists are included in Section

3.1.3.1. According to the IPaC list and the 2018 USFWS species lists, there is no critical habitat within the project area. A species list was not obtained from NOAA Fisheries Service. The project site, which is outside the NOAA Fisheries Service jurisdictional boundary, lies in a highly disturbed urban location where habitat is marginal for special-status species. Furthermore, none of the species that are under the jurisdiction of NOAA Fisheries Service are on the IPaC species list, dated July 13, 2017, that was obtained from the Carlsbad-Palm Springs field office. For this reason, a species list was not requested from NOAA Fisheries Service.

The IPaC list and the 2018 USFWS species lists, in addition to the nine-quadrangle CNDDB and CNPS lists, provided the federally listed as threatened, endangered, or candidate species listed below, which were incorporated into the effect analysis for the proposed project.

Threatened and Endangered Plant Species

Eight federally and/or state-listed as endangered or threatened plant species are known to occur in the study region: San Diego ambrosia (*Ambrosia pumila*), Nevin's barberry (*Berberis nevinii*), thread-leaved brodiaea (*Brodiaea filifolia*), salt marsh bird's-beak (*Chloropyron maritimum* ssp. *Maritimum*), slender-horned spineflower (*Dodecahema leptoceras*), Santa Ana River woollystar (*Eriastrum densifolium* ssp. *Sanctorum*), Gambel's water cress (*Nasturtium gambelii*), and Brand's star phacelia (*Phacelia stellaris*). Table 2-40 provides a list of all special-status plants, including federally and/or state-listed species, reviewed for the project, along with a summary of the habitat requirements for each species. A "no effect" determination under the FESA is proposed for all of the above-listed species.

Threatened and Endangered Animal Species

Nine federally and/or state-listed as endangered or threatened animal species are known to occur in the study region: Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*), Riverside fairy shrimp (*Streptocephalus woottoni*), Santa Ana sucker (*Catostomus santaanae*), California red-legged frog (*Rana aurora draytonii*), southern mountain yellow-legged frog (*Rana muscosa*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), California gnatcatcher (*Polioptila californica californica*), and least Bell's vireo (*Vireo bellii pusillus*). Table 2-41 provides a list of all special-status animal species, including federally and/or state-listed animal species, reviewed for the project, along with a summary of the habitat requirements for each species.

Based on the highly disturbed urban location, there is no potential for these listed species to occur within the project BSA. A "no effect" determination under the FESA is proposed for all of the above-listed species.

2.3.5.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

Because there is no potential for these listed species to occur within the project BSA, no listed species are anticipated to be affected, either directly or indirectly, and no critical habitat is present. A "no effect" determination under the FESA is proposed for all of the above-listed species. Impacts are the same as those described in the adopted 2011 EA/FONSI.

No-Build Alternative

Under the No-Build Alternative, no impacts on threatened and endangered plant or animal species would occur.

2.3.5.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

No listed plants or animal species were found; therefore, no avoidance and minimization measures are necessary. No compensatory mitigation is necessary.

2.3.6 Invasive Species

2.3.6.1 REGULATORY SETTING

On February 3, 1999, President William J. Clinton signed Executive Order (EO) 13112 requiring federal agencies to combat the introduction or spread of invasive species in the United States. The order defines invasive species as "any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health." Federal Highway Administration (FHWA) guidance issued August 10, 1999 directs the use of the State's invasive species list, maintained by the California Invasive Species Council to define the invasive species that must be considered as part of the National Environmental Policy Act (NEPA) analysis for a proposed project.

2.3.6.2 AFFECTED ENVIRONMENT

Information used in this section is based on the approved *Mount Vernon Avenue NES/MI*, approved in August 2017 (Caltrans 2017d). The information related to biological resources in the adopted 2011 EA/FONSI has been updated to reflect current site conditions, and that information is presented in this section.

Seeds of invasive species can be transported to natural open space areas through a variety of mechanisms, including vehicles. Recurring fires can encourage the establishment of invasive species and so can some forms of routine land maintenance (e.g., disking). The impact invasive species have on Southern California native vegetation communities, as well as the plants and animals that are found within these areas, is, in some circumstances, catastrophic. Therefore, a need exists to identify and recommend measures that reduce and/or avoid further transport of invasive species into natural open space areas. Because this project is federalized, Executive Order 13112 is triggered, which states that federal agencies are required to combat the introduction or spread of invasive species in the United States.

Invasive plant species occur within the BSA as ornamental landscape vegetation and ruderal vegetation in barren areas (i.e., empty lots). Invasive plant species observed within the BSA included Mexican fan palm (*Washingtonia robusta*), Peruvian pepper tree (*Schinus molle*), and nonnative grasses (e.g., *Avena* sp., *Bromus* sp.) (California Invasive Plant Council 2017).

2.3.6.3 ENVIRONMENTAL CONSEQUENCES

Build Alternative (Preferred Alternative)

During construction activities, construction vehicles and equipment could transport invasive plant species from past work sites to the project area or between work areas within the study area. After construction is complete, areas left as bare ground could create favorable conditions for invasive plants and promote the spread of these species. Invasive plant species could also spread to open space areas adjacent to the limits of disturbance including at the Santa Ana River. Impacts on natural open space from the introduction of invasive species would be considered potentially adverse under NEPA. In compliance with Executive Order 13112, weed control would be performed to minimize the importation of nonnative plant material during and after construction. Eradication strategies would be employed should an invasion occur.

Implementation of the avoidance and minimization measures **BIO-5** and **BIO-6** would ensure that any potential indirect impacts from the introduction of invasive species during construction would be avoided and/or minimized.

No-Build Alternative

The No-Build Alternative is not expected to add impacts from invasive species because it would not change existing conditions.

2.3.6.4 AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

All avoidance and minimization measures previously identified in the adopted 2011 EA/FONSI for invasive species, with the exception of **BIO-7**, have been updated to ensure that all measures are consistent with current standard practices. Measure **BIO-7** from the adopted 2011 EA remains as **BIO-7**.

BIO-5 Inspection and cleaning of construction equipment shall be performed to minimize the importation of nonnative plant material. Eradication strategies (i.e., weed control) shall be implemented should an invasion of nonnative plant species occur.

BIO-6 After construction, species that have been listed as having a high or moderate rating on the California Invasive Plant Council's California Invasive Plant Inventory shall not be planted in any revegetated areas (California Invasive Plant Council 2006).

BIO-7 Trucks with loads carrying vegetation shall be covered and vegetative materials removed from the site shall be disposed of in accordance with all applicable laws and regulations.

2.4 Cumulative Impacts

2.4.1 Regulatory Setting

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of the proposed project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

A definition of cumulative impacts under the National Environmental Policy Act (NEPA) can be found in 40 Code of Federal Regulations (CFR) Section 1508.7.

Methodology

Caltrans, in conjunction with FHWA and U.S. EPA, developed a guidance document titled *Guidance for Preparers of Cumulative Impact Analysis* (2005). The discussion below is based on the referenced guidance.

As specified in the guidance, if a proposed project will not cause direct or indirect impacts on a resource, it will not contribute to a cumulative impact on that resource. Furthermore, it is identified in the guidance that the cumulative impact analysis should focus only on: 1) those resources significantly impacted by the project; or 2) resources currently in poor or declining health or at risk even if the project impacts are relatively small. Therefore, it need not be included in the evaluation of potential cumulative impacts. As discussed at the beginning of Chapter 2, or in the related sections of Chapter 2 of this environmental document, the proposed project will not result in direct or indirect impacts, or would result in minor impacts, on the following resources; therefore, no discussion is provided for these resources in the evaluation of potential cumulative impacts:

- Coastal Zone
- Wild and Scenic Rivers
- Sole Source Aquifers
- Encroachment on State Lands
- Land Use

- Parks and Recreation Facilities
- Farmlands/Timberlands
- Growth
- Floodplains
- Traffic and Transportation/Pedestrian and Bicycle Facilities
- Air Quality
- Noise
- Natural Communities
- Wetlands and Other Waters
- Plant Species
- Animal Species
- Threatened and Endangered Species
- Invasive Species

Resources Evaluated for Potential Cumulative Impacts

The following discussion of potential cumulative impacts is organized by environmental resource area:

- Community Impacts
- Environmental Justice
- Relocations and Real Property
- Utilities and Emergency Services
- Visual Impacts
- Cultural Resources
- Water Quality and Stormwater Runoff
- Geology/Soils/Seismicity
- Paleontology
- Hazardous Waste/Materials

Future development trends near the project site in the city of San Bernardino are listed in Table 2-1 and shown in Figure 2-2. As can be seen, future development near the project site consists of a variety of land uses, from residential to commercial, indicative of the variety of land use designations in the surrounding area.

2.4.1.1 COMMUNITY IMPACTS

The resource study area (RSA) for community impacts includes the populations and communities that are most likely to experience potential adverse effects from the physical improvement associated with the proposed project. This includes Census Tract 49, Block Groups 2 and 4, located within the city of San Bernardino (refer to Figure 2-3, Community Study Area).

There are two planned projects within this RSA. The first project is construction of the 6,365-square-foot La Nueva Copa Cabana restaurant and night club (Site ID #1); the second project is an extension to the existing Pepe's Night Club (Site ID #2).

Construction effects on community character and cohesion under the proposed project would be the same as under the previously adopted 2011 EA/FONSI, except that the limits of construction have been expanded and the duration of construction would be longer (32 months compared with 24 months). The disruptions would stem primarily from construction-related traffic changes associated with trucks and equipment in the area; the bridge closure; partial and/or complete street and lane closures, some of which would require detours; increased noise and vibration; light and glare; and changes in air emissions. Although bridge closure would result in a temporary impact, free bus passes would be provided by the SBCTA, part of Measure **TR-2** from the adopted 2011 EA/FONSI, to maintain mobility for individuals (including both pedestrians and cyclists) affected by the bridge closure. Measures **R-1**, **R-2**, **EJ-1**, **UT-1**, and **UT-2**, in the adopted 2011 Final EA/FONSI, would still be applicable to the revised project and would be implemented. In addition to these measures, the Supplemental EA includes two new measures (**C-1** and **C-2**) that would be implemented to address issues related to maintaining access to properties during the construction period and development of a community outreach plan.

The two other planned projects are relatively minor in scale compared with the proposed project and not anticipated to result in additional community impacts. The impacts of the proposed project, in combination with impacts that could result from other reasonably foreseeable projects, would not result in adverse cumulative impacts on the community with implementation of the proposed avoidance and minimization measures.

2.4.1.2 RELOCATIONS AND REAL PROPERTY ACQUISITIONS

The RSA is the same as that described under Community Impacts. Under the proposed project, a total of 18 parcels would require TCEs, and 63 parcels would require permanent full acquisitions. Many of the parcels are either vacant or already owned by BNSF and, therefore, would not require relocation. However, 28 single-family residences, one multi-family residence (duplex), and one nonresidential unit (car wash) would be fully acquired under the proposed project and would require relocation. The two other planned projects in the study area would not result in a relocation or acquisition of property.

As part of project implementation, all acquisitions would be conducted in accordance with the federal Uniform Act and the California Relocation Act. In addition, the number of relocations would be a small percentage (3.7 percent) of the total number of households in the study area (771 households). Therefore, the proposed project, in combination with the other two planned projects in the RSA, would not result in an adverse cumulative effect.

2.4.1.3 ENVIRONMENTAL JUSTICE

The RSA for environmental justice includes the populations and communities that are most likely to experience potential adverse effects from the physical improvement associated with the proposed project. This includes Census Tract 49, Block Groups 2 and 4, located within the city

of San Bernardino (refer to Figure 2-3, Community Study Area). The Supplemental EA determined that the population within the study area includes environmental justice populations.

The technical analyses conducted for the project on air quality and noise indicate that no substantial adverse effects related to the areas of study are expected as a result of the proposed project, which is the same conclusion identified in the adopted 2011 EA/FONSI. However, these analyses do indicate that some potential temporary air quality and noise effects are expected during the construction period. The Supplemental EA includes measures **AQ-1** through **AQ-3** (refer to Section 2.2.5.4) and measures **N-2** and **N-3** (see Section 2.2.6.4) that would be incorporated into the project to avoid and minimize construction noise and air quality impacts.

The proposed project would result in vehicle and pedestrian detours during the construction period that could affect the environmental justice populations. Vehicle detours would affect equally both environmental justice populations within the study area as well as the general population within a few miles of the bridge. Pedestrian detours are more likely to affect environmental justice populations and those who rely on non-motorized travel within the study area. However, that is due to the proximity of those groups to the proposed project. Measures **TR-1** through **TR-4** would be incorporated into the project to avoid and minimize construction traffic impacts (refer to Section 2.1.8.4).

It is appropriate to conclude that, even though these groups could bear a large part of the burden associated with the proposed project, primarily due to their proximity to short-term construction activities, the community in general would be similarly affected. The bridge is an important part of both the local and regional circulation system. Consequently, local motorists and pedestrians from the immediate project area, as well as those traveling to and from the project area from elsewhere, would all be inconvenienced by traffic delays and other disruptions during the project construction period.

The City of San Bernardino, and subsequently SBCTA, instituted public involvement and community outreach efforts to ensure that issues of concern or controversy to environmental justice populations are identified and addressed where practicable as part of the project planning and development process as well as the environmental process. This may include, but not necessarily be limited to, additional community meetings, informational mailings, a project website, and news releases to local media. The community outreach and public involvement programs for the proposed project would seek to actively and effectively engage the affected community and include mechanisms to reduce cultural, language, and economic barriers to participation.

Of the permanent effects identified thus far in the supplemental technical studies, none are beyond those previously identified in the adopted 2011 EA/FONSI, with the exception of the temporary and permanent property acquisitions. However, as noted earlier, these impacts are not considered unavoidable adverse effects. As part of project implementation, all acquisitions would be conducted in accordance with the Uniform Act and the California Relocation Act. In addition, the number of relocations would be a small percentage (3.7 percent) of the total number of households in the study area (771 households). Therefore, the proposed project would not result in an adverse effect. All effects would be substantially minimized with implementation of

avoidance and minimization measures **R-1** through **R-3,** as identified in Section 2.1.5.4. Implementation of the proposed project would unquestionably have offsetting benefits that would accrue within the community. Residents, businesses, and visitors would be afforded a safer and more reliable bridge. A critical link in the local and regional circulation system would be restored, which could help stimulate social and economic redevelopment projects within the community.

The two other planned projects are relatively minor in scale compared with the proposed project and not anticipated to result in additional environmental justice impacts. The impacts of the proposed project, in combination with impacts that could result from other reasonably foreseeable projects, would not result in adverse cumulative impacts on environmental justice populations with implementation of the proposed avoidance and minimization measures.

2.4.1.4 UTILITIES/EMERGENCY SERVICES

The RSA for utilities/emergency services would be the same as described under Community Character and Cohesion. SBCTA would coordinate all utility relocation work with the affected utility companies to ensure minimal disruption to customers in the service area during construction. Temporary bridge closure during project construction would result in impacts on emergency services and/or public services/facilities. However, these impacts would be temporary and addressed through coordination with the service providers, implementation of a construction management plan, and implementation of a TMP. Coordination and management plans will be in place.

The two other planned projects are relatively minor in scale compared with the proposed project and not anticipated to result in additional impacts on utilities and emergency service providers. The impacts of the proposed project, in combination with impacts from the other two projects, would not result in adverse cumulative impacts with implementation of the proposed avoidance and minimization measures.

2.4.1.5 VISUAL/AESTHETICS

The RSA for visual impacts is defined as the area within 0.5 mile of the Mount Vernon Avenue Bridge right of way because 0.5 mile is typically the distance within which a visual change can be seen. At greater distances, visual change would be barely noticeable. The only notable visual change resulting from the proposed improvements/refinements would be related to acquisition and removal of existing residences and businesses located northwest of the rail yard, on the block bordered by Kingman Street, West 4th Street, Cabrera Avenue, and Mount Vernon Avenue and southwest of the rail yard on a half block bordered by Mount Vernon Avenue, an alley behind the structures, West 3rd Street, and West 2nd Street. The removal of residences and businesses on the northwest block and southwest half block would not greatly alter the visual character of the study area because rail facilities and local roadways already dominate the landscape. The conversion of these blocks constitutes a relatively small expansion compared with the overall scale of the existing facilities. However, sensitive residential and commercial receptors would see these changes and most likely view them negatively. The 12-foot-high block wall and 20-foot-wide landscape buffer along Kingman Street and Cabrera Avenue would improve project aesthetics by providing a vegetative buffer and visual relief from the rail yard for adjacent

residents. The measures identified in the in the 2009 VIAM and adopted 2011 EA/FONSI have been revised, and new measures (**VIS-1** through **VIS-4**) would be implemented to avoid or minimize visual impacts.

There are three other planned projects in the visual RSA (construction of 15,000-square-foot religious facility, an extension to an existing night club, and construction of new 6,365-square-foot night club). Construction of these projects would not greatly alter the visual character of the RSA because the RSA is a heavily developed urban area with similar commercial development already in the visual landscape. In addition, the projects are relatively small development projects. Cumulative impacts associated with visual quality are not considered to be adverse.

2.4.1.6 CULTURAL RESOURCES

The RSA for cultural resources is the cultural APE, discussed in Section 2.1.10, Cultural Resources. The probability of construction of the Build Alternative (Preferred Alternative) affecting buried cultural materials would be low. There would be no effect on the Atchison, Topeka & Santa Fe passenger and freight depot. The Build Alternative (Preferred Alternative) would demolish Mount Vernon Avenue Bridge, a historic property, which would constitute an adverse effect. However, the EA includes measures **CR-1** through **CR-6**, which are identified in the MOA and approved by SHPO, pursuant to Section 106 PA Stipulation XI and 36 CFR 800.6(a) and (b)(1) to mitigate effects on this historic resource. Construction of the two other planned projects in the APE are not anticipated to affect historic or cultural resources. With incorporation of measures **CR-1** through **CR-6**, potential adverse effects would be minimized. The proposed project, in combination with the other two planned projects, would not result in an adverse cumulative effect on cultural or historic resources.

2.4.1.7 WATER QUALITY AND STORMWATER RUNOFF

The RSA for the project is the Santa Ana River watershed. As shown in Table 2-1 and Figure 2-2, several projects are planned within city of San Bernardino limits. Continued development represents a continuation of the existing pattern of urban development, which has resulted in extensive modifications to watercourses. The area's watercourses have been channelized, and drainage systems have been constructed in response to urbanization and the associated impervious surface area that has been created. The projects being considered in the cumulative analysis related to hydrology and water quality include all planned developments that would discharge to the Santa Ana River Hydrologic Unit. Because cumulative water quality impacts are caused by projects that increase the amount of impervious area, as well as pollutant loads, cumulative development is considered to be the development of all available parcels with plans for development within the Santa Ana River Hydrologic Unit over an extended period of time.

The limits of disturbance for the proposed project are larger than the limits analyzed in the adopted 2011 EA/FONSI; therefore, the amount of impervious surface area that would be created would increase. However, cumulative impacts as a result of an increase in impervious surface area and a corresponding increase in runoff are unlikely. Drainage improvements would be designed in consultation with the appropriate agencies and would not substantially alter the existing conditions. Best management practices (BMPs) would be implemented, in compliance with National Pollutant Discharge Elimination System (NPDES) permit requirements, to

minimize the potential for project effects on water quality, including violation of any water quality standards or waste discharge requirements. The proposed project would be regulated under the City of San Bernardino Municipal Separate Storm Sewer System (MS4)/NPDES Permit, in accordance with the Clean Water Act. A stormwater pollution prevention plan, which will identify BMPs to address water quality effects on receiving waters resulting from surface water runoff from the project site, will be required as part of the general permit from the State Water Resources Control Board.

Construction of the bridge structure foundation may reach groundwater. Intermediate piers would be founded on larger-diameter pile shafts with steel casings, which would be driven into the ground and partially cleaned out (i.e., the soil inside the hollow steel casings would be removed to a specified depth). Pile shafts may extend below the groundwater elevation. If groundwater enters the steel casings, it would be removed, either by being displaced by the concrete that would form the pile foundation or by pumping the water out after first sealing the end of the casing against further intrusion.

New development and redevelopment within the RSA can increase urban pollutants in dry weather as well as stormwater runoff from project sites in wet weather. Each project must comply with NPDES permitting requirements and include BMPs to minimize impacts on water quality and local hydrology, in compliance with local ordinances and plans adopted to comply with the MS4 Permit, Drainage Area Master Plan (DAMP), and Local Implementation Plan (LIP) as well as other applicable regulatory permits (e.g., De Minimis Permit, Construction General Permit, Section 404 Permit, 401 Water Quality Certification, California Department of Fish and Wildlife Section 1602 Streambed Alteration Agreement). Each project in the RSA must consider the potential presence of impaired receiving waters and the annual total maximum daily load (TMDL). The TMDL program identifies all constituents that adversely affect beneficial uses of water bodies. It also identifies appropriate reductions for pollutant loads or concentrations from all sources so that the receiving waters can maintain/attain the beneficial uses found in the Basin Plan.

Regional programs and BMPs, such as TMDL programs, the DAMP/LIP, and the MS4 Permit, have been designed in anticipation of future urbanization within the region. Regional control measures contemplate the cumulative effects of proposed development. The requirements of these programs are intended to minimize the collective impacts of development on water quality. Because of these programs, water quality health in the watershed is considered to be improving.

The proposed project—and all proposed projects in the RSA—would be required to comply with the regulations that are in effect at the time the project is approved, or before construction permits are issued, thereby minimizing the water quality impacts of each project. Compliance with these regional programs and the Construction General Permit constitutes compliance with the programs that address cumulative water quality impacts. Therefore, the proposed project's contribution to cumulative hydrology and water quality impacts would be minimal when taking into account other planned and programmed projects in the RSA.

2.4.1.8 GEOLOGY/SOILS

The RSA includes the area within 0.5 mile of each side of the project. The cumulative projects include two small commercial projects (6,365-square-foot restaurant/nightclub and 15,000-square-foot religious facility) and a modest expansion to an existing nightclub. The proposed project, in conjunction with other planned projects in the vicinity, may result in short-term increases in erosion due to grading activities. Increased development density in the surrounding areas could expose persons and property to potential impacts related to seismic activity. However, construction performed in accordance with accepted engineering standards and building codes would reduce the potential for structural damage due to seismic activity to the maximum extent feasible. Earthwork in the project area would be performed in accordance with the most current edition of Caltrans' Standard Specifications and/or the requirements of applicable government agencies. Implementation of measures **GEO-1** through **GEO-6** would ensure that potential effects would be minimized. With implementation of these measures, the proposed project would not contribute to cumulative geologic impacts in combination with other planned and programmed projects in the RSA.

2.4.1.9 PALEONTOLOGY

The RSA pertaining to paleontological resources includes a 0.5-mile radius from the project site. This is based on the record search that was done for the adopted 2011 EA/FONSI. Because of the proposed depth of excavation, construction activities associated with the project could extend into previously undisturbed and paleontologically sensitive sedimentary rock units with high paleontological resource potential/sensitivity. Therefore, impacts on paleontological resources in these areas may occur during project construction. To minimize these impacts, a Paleontological Mitigation Plan (measure **PALEO-1**) would be prepared by a qualified paleontologist and any requirements identified in that Plan would be implemented.

The three other projects in the RSA are relatively minor in scale, would most likely not require deep excavations, and are not anticipated to affect paleontological resources. Therefore, construction activities associated with the project, in conjunction with other projects, would not result in cumulative impacts related to unknown and nonrenewable paleontological resources.

Once the proposed project and other projects are operational, they would not have the potential to affect unknown and nonrenewable paleontological resources. Therefore, operation of the proposed project, in conjunction with other projects, would not result in cumulative effects related to unknown and nonrenewable paleontological resources.

2.4.1.10 HAZARDOUS MATERIALS/HAZARDS

The RSA for hazardous materials/hazards is the area within 0.25 mile of the project site. The RSA is limited to areas where hazardous waste/materials may be present. During construction, the potential exists for construction workers to be exposed to contaminated soils, groundwater, asbestos-containing materials, and lead-based paint; however, the proposed project includes measures (**HAZ-1** through **HAZ-17**) to minimize these potential effects. The other two planned projects in the RSA are small in scale compared with the proposed project and not

anticipated to result in additional related to hazardous materials/hazards. Therefore, the proposed project, when combined with the other proposed projects, would not result in substantial cumulative impacts related to hazards and hazardous materials with implementation of measures **HAZ-1** through **HAZ-17**.

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Chapter 3 Comments and Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization, and/or mitigation measures and related environmental requirements. Agency and tribal consultation and public participation for this project have been accomplished through a variety of formal and informal methods, including interagency coordination meetings and Project Development Team (PDT) meetings. This chapter summarizes the results of Caltrans' efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

3.1 Consultation and Coordination with Public Agencies

The following discussion provides a summary of all meetings, correspondence, and/or coordination relevant to development of the proposed project. The chapter describes coordination that has occurred for the proposed project since the adoption of the 2011 EA/FONSI.

3.1.1 Biological Resources

The USFWS was contacted by email for a list of species relevant to the proposed project. An IPaC species list was received from USFWS on July 13, 2017. An updated species list was obtained on February 14, 2018 and included a list of species and other resources, such as critical habitat under the USFWS jurisdiction, that are known or expected to be in or near the project area. There are no critical habitats under the USFWS within or adjacent to the project limits of disturbance.

3.1.2 Cultural Resources

3.1.2.1 Native American Tribes, Groups, and Individuals

A request to the Native American Heritage Commission (NAHC) was made for the project on April 8, 2004. On May 10, 2004, the NAHC responded that a search of its Sacred Lands File for the affected project area failed to indicate the presence of Native American cultural resources in the immediate project area.

Letters were sent to the tribal contacts the NAHC provided as part of consultation efforts in 2004. On September 17, 2004, the San Manuel Band of Mission Indians responded via letter that they had no knowledge of any culturally sensitive locations in the project area. No other tribe responded to consultation attempts.

Although none of the previously contacted tribes identified any concerns regarding the project, updated letters were sent to nine tribes on August 29, 2017. Additionally, calls were made to each individual and group. Lee Clauss of the San Manuel Band of Mission Indians and Anthony Morales of the Gabrieleno/Tongva San Gabriel Band of Mission Indians responded to consultation attempts.

A response was received from Lee Clauss on behalf of the San Manuel Band of Mission Indians in which she sent an email in response to contact attempts to Gary Jones of Caltrans on October 3, 2017. In her email she stated that the project was of interest to the tribe because it is located in the Serrano ancestral territory. In addition, she requested a copy of the Draft Archaeological Survey Report and the literature and records search results. These were sent to her on January 9, 2018. Because the tribe has not responded, and because previous disturbance and the record search information acquired for the project indicate a low sensitivity for prehistoric cultural resources, Caltrans is assuming the tribe has no further concerns and is proceeding to the next phase of the undertaking.

In his response, Mr. Morales indicated that monitoring by both archaeologists and Native Americans should be conducted for underground work. A monitoring denial letter was sent to Mr. Morales dated March 5, 2018, which indicated that the project Area of Potential Effects (APE) was determined to not have a high probability of encountering intact, buried prehistoric cultural deposits, and therefore Native American monitoring was determined to be unnecessary for this project This conclusion is based upon: (1) the results of the records search, which did not identify any prehistoric sites in or near the project; (2) statements from the San Manuel Band of Mission Indians indicating that they have no knowledge of any sites or culturally sensitive locations in the project area; (3) the fact that no prehistoric deposits were identified during the sub-surface data recovery work at CA-SBR-8695H (Swope et al. 1997); and (4) the fact that there was no surface evidence of prehistoric sites found during past or current field surveys. No response has been received to date.

The following individuals were contacted via letter on August, 29 2017, and via phone on September 27 and November 2, 2017; however, no response was received:

- Cindi Alvitre, Ti'at Society
- Michael Contreras, Morongo Band of Mission Indians
- Sam Dunlap, Gabrielino/Tongva Council/Gabrielino/Tongva Nation
- Joseph Hamilton, Ramona Band of Cahuilla Mission Indians
- Anthony Madrigal, Cahuilla Band of Indians
- James Ramos, San Manuel Band of Mission Indians
- Goldie Walker, Serrano Nation of Indians

No further response has been received from these tribes for this project.

3.1.2.2 LOCAL HISTORICAL SOCIETY / HISTORIC PRESERVATION GROUP

On August 2, 2017, updated consultation letters and maps were sent to the following societies/groups that may have knowledge of or concerns regarding historic properties in the area. The letters requested information regarding any historic buildings, districts, sites, objects, or archaeological sites of significance within the proposed project area.

- San Bernardino Historical and Pioneer Society (San Bernardino History and Railroad Museum)
- San Bernardino Railroad Historical Society
- San Bernardino County Historical Archives
- San Bernardino County Museum
- California Historic Route 66 Association
- California State Railroad Museum
- Historical Society of Southern California
- California Historical Society
- Society of Architectural Historians, Southern California Chapter
- California Preservation Foundation

Follow-up contacts were made the week of December 18, 2017, either by phone or email. One organization, the California State Railroad Museum, responded and requested a copy of the original 2007 letter sent during preparation of the 2007 Supplemental HPSR. In response to their request, the 2007 letter was sent to them on December 18, 2017. A follow-up letter was also sent to the California Historic Route 66 Association on December 21, 2017, as initial efforts to reach them via phone and email were previously unsuccessful. A response was received from the San Bernardino County Historical Archives, in which they provided resources to research properties in the project APE. No further responses have been received.

3.1.2.3 LOCAL GOVERNMENT

On August 2, 2017, a letter and map were sent to the City of San Bernardino Historic Preservation Commission, a local government agency. The letter requested information regarding any historic buildings, districts, sites, objects, or archaeological sites of significance within the proposed project area. In addition, a phone call was made to the San Bernardino Landmarks Commission on January 16, 2018. No responses have been received from either of these agencies.

3.1.2.4 STATE HISTORIC PRESERVATION OFFICE (SHPO)

A *Historic Property Survey Report* (HPSR) was originally completed in August 2001 for the proposed Mount Vernon Avenue Bridge Replacement Project. The SHPO concurred with the 2001 HPSR on March 1, 2002. A *Supplemental Historic Property Survey Report* (SHPSR) was prepared in March 2007 to take into account modifications to the project design, which required changes to the 2001 APE. The results of the 2007 study found that a building located at 240 North Mount Vernon Avenue, determined eligible for the National Register of Historic Places (NRHP) in 2001, had been demolished in 2003 and Caltrans approved a Finding of Effect for the undertaking in 2007. Because the SHPO did not formally concur on Caltrans' proposed Adverse Effect finding, Caltrans assumed concurrence and proceeded with a Memorandum of Agreement (MOA), signed by the SHPO in 2009 and later by Caltrans in 2011. An amendment to the MOA was completed in March 2018 to extend the expiration date of the original MOA and to replace the City of San Bernardino with SBCTA. A second amendment to the MOA was prepared

because Caltrans in consultation with SHPO determined that project scope changes subsequent to execution of the MOA resulted in the expansion of the APE, resulting in the potential to affect subsurface historical archaeological deposits within the northwest quadrant of the APE. As a result, a second amendment to the MOA and a Cultural Resources Discovery and Monitoring Plan to address the potential for subsurface sensitivity for historical archaeological deposits has been prepared and was approved by SHPO on September 5, 2018. The MOA and CRDMP are found in Appendix F of this Supplemental Environmental Assessment. A second SHPSR was prepared to take into account proposed improvements/refinements to the project design presented in the first SHPSR, which resulted in additional changes to the APE. The SHPO concurred with the findings in the second SHPSR on May 1, 2018.

It was determined that the project would have an Adverse Effect on Mount Vernon Avenue Bridge and that there would be No Adverse Effect on the Santa Fe Depot. The SHPO concurred with the findings on September 18, 2007, and again on May 1, 2018.

3.1.3 Agency Correspondence and Documentation

Agency correspondence letters are provided on the pages that follow in the order listed below.

3.1.3.1 BIOLOGICAL RESOURCES

- July 13, 2017 IPaC species list from USFWS
- February 14, 2018 species list from USFWS
- August 6, 2018 species list from USFWS

3.1.3.2 CULTURAL RESOURCES

- May 1, 2018, SHPO Concurrence Letter

3.2 Community Outreach and Public Involvement

A public notice announcing the Notice of Intent to Adopt a Supplemental Environmental Assessment and Programmatic Section 4(f) Evaluation and Announcement of Public Hearing was published in local newspapers on May 28, 2018 and June 1, 2018. A second notice, Announcement of Public Hearing, was published in local newspapers on June 8 and 12, 2018.

On May 28, 2018, an English-language advertisement announcing the public hearing and Notice of Intent to Adopt a Supplemental Environmental Assessment and Programmatic Section 4(f) Evaluation was placed in the *San Bernardino Sun* and *The Press Enterprise*. On June 1, 2018, a Spanish-language advertisement announcing the public hearing and Notice of Intent was placed in *La Prensa*. The notices identified the location, purpose, and format of the public meeting. The notices also provided information on the availability of the Draft Supplemental Environmental Assessment, review comment time period, and contact information for further information and/or submittal of comments. Notices announcing the public meeting and availability of the Draft Supplemental Environmental Assessment were also mailed to residents within a 500-foot radius of the project; federal, state, regional, and local agencies and elected officials; interested groups, organizations, and individuals; and utilities and service providers.

On June 8, 2018, a Spanish language advertisement announcing the public hearing was placed in *La Prensa*. On June 12, 2018, a English-language advertisement announcing the public hearing was placed in *The Press Enterprise* and the *Bernardino S*un. The public hearing notices identified the location, purpose, and format of the public hearing and the availability of the Draft Supplemental Environmental Assessment, review comment time period, and contact information for further information and/or submittal of comments.

In conjunction with the public circulation and review of the Draft Supplemental Environmental Assessment, a public hearing was held on Tuesday, June 19, 2018, from 5:30 p.m. to 7:30 p.m. at the SBCTA Building Lobby located at 1170 West 3rd Street in the City of San Bernardino. Spanish language translators were available to provide assistance as needed. Additionally, information was provided in English and Spanish. Questions and discussion at the public hearing included the following topics: property acquisitions and relocations, project schedule, air quality impacts, and local traffic circulation and traffic congestion impacts. The documentation indicating the distribution of the DED for public review are found at the end of the chapter following the USFWS species list.

IPaC U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Bernardino County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385

http://www.fws.gov/carlsbad/

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.

5. Click REQUEST SPECIES LIST.

Listed species[1] are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat Dipodomys merriami parvus There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/2060	Endangered
Stephens' Kangaroo Rat Dipodomys stephensi (incl. D. cascus) No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3495	Endangered

Birds

NAME	STATUS
Coastal California Gnatcatcher Polioptila californica californica There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo Vireo bellii pusillus There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher Empidonax traillii extimus There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/6749	Endangered

Fishes

NAME	STATUS
Santa Ana Sucker Catostomus santaanae There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Delhi Sands Flower-loving Fly Rhaphiomidas terminatus abdominalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1540	Endangered

Flowering Plants

NAME	STATUS
Gambel's Watercress Rorippa gambellii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4201	Endangered
San Diego Ambrosia Ambrosia pumila There is a final critical habitat designated for this species. Your location is outside the designated critical habitat. https://ecos.fws.gov/ecp/species/8287	Endangered

Santa Ana River Woolly-star Eriastrum densifolium ssp. sanctorum — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6575

Slender-horned Spineflower Dodecahema leptoceras — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4007

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service[3]. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The migratory birds species listed below are species of particular conservation concern (e.g. Birds of Conservation Concern) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the AKN Histogram Tools and Other Bird Data Resources. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

NAME	SEASON(S)
Allen's Hummingbird Selasphorus sasin https://ecos.fws.gov/ecp/species/9637	Migrating
Bald Eagle Haliaeetus leucocephalus https://ecos.fws.gov/ecp/species/1626	Wintering
Bell's Vireo Vireo bellii https://ecos.fws.gov/ecp/species/9507	Breeding
Black-chinned Sparrow Spizella atrogularis https://ecos.fws.gov/ecp/species/9447	Breeding
Brewer's Sparrow Spizella breweri https://ecos.fws.gov/ecp/species/9291	Year-round
Burrowing Owl Athene cunicularia https://ecos.fws.gov/ecp/species/9737	Year-round

Cactus Wren Campylorhynchus brunneicapillus https://ecos.fws.gov/ecp/species/8834	Year-round
California Spotted Owl Strix occidentalis occidentalis https://ecos.fws.gov/ecp/species/7266	Year-round
Calliope Hummingbird Stellula calliope https://ecos.fws.gov/ecp/species/9526	Breeding, Migrating
Costa's Hummingbird Calypte costae https://ecos.fws.gov/ecp/species/9470	Year-round
Flammulated Owl Otus flammeolus https://ecos.fws.gov/ecp/species/7728	Breeding
Fox Sparrow Passerella iliaca	Year-round
Lawrence's Goldfinch Carduelis lawrencei https://ecos.fws.gov/ecp/species/9464	Year-round
Le Conte's Thrasher toxostoma lecontei https://ecos.fws.gov/ecp/species/8969	Year-round
Least Bittern Ixobrychus exilis https://ecos.fws.gov/ecp/species/6175	Year-round
Lesser Yellowlegs Tringa flavipes https://ecos.fws.gov/ecp/species/9679	Wintering
Lewis's Woodpecker Melanerpes lewis https://ecos.fws.gov/ecp/species/9408	Wintering
Loggerhead Shrike Lanius ludovicianus https://ecos.fws.gov/ecp/species/8833	Year-round
Long-billed Curlew Numenius americanus https://ecos.fws.gov/ecp/species/5511	Wintering
Mountain Plover Charadrius montanus https://ecos.fws.gov/ecp/species/3638	Wintering
Nuttall's Woodpecker Picoides nuttallii https://ecos.fws.gov/ecp/species/9410	Year-round
Oak Titmouse Baeolophus inornatus https://ecos.fws.gov/ecp/species/9656	Year-round
Olive-sided Flycatcher Contopus cooperi https://ecos.fws.gov/ecp/species/3914	Breeding
Peregrine Falcon Falco peregrinus https://ecos.fws.gov/ecp/species/8831	Wintering
Rufous Hummingbird selasphorus rufus https://ecos.fws.gov/ecp/species/8002	Migrating
Rufous-crowned Sparrow Aimophila ruficeps https://ecos.fws.gov/ecp/species/9718	Year-round
Short-eared Owl Asio flammeus https://ecos.fws.gov/ecp/species/9295	Wintering

Western Grebe aechmophorus occidentalis Wintering
https://ecos.fws.gov/ecp/species/6743

Williamson's Sapsucker Sphyrapicus thyroideus Wintering
https://ecos.fws.gov/ecp/species/8832

What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAANCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the Northeast Ocean Data Portal. The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAANCCOS models: the models were developed as part of the NOAANCCOS project: Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf. The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the Northeast Ocean Data Portal, which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

Landbirds:

The Avian Knowledge Network (AKN) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest,survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the Migratory Bird Programs AKN Histogram Tools webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North, Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia, and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAANCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Facilities

Wildlife refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

United States Department of the Interior

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In Reply Refer To:
Consultation Code: 08ECAR00-2018-SLI-0539
Event Code: 08ECAR00-2018-E-01211
Project Name: Mount Vernon Avenue Bridge Project

February 14, 2018

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2018-SLI-0539

Event Code: 08ECAR00-2018-E-01211

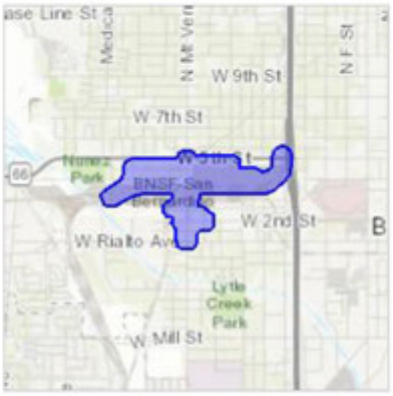
Project Name: Mount Vernon Avenue Bridge Project

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: The San Bernardino County Transportation Agency (SBCTA), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Mount Vernon Avenue Bridge (Bridge Number 54C-066) over the Burlington Northern Santa Fe (BNSF) rail yard in the city of San Bernardino, San Bernardino County, California.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.104734920293026N117.31395717004676W



Counties: San Bernardino, CA

Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat *Dipodomys merriami parvus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2060	Endangered
Stephens' Kangaroo Rat *Dipodomys stephensi (incl. D. cascus)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3495	Endangered

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Fishes

NAME	STATUS
Santa Ana Sucker *Catostomus santaanae* Population: 3 CA river basins There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Delhi Sands Flower-loving Fly *Rhaphiomidas terminatus abdominalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1540	Endangered

Flowering Plants

NAME	STATUS
Gambel's Watercress *Rorippa gambellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4201	Endangered
San Diego Ambrosia *Ambrosia pumila* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8287	Endangered
Santa Ana River Woolly-star *Eriastrum densifolium ssp. sanctorum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6575	Endangered
Slender-horned Spineflower *Dodecahema leptoceras* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4007	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
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http://www.fws.gov/carlsbad/

In Reply Refer To:
Consultation Code: 08ECAR00-2018-SLI-1518
Event Code: 08ECAR00-2018-E-03328
Project Name: Mount Vernon Avenue Bridge Project

August 06, 2018

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2018-SLI-1518

Event Code: 08ECAR00-2018-E-03328

Project Name: Mount Vernon Avenue Bridge Project

Project Type: TRANSPORTATION

Project Description: The San Bernardino County Transportation Agency (SBCTA), in cooperation with the California Department of Transportation (Caltrans), is proposing to replace the existing Mount Vernon Avenue Bridge (Bridge Number 54C-066) over the Burlington Northern Santa Fe (BNSF) rail yard in the city of San Bernardino, San Bernardino County, California.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/34.104734920293026N117.31395717004676W

Counties: San Bernardino, CA

Endangered Species Act Species

There is a total of 11 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
San Bernardino Merriam's Kangaroo Rat *Dipodomys merriami parvus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/2060	Endangered
Stephens' Kangaroo Rat *Dipodomys stephensi (incl. D. cascus)* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/3495	Endangered

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened
Least Bell's Vireo *Vireo bellii pusillus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Fishes

NAME	STATUS
Santa Ana Sucker *Catostomus santaanae* Population: 3 CA river basins There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/3785	Threatened

Insects

NAME	STATUS
Delhi Sands Flower-loving Fly *Rhaphiomidas terminatus abdominalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/1540	Endangered

Flowering Plants

NAME	STATUS
Gambel's Watercress *Rorippa gambellii* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4201	Endangered
San Diego Ambrosia *Ambrosia pumila* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8287	Endangered
Santa Ana River Woolly-star *Eriastrum densifolium ssp. sanctorum* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6575	Endangered
Slender-horned Spineflower *Dodecahema leptoceras* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/4007	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

State of California • Natural Resources Agency
Edmund G. Brown Jr., *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Lisa Ann L. Mangat, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

March 8, 2018

VIA EMAIL

In reply refer to: FHWA000302A

Ms. Alexandra Bevk Neeb, Section 106 Coordinator
Cultural Studies Office
Caltrans Division of Environmental Analysis
1120 N Street, PO Box 942873, MS-27
Sacramento, CA 94273-0001

Subject: Determinations of Eligibility for the Mount Vernon Avenue Bridge Replacement Project, San Bernardino County, CA

Dear Ms. Bevk Neeb:

Caltrans is continuing consultation regarding the above project in accordance with the February 8, 2011, *Memorandum of Agreement Between the California Department of Transportation and the California State Historic Preservation Officer Regarding the Replacement of the Mount Vernon Avenue Bridge, San Bernardino County, California.(MOA.),* amended March 2018. Caltrans is also consulting under the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). As part of your documentation, Caltrans submitted a Supplemental #2 Historic Property Survey Report (SHPSR), Supplemental Historical Resources Evaluation Report, 2nd Supplemental Archaeological Survey Report, Revised Finding of Effect, and a Cultural Resources Discovery and Monitoring Plan.

A Historic Property Survey Report (HPSR) was completed in August of 2001. The State Historic Preservation Officer (SHPO) concurred with the 2001 HPSR on March 1, 2002. A Supplemental HPSR was prepared in March 2007 to take into account modifications to the project design. Caltrans approved a Finding of Effect in 2007 and a MOA was signed by the SHPO in 2009 and later by Caltrans in 2011.

Ms. Bevk Neeb FHWA000302A
May 1, 2018
Page 2

Expansion of the area of potential effect (APE) required further identification and evaluation efforts. As a result, Caltrans has found the following properties to be not eligible for the National Register of Historic Places (NRHP):

- 1340 Kingman Avenue
- 1314 Kingman Avenue
- 436 N Mount Vernon Avenue
- 1335 3rd Street
- 248 N Mount Vernon Avenue
- 232 N Mount Vernon Avenue
- 202 N Mount Vernon Avenue
- 1324 2nd Street
- 190 N Mount Vernon Avenue
- 1225-1227 2nd Street
- Segments of Route 66
- 440-442 Cabrera Avenue
- 1456 Kingman Avenue
- 1510 Kingman Avenue
- 1528 4th Street
- 1486 Kingman Avenue
- 1499 Kingman Avenue
- 1457 Kingman Avenue
- 1472 4th Street
- 1522 4th Street
- 1528 Kingman Avenue
- 1515 Kingman Avenue
- 1479 Kingman Avenue
- 1388 Kingman Avenue
- 1428-1429 Kingman Avenue
- 1440 Kingman Avenue
- 1454 Kingman Avenue
- 1370 Kingman Avenue
- 1447 Kingman Avenue
- 1439 Kingman Avenue
- 1431 Kingman Avenue
- 1367 Kingman Avenue
- 1448 4th Street
- 1415 Kingman Avenue
- 1432 and 1434 4th Street
- 1257 5th Street
- 1241 5th Street

- 160 Mt. Vernon Avenue
- ATSF Rail Yard

Based on my review of the submitted documentation I concur.

Based on our conversation of May 1, 2018, Caltrans will be submitting an amendment to the MOA due to the potential sensitivity in the northwestern quadrant of the APE for encountering historic archaeological deposits. The SHPO will review the Cultural Review Discovery and Monitoring Plan when Caltrans submits the MOA amendment.

If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014 with e-mail at natalie.lindquist@parks.ca.gov or Alicia Perez at (916) 445-7020 with e-mail at alicia.perez@parks.ca.gov .

Sincerely,

Julianne Polanco
State Historic Preservation Officer

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STORM

Florida braces for Alberto

By Tamara Lush and Rebecca Santana
The Associated Press

ST. PETERSBURG, FLA. » Beaches in Florida were largely empty ahead of Memorial Day as the first named storm of the Atlantic hurricane season, Subtropical Storm Alberto, approached the northern Gulf Coast carrying brisk winds and heavy rain.

The storm disrupted long holiday weekend plans from Pensacola in the Florida Panhandle to Miami Beach on Florida's southeastern edge. Lifeguards posted red flags along the white sands of Pensacola Beach, where swimming and wading were banned amid high surf and dangerous conditions.

It also triggered mandatory evacuations of some small, sparsely populated Gulf Coast barrier islands in one Florida county. The Florida Division of Emergency Management said in a statement Sunday that a mandatory evacuation has been issued in Franklin County for all barrier islands there and those in the county living directly on the coast in mobile homes or in recreation vehicle parks.

Alberto got an early jump on the 2018 hurricane season, which doesn't officially start until June 1. The storm prompted Florida, Alabama and Mississippi to launch emergency preparations over the weekend amid expectations Alberto would reach land sometime today. Rough conditions were expected to roil the seas off the eastern and northern Gulf Coast region through Tuesday.

"These swells are likely to cause life-threatening surf and rip current conditions," the National Hurricane Center in Miami said in a statement.

Subtropical Storm Alberto spoiled the plans of Hannibal and Emily Baldwin have an outdoor wedding, on Saturday.

Gusty showers were to begin lashing parts of Florida on Sunday, and authorities were warning of the possibility of flash flooding.

At 5 p.m. EDT Sunday, Alberto was centered about 165 miles west of Tampa and had maximum sustained winds of 50 mph. Forecasters said Alberto has most recently taken a north-northwest track that would bring it over the northern Gulf of Mexico during the night and make landfall on or in the vicinity of the Florida Panhandle on Monday.

A subtropical storm like Alberto has a less defined and cooler center than a tropical storm, and its strongest winds are found farther from its center. Subtropical storms can develop into tropical storms, which in turn can strengthen into hurricanes.

Forecasters cautioned that heavy rain and tropical storm conditions could reach the northern Gulf Coast well ahead of the center of Alberto making landfall.

Meanwhile, the National Hurricane Center in Miami discontinued all storm surge warnings for most of the state's peninsula.

Mark Bowers, the Bay County Emergency management director, said at a Sunday afternoon news conference that the concern isn't with storm surge due to the timing of landfall and the tides. He said Alberto's biggest threat will be its heavy rains, with forecasts of anywhere from four to 12 inches of rain in some areas.

In Taylor County, there were voluntary evacuations for those in coastal zones and beach communities, mobile homes, RV parks and low-lying areas.

In Gulf County, T. H. Stone Memorial St. Joseph Peninsula State Park began evacuations Sunday morning.

In Miami, organizers called off the sea portion of the Miami Beach Air & Sea Show on Sunday because of heavy rain and rough waters. And in the Tampa Bay area on the central Gulf Coast, cities offered sandbags for homeowners worried about floods. Live video from webcams posted in Clearwater and Destin showed half-empty beaches, and whitecaps roiled the normally placid Gulf waters.

NUCLEAR TENSIONS

Trump says U.S. team in North Korea preparing for summit with Kim

By Catherine Lucey, Matthew Lee, Hyung-Jin Kim and Foster Klug
The Associated Press

President Donald Trump said Sunday a U.S. team was in North Korea to plan a summit with North Korean leader Kim Jon Un, raising expectations that the on-off-on meeting would indeed take place.

The State Department said earlier that a team was in Panmunjom, which straddles the border inside the Demilitarized Zone, which separates the North and South Korea. One can cross the border simply by stepping across a painted line, but moving beyond several footsteps into the North at Panmunjom would be rare for U.S. officials.

Trump withdrew from a planned June 12 Singapore summit with Kim on Thursday, but quickly announced that it could get back on track. His tweet Sunday afternoon, which offered praise for the longtime U.S. adversary, was the latest signal that his concerns about the North's stance toward the summit had been allayed.

"Our United States team has arrived in North Korea to make arrangements for the Summit between Kim Jong Un and myself," he tweeted. "I truly believe North Korea has brilliant potential and will be a great economic and financial Nation one day. Kim Jong Un agrees with me on this. It will happen!"

South Korea's president, Moon Jae-in, gave details about his surprise meeting Saturday with Kim in the Panmunjom truce village, saying Kim had committed to sitting down with Trump and to a "complete denuclearization of the Korean Peninsula."

North Korean leader Kim Jong Un, left, and South Korean President Moon Jae-in, right, walk from their meeting at the northern side of Panmunjom in North Korea.

U.S. Secretary of State Mike Pompeo tapped veteran American diplomat Sung Kim to handle pre-summit negotiations. On a separate but complementary track was the CIA team Pompeo set up last year when he headed the spy agency. And on a third track was a White House logistical group sent to Singapore on Sunday to prepare in case the summit takes place. It was led by Joe Hagin, White House deputy chief of staff for operations.

Sung Kim, the U.S. ambassador to the Philippines, also served as ambassador to South Korea and was part of the U.S. negotiating team that last held substantive denuclearization talks with North Korea during the George W. Bush administration in 2005.

The Korean leaders' second summit in a month saw bear hugs and broad smiles. But their quickly arranged meeting Saturday appeared to highlight a sense of urgency on both sides of the world's most heavily armed border.

The talks, which Moon said Kim Jong Un requested, capped a whirlwind 24 hours of diplomatic back and forth. They allowed Moon to push for a U.S.-North Korean summit that he sees as the best way to ease animosity that had some fearing a war last year.

The North Korean leader may see a meeting with Trump as necessary to easing pressure from crushing sanctions and to winning security assurances in a region surrounded by enemies.

Moon told reporters that Kim "again made clear his commitment to a complete denuclearization of the Korean Peninsula." Moon added that Kim said he's willing to cooperate to end confrontation and work toward peace for the sake of the successful summit with Trump.

Moon said he told Kim that Trump has a "firm resolve" to end hostile relations with North Korea and initiate economic cooperation if Kim implements "complete denuclearization."

RUSSIA PROBE

Giuliani: No Mueller interview without the information about roots of inquiry

By The Associated Press

WASHINGTON » President Donald Trump's legal team would advise that he refuse to submit to an interview with special counsel Robert Mueller unless the team can review classified information shared with select lawmakers about the origins of the FBI investigation into Russia's election meddling, Trump's personal lawyer said Sunday.

Rudy Giuliani said that should Mueller's investigators seek a court order to compel the president to testify, Trump's lawyers would fight such a subpoena all the way to the U.S. Supreme Court, if necessary.

"I think we win it," Giuliani said.

Giuliani downplayed the chances that Trump would fire Mueller, a Republican who once was FBI director and has served under GOP presidents. Asked if Trump would dismiss anyone if the investigation kept going, Giuliani told "Fox News Sunday" that firings would play "into the hands of playing the victim, Watergate."

Giuliani's public negotiation over terms of an interview focuses on the use of a government informant who approached members of Trump's 2016 campaign in a possible bid to glean intelligence on Russian efforts to sway his race against Democrat Hillary Clinton. Trump has made unproven claims of FBI misconduct and political bias and has denounced the informant, without evidence, as "a spy."

The two meetings with select lawmakers, held last Thursday, were requested by Trump's GOP allies in Congress and arranged by the White House. The president has tried to sow suspicions about the legitimacy of the FBI investigation, and he and his allies have focused on the use of the informant. After the meetings, which included Justice Department, FBI officials, congressional leaders from both parties and Democratic and Republican leaders of the intelligence committees, Democrats said they saw no evidence to support Republican allegations that the FBI acted inappropriately.

Nonetheless, Giuliani said the Trump camp wants access to the material presented at those briefings to help prepare the president for a possible interview with Mueller.

"If they don't show us these documents, well, we are just going to have to say no," Giuliani said.

NOTICE OF PUBLIC HEARING ON
2018-19 RECOMMENDED BUDGET FOR
Housing Authority of the County of San Bernardino

NOTICE IS HEREBY GIVEN that the Board of Supervisors of the County of San Bernardino acting as the governing body of the Housing Authority of the County of San Bernardino, will conduct a hearing on the 2018-19 Budget for this public entity.

The recommended budget documents are now available to the public and are on file in the Office of the Clerk of the Board of Supervisors, 385 North Arrowhead Avenue, Second Floor, San Bernardino.

SAID HEARING will be conducted pursuant to Government Code Sections 29080 and 29081, on Tuesday, June 12, 2018, at 10:00 a.m., in the Chambers of the Board of Supervisors, 385 North Arrowhead Avenue, First Floor, San Bernardino, and may be continued to another day, where all interested persons may appear at the hearing and be heard regarding any item in the recommended budget or for the inclusion of additional items. All proposals for revisions should be submitted in writing to the Clerk of the Board before the close of the public hearing.

BOARD OF GOVERNORS
HOUSING AUTHORITY OF THE COUNTY OF SAN BERNARDINO

Laura H. Welch
Clerk of the Board of Supervisors

BECAS IME

ANGELA MARIA NASO – EXCELSIOR

Algunos de los estudiantes que participarán en el viaje a México, durante la ceremonia de Inicio de la Estancia Académica 2018 en el campus de la Universidad Estatal de California en San Bernardino.

Oportunidad para que los jóvenes conozcan México

Las becas IME buscan ampliar las oportunidades educativas de los mexicanos en el exterior y está dirigido a los estudiantes de bajos recursos

Angela Maria Naso
enaso@scng.com
@angelamariaenaso en Twitter

Hasta ahora Lizeth González no había conocido el país que la vio nacer y de sus padres. Como estudiante de pregrado viajará con un grupo de otros 30 becarios gracias al Programa IME Becas 2018 para una tercera estancia académica del 20 de junio al 13 de julio en México.

La joven de 19 años y estudiante de español piensa que será una ocasión maravillosa porque, además de conocer el país más a fondo, la beca la respaldará para costear los gastos del viaje.

Alejandrino Rodríguez, de 27 años, otro estudiante de origen mexicano que ya fue becario en dos ocasiones, explicó que fue una experiencia única porque se les llevó a edificios y sitios históricos a los que el público en general no tenía acceso.

El Programa IME Becas, según el portal del Instituto de Mexicanos en el Exterior, busca ampliar las oportunidades educativas de los mexicanos en el exterior y está dirigido a los estudiantes de bajos recursos económicos que cursan educación básica, universitaria y tecnológica.

"Es un programa muy importante que puede mostrarles un México que no conocían y puede reencontrarles con su país y su cultura", dijo Salomón Rosas Ramírez, Cónsul de México en San Bernardino, durante la Ceremonia de Inicio de la Estancia Académica 2018 que se llevó a cabo el 23 de mayo en el campus de la Universidad Estatal de California en San Bernardino.

Geraldí Jara, otro estudiante que se ha beneficiado del Programa IME Becas, incluyó en su testimonio los siguientes palabras: "Pensé que sabía mucho de mi cultura pero me di cuenta que no sabía tanto".

> **"Es un programa muy importante que puede mostrarles un México que no conocían y puede reencontrarles con su país y su cultura".**
> — *Salomón Rosas Ramírez, Cónsul de México en San Bernardino*

RIVERSIDE

Ciertos estudiantes pagarán 25 centavos por el boleto de bus

FOTO DE ARCHIVO

La Agencia de Tránsito de Riverside lanzó un programa que permite que los estudiantes del 1 al 12 grado viajen por el precio de 25 centavos.

El descuento es para todos los autobuses, incluidos los que sirven destinos distantes

David Downey
Prensa Enterprise

Los jóvenes del Condado de Riverside que se preguntan cómo van a llegar a la playa, al cine o a la casa de un amigo este verano y quirás quieran tomar el autobús.

La Agencia de Tránsito de Riverside, que presta servicios en el lado oeste del condado, lanzó un programa que permite que los estudiantes del 1 al 12 grado viajen por el precio de 25 centavos.

La tarifa está disponible para cualquier joven menor de 19 años, dijo el vocero de la RTA, Brad Weaver.

El descuento se ofrecerá desde el viernes 1 de junio hasta el 3 de septiembre, según un comunicado de prensa.

La agencia solicita que los estudiantes muestren sus tarjetas de identificación escolar. Los conductores de autobuses también aceptan tarjetas de identificación de RTA Youth, y licencias de conducir de California o tarjetas de identificación estatales que demuestran que los pasajeros son menores de 19 años.

El descuento es para todos los autobuses, incluidos los que sirven destinos distantes.

Uno de estos autobuses express es la ruta CommuterLink Route 202, con destino a Oceanside, que comenzará a ofrecer servicios de temporada ampliados el 16 de junio.

EL DATO

- Los estudiantes del 1 al 12 grado viajen por el precio de 25 centavos.
- La tarifa está disponible para jóvenes menores de 19 años
- Disponible desde el 1 de junio hasta el 3 de septiembre

Breves

INLAND EMPIRE

Llegan los festivales de cerezas, lavanda y... salsas este fin de semana

Con la llegada de junio arranca el verano y la estación de las fiestas en el Inland Empire.

Para que vayas con tu familia, te dejamos el dato:

Fiesta de la Cereza (Hasta el 3 de junio) 650 E Calle 9, Beaumont.Entradas: $7 para adultos, $5 para tercera edad y militares o policías, $3 para menores de 6 a 13. Gratis para menores de cinco.

Festival de la Salsa (2 de junio)Lugar: 3036 Chestnut, Riverside.Entradas:

Festival de la Cereza en Beaumont. (Foto Archivo)

$15 para adultos y $5 para menores.

Festival de la Lavanda (Del 7 al 10 y del 14 al 17 de junio)30000 Highland Springs, Cherry Valley.

Entradas: $8 para adultos, $6 para tercera edad y estadiantes entre 13 y 17 años. Gratis para menores de 12.

— *Angela Naso*

ONTARIO

Muere bebe atropellada por su madre mientras discutía con el padre

Una niña de 7 meses de nacida, murió al ser atropellada por un vehículo que era conducido por su madre en Ontario. Los hechos ocurrieron el lunes por la noche luego de que sostuviera una discusión con el padre de la niña.

"Parece que el alcohol estuvo involucrado", dijo el sargento Jeff Higbee de la Policía de Ontario.

Según el reporte, no esta claro si el accidente fue intencional.

La niña estaba en los brazos de su padre cuando Sarah Marie Gomez, de 19 años, supuestamente los atropelló tras discutir y antes de la medianoche afuera de una residencia ubicada en la cuadra 500 de West D Street.

La pareja había estado en la casa de un familiar donde se reunieron durante el día y habían regresado a su hogar, pero antes discutieron en el vehículo.

"El salió del automóvil con la bebé, y fue entonces cuando los atropelló", dijo Higbee. "Pero aún no estamos seguros de cómo sucedió eso".

Familiares llevaron al padre y a la niña a un hospital, donde la bebé murió. El hombre sufrió lesiones menores.

Inicialmente, Gómez fue arrestada bajo sospecha de asalto con armas mortal, pero fue cambiado a sospecha de asesinato e intento de asesinato, según la Policía.

— *Beatriz Valenzuela*

RIALTO

Detienen a presunto violador de menores; buscan a más afectados

Una investigación en la ciudad de Rialto resultó en que la policía detuviera a Gustavo Alcázar-Ramírez, hombre hispano de 69 años, bajo la sospecha del delito de violación, abuso sexual e incesto, según fuentes oficiales del Departamento del Sheriff del Condado de San Bernardino. También se le acusa de varios actos lascivos contra menores y agresión sexual.

Alcázar

El 21 de mayo los agentes de la Policía de Rialto llegaron a una escuela de la localidad para investigar un caso de una menor y se enteraron que la niña había sido abusada sexualmente por Alcázar-Ramírez. La investigación reveló además que el hombre había abusado a otras dos familiares, según relataron las autoridades, desde el 1994 hasta el presente.

La detención del acusado fue llevada a cabo por los agentes en su casa ubicada en la calle N. Millard Avenue. Alcázar-Ramírez se ha declarado no culpable a los cargos impuestos en su contra.

En caso de tener algún dato que aportar a la investigación la Policía de Rialto pide que se pongan en contacto con la detective Érica Duque al teléfono 909-820-7264 o por correo electrónico Eduque@rialtopd.com.

— *Angela Naso*

AVISO PÚBLICO
Proyecto del Puente de Avenida Mount Vernon
Aviso de Intención de Adoptar una Evaluación Ambiental Suplementaria, Evaluación Programática Sección 4(f) y Anuncio de Audiencia Pública

¿QUÉ SE ESTÁ PLANEANDO?

POR QUÉ ESTE ANUNCIO?

LO QUE ESTÁ DISPONIBLE

CÓMO PUEDE PARTICIPAR

CUÁNDO Y DÓNDE

CONTACTO

SEMANA DEL 8 DE JUNIO DE 2018 — LA PRENSA | NOTICIAS | 3

INLAND EMPIRE

CORTESÍA RCOE

Rafael Mota (izq.) con el grupo de graduados del programa educativo para ex presos en el condado de Riverside.

Se gradúa de bachillerato tras haber cumplido seis condenas

Con un poco más de una década logra recibir el diploma de Preparatoria

By Angela Maria Naso
anaso@scng.com
@angelamarianaso on Twitter

Rafael Mota nunca pensó que iba a llegar este día.

A los 55 años de edad, acaba de recibir su diploma de la preparatoria (high school) por medio de un programa que forma parte de una iniciativa impulsada en 2010 por la Universidad Estatal de California, San Bernardino y en colaboración con la Oficina de Educación del Condado de Riverside.

Insistiendo en que "todo tiene remedio menos la muerte", el migrante mexicano, padre de familia y ex preso ha enfrentado muchos contratiempos en la vida. A pesar de haber cometido errores en el pasado, ahora quisiera volver a comenzar de nuevo.

"Lo pasado ya pasó y uno tiene que seguirle", reconoció en entrevista con Excélsior California.

Antes de venirse a Estados Unidos en los ochenta, Mota había estudiado hasta el primer semestre de preparatoria en Mexicali.

A los 17 años, dejó la escuela para poder ayudar a que su familia solventara sus necesidades económicas. Luego tuvo varios trabajos a la vez hasta que enfermó su madre y Mota se quedó con ella para cuidarla.

Precisamente en aquel entonces fue cuando tomó una decisión que cambiaría su vida para siempre y que, en retrospectiva, reconoce que fue causante de todos sus males.

"Me vi sin dinero y tomé una mala decisión", reflexionó. Para seguir ganando el pan de cada día, optó por "hacer dinero fácil" vendiendo drogas en la calle. A poco tiempo de morir su madre, su nuevo oficio le llevó a la prisión.

Sin duda alguna, no sería la primera ni única vez. Mota entraría y saldría de la cárcel para cumplir otras cinco condenas más.

Fue al salir esta última ocasión cuando encontró el Centro de Día para la Inserción Social (Day Reporting Center) en Indio donde se ofrecía programas de asistencia pos carcelaria para ayudar a los ex convictos se reintegraran en la sociedad.

Al graduarse recientemente se fijó que era "el más grande" comparado con los demás jóvenes, sin embargo, ahora siente que se le abrirán puertas. Quisiera seguir estudiando la refrigeración y el inglés.

"No hay manera de recuperar el tiempo perdido, ni cambiar el pasado pero puedo mejorar el futuro", afirmó. "Quiero superarme y buscar otras opciones".

A la juventud que se encuentre en la situación difícil de tener que decidir entre algo bueno o malo, Mota les aconsejó que deberían "pensar bien las cosas porque las drogas cambian los valores de la persona y hacen que pierda la razón".

TRANSPORTE

AP PHOTO / RICH PEDRONCELLI

Una mujer sale del Departamento de Vehículos Motorizados de Carmichael CA en 2016.

¿Qué oficinas del DMV abren los sábados?

Redacción de Excélsior
excelsior@scng.com

En un intento de ayudar a mejorar los tiempos de espera por todo el estado, 60 oficinas del Departamento de Vehículos Motorizados de California (DMV) comenzarán a ofrecer servicio limitado los sábados en junio. Las oficinas estarán abiertas los sábados, 16 y 23 de junio, y luego continuarán ofreciendo servicio el primer y tercer sábado de cada mes entre 8 a.m. a 1 p.m., comenzando en julio de 2018. Los exámenes de manejo no estarán disponibles los sábados.

Las citas del sábado se pueden programar hasta 90 días por adelantado usando el sitio de internet del DMV o llamando al 1-800-777-0133.

Los clientes que soliciten un tarjeta REAL ID necesitan visitar REALID.DMV.ca.gov para asegurarse de que tienen los documentos requeridos para solicitar la licencia de manejar o la tarjeta de identidad conforme a la ley federal. Si decide solicitar una tarjeta REAL ID, debe visitar una oficina del DMV.

El DMV también ofrece muchos servicios por internet en www.DMV.ca.gov que puede ahorrar un viaje a una oficina del DMV. Los servicios en línea incluyen: la renovación de licencia de manejar y tarjeta de identidad, pago de la cuota de suspensión de matrícula, aviso de traspaso y relevo de responsabilidad, pedidos de placas personalizadas, agregar o remover un vehículo presentando un declaración jurada de no utilizar un vehículo, y solicitar un expediente de conductor o de un vehículo.

Los clientes que renuevan su registro de vehículos pueden evitar visitar el DMV utilizando una terminal de autoservicio DMV Now, que imprime una nueva tarjeta de registro y una calcomanía de matrícula inmediatamente. Estos quioscos convenientes están disponibles en 60 oficinas del DMV, 30 centros de comercio y en la Universidad de California, Irvine.

Las oficinas de AAA ofrecen servicios a sus clientes de renovación de matrícula vehicular, y otros socios de negocios (Registration Business Partners).

OFICINAS QUE ABREN LOS SÁBADOS:

Bellflower, Costa Mesa, Fullerton, Granada Hills, Hawthorne, Lancaster, Los Angeles, Palm Desert, Pasadena, Rancho Cucamonga, Riverside East, Santa Monica, Temecula, Thousand Oaks, Van Nuys, Victorville.

"Los centros de procesamiento de licencias de manejar, exclusivamente procesan transacciones de licencias de manejar y tarjetas de identidad.

AVISO DE ACUERDO DE DEMANDA COLECTIVA—
TRIBUNAL SUPERIOR DE CALIFORNIA, CONDADO DE LOS ANGELES

Granados contra el Condado de Los Angeles, núm. BC361470

ES POSIBLE QUE TENGA DERECHO A RECIBIR UN REINTEGRO DE IMPUESTOS TELEFÓNICOS

Si usted pagó por un servicio telefónico entre el 25 de agosto de 2005 y el 4 de noviembre de 2008, y su dirección de facturación o servicio se encontraba dentro de las áreas no incorporadas del Condado de Los Angeles posible que sea elegible para recibir un reintegro de impuestos telefónicos.

¿QUIÉN TIENE DERECHO A RECIBIR EL PAGO?

SUS OPCIONES

¿DE QUÉ TRATA ESTA DEMANDA?

AUTOEXCLUSIÓN DEL ACUERDO

IMPUGNACIÓN DEL ACUERDO

A QUÉ RENUNCIA POR RECIBIR EL PAGO

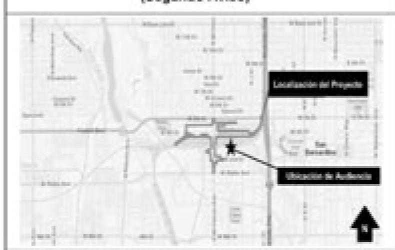
LOS ABOGADOS QUE LO REPRESENTAN

No se comunique directamente con el Tribunal si tiene preguntas sobre el acuerdo.

AVISO PÚBLICO

Anuncio de Audiencia Publica
Proyecto de Puente Avenida Mount Vernon

(Segundo Aviso)



¿QUE SE ESTA PLANEANDO?

¿POR QUÉ ESTE ANUNCIO?

LO QUE ESTA DISPONIBLE

COMO PUEDE PARTICIPAR

CUANDO Y DONDE

CONTACTO

2 | NEWS | THE PRESS-ENTERPRISE • PE.COM TUESDAY, JUNE 12, 2018

START YOUR DAY HERE

Good morning!

Cool fact: A crocodile can't poke its tongue out.

Star report

McGowan calls for depression conversation

Actress Rose McGowan echoed calls for a broad conversation about depression and mental illness in an open letter Monday about her friend Asia Argento, an actress, and Argento's partner, Anthony Bourdain, who killed himself last week.

McGowan

"To the media and to the random commenter, Anthony would never have wanted Asia to be hurt. I'd like to think he would want us to have the collective conversation that needs to be had about depression," she wrote.

In the letter, addressed to "Yellow humans," McGowan said that neither Argento nor Bourdain, the food writer and television host, deserved blame for his death.

Bourdain had sought out help but was unable to get what he needed, according to McGowan.

"I know before Anthony died he reached out for help, and yet he did not take the doctor's advice," she wrote. "And that has led us here, to this tragedy, to this loss, to this world of hurt."

The National Suicide Prevention Lifeline can be reached at 800-273-8255, or go to SpeakingOfSuicide.com for a list of additional resources.

Chopra apologizes for 'Quantico's' terrorism

Priyanka Chopra, one of India's most famous actresses, who found crossover appeal playing an FBI recruit on the ABC drama "Quantico," has apologized for a plot line involving terrorism by Indian nationalists before a summit meeting about Kashmir.

"I'm extremely saddened and sorry that some sentiments have been hurt by a recent episode of Quantico," she wrote on Twitter on Sunday. "That was not and would never be my intention. I sincerely apologize. I'm a proud Indian and that will never change."

ABC Studios also apologized for wading into a delicate political situation, emphasizing in a statement that the episode was fictional and that much of the backlash had been unfairly directed toward Chopra, "who didn't create the show."

Chopra

For decades, the mountainous region of Jammu and Kashmir has been a flash point for India, which is predominantly Hindu, and Pakistan, which is mostly Muslim. Violence has ebbed and flowed for years, with thousands of people killed and wounded during shelling, skirmishes and several wars along the roughly 1,200-mile border. But in recent months, fighting has intensified.

The episode that aired June 1 enraged some Indians. In the episode, Indian nationalists plan to frame Pakistanis before an international summit meeting in Kashmir by orchestrating a nuclear attack in New York. Chopra's character foils the plot after she notices that one of the terrorists is wearing rudraksha, seeds used as prayer beads in Hinduism.

Hot shot

TERRY PIERSON — STAFF PHOTOGRAPHER

Rolling along: Trinity Perez, 10, left, and Noemie Cruz, 9, push Sierra Perez, 7, in a cart as they play in a parking lot in Corona after watching their brothers on Corona High School's baseball team last month.

Birthdays

Former President George H.W. Bush is 94.
Songwriter Richard M. Sherman is 90.
Jazz musician Chick Corea is 77.
Sportscaster Marv Albert is 77.
Rock musician Bun E. Carlos is 67.
Country singer-musician Junior Brown is 66.
Actor Timothy Busfield is 61.
Singer Meredith Brooks is 60.
Actress Jenilee Harrison is 60.
Rapper Grandmaster Dee is 56.
Actor Paul Schulze is 56.
Actress Paula Marshall is 54.
Actress Frances O'Connor is 51.
Actor Jason Mewes is 44.
Blues musician Kenny Wayne Shepherd is 41.
Actor Will Horneff is 39.
Singer Robyn is 39.
Country singer Chris Young is 33.

TODAY IN HISTORY

1939
The National Baseball Hall of Fame and Museum was dedicated in Cooperstown, New York.

1968
The Roman Polanski horror film "Rosemary's Baby," starring Mia Farrow and John Cassavetes, was released by Paramount Pictures.

1978
David Berkowitz was sentenced to 25 years to life in prison for each of the six "Son of Sam" .44-caliber killings that terrified New Yorkers.

1994
Nicole Brown Simpson and Ronald Goldman were slashed to death outside her Brentwood home. ... Boeing's new 777 jetliner went on its first test flight.

LOTTERY

WINNING NUMBERS
Daily 3 Afternoon: 3, 7, 6
Daily 3 Evening: 6, 4, 2
Daily 4: 4, 7, 6, 8
Fantasy 5: 6, 22, 33, 38, 39

DAILY DERBY
1st: 8, Gorgeous George
2nd: 7, Eureka
3rd: 12, Lucky Charms
Race time: 1:48.26

SUPER LOTTO PLUS
Saturday's drawing: 5, 11, 27, 33, 47
Mega number: 18
Wednesday's estimated jackpot: $22 million

MEGA MILLIONS
Friday's drawing: 14, 30, 33, 44, 56
Mega Number: 13
Today's estimated jackpot: $144 million

POWERBALL
Saturday's drawing: 6, 10, 16, 25, 36
Powerball: 14
Wednesday's estimated jackpot: $121 million

PUBLIC NOTICE
Announcement of Public Hearing
Mount Vernon Avenue Bridge Project
(Second Notice)

WHAT IS BEING PLANNED?
WHY THIS MEETING?
WHAT'S AVAILABLE?
WHERE YOU COMMENT
WHEN AND WHERE
CONTACT

Pertussis snapshot

California Department of Public Health's year-by-year and year-to-date stats on pertussis or whooping cough cases

California

San Bernardino County

PERTUSSIS RECOMMENDATIONS

To prevent the spread of pertussis after a case has been reported, the L.A. County Department of Public Health recommends that:

1. If your child is coughing, keep them out of school until they have a note from a doctor that shows your child is safe to return.

2. If your child begins coughing over the next 3 weeks, take them to a doctor and let the doctor know that your child may have been exposed to pertussis.

3. If your child is medically exempt from the TDAP or pertussis vaccine, consult your doctor. Let your doctor know that your child might have been exposed to pertussis. It might be recommended that your child take antibiotics or stay home from school for 21days.

"Of note is the recommendation for women to have a ... vaccination in the third trimester of each pregnancy. Infants less than 6 months of age are at the greatest risk, being too young to be fully vaccinated."

The disease is treated with antibiotics.

Once common in the United States, whooping cough killed thousands of people and caused hundreds of thousands to become ill year after year until the introduction of a vaccine in the 1940s. Then cases dropped to fewer than 5,000 a year. At the peak of the most recent outbreak in California, there were 11,209cases. The last outbreak at a school in Los Angeles County occurred in March 2017.

Cough

FROM PAGE 1

nardino counties also indicates that with one exception, the number of pertussis cases in 2018 is about the same — or lower — than last year's.

The outlier is Orange County, where 80 cases were reported versus 46 at this time in 2017.

"We haven't reached the same levels seen in the 2014 epidemic year [407 cases], but reports are definitely increasing," said Dr. Matt Zahn, Orange County's medical director of epidemiology and assessment. "Many of these cases have been in children, but there hasn't been an outbreak identified at a single school."

An increase was not surprising, Zahn said.

"On a national level, communities and states have noted that case rates wax and wane in intervals of about four to five years," he said. "California pertussis rates have been lower since the epidemic year of 2014, so on a statewide level we've anticipated that we may be seeing an increase in pertussis in the near future."

Killer of thousands

Once common in the United States, whooping cough killed thousands of people and caused hundreds of thousands to become ill year after year until the introduction of a vaccine in the 1940s. Then cases dropped to fewer than 5,000 a year. At the peak of the most recent outbreak in California, there were 11,209 cases.

Even children who have been vaccinated can contract the disease, since protection can decrease over time, Dr. Sheilita Rajapogulan said in a letter emailed June 4 to notify parents with children attending Calle Mayor Middle School in Torrance that at least one person on campus had been diagnosed with whooping cough.

The last outbreak at a school in Los Angeles County occurred in March 2017 and, overall, the case count in the county is not expected to reach that of previous years, according to the Los Angeles County Department of Public Health.

Vaccination rates are at a level where an average elementary, middle or high school student population may not experience any pertussis cases — or at the most, one to three — in a single year.

In Pasadena, which like Long Beach has its own health department and is not included in the Los Angeles County data, there have been no confirmed laboratory cases of pertussis in 2018.

Health care specialists with the Long Beach Department of Health and Human Services also attributed a low case count — fewer than 10 from January to May — to vaccine rates and booster shots.

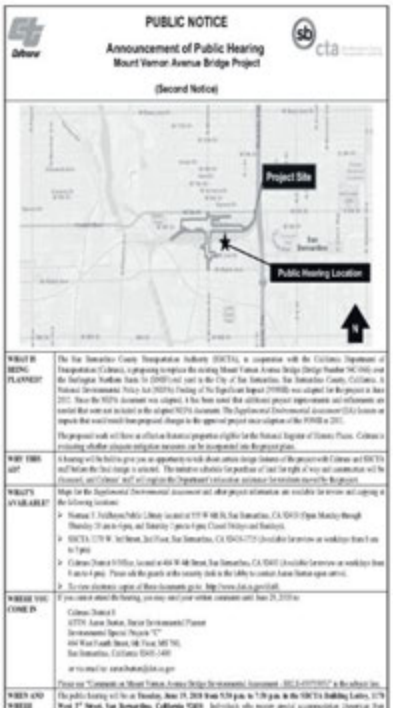
"We were expecting a busy year this year, but actually it's been kind of slow," said Long Beach epidemiologist Nora Bacin.

With 35 cases reported as of June 6, Riverside County was on track to reach about the same number of cases — 72 — as in 2017, said Barbara Cole, a registered nurse who is the county's director for disease control.

San Bernardino County's last increase in pertussis cases dates to the epidemic in 2014, when 205 were reported.

In 2016, the caseload had dropped to 32, "so an increase in cases is expected in late 2018 or early 2019," said Lana Cao, public health information officer at the county's Department of Public Health.

"Vaccination is the best method to prevent pertussis," Cao said.



PUBLIC NOTICE

Announcement of Public Hearing
Mount Vernon Avenue Bridge Project

(Second Notice)

Project Site

Public Hearing Location

WHAT IS BEING PLANNED?

WHY THIS MAP

WHAT'S AVAILABLE?

WHERE YOU COME IN

WHEN AND WHERE

CONTACT

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3.3 Comments and Responses to Comments on Recirculated Draft Initial Study with Negative Declaration/Environmental Assessment

Table 3-1 lists the agencies, organizations, and persons who commented on the Supplemental Draft Environmental Assessment during the circulation period.

Table 3-1. Comments Received

FED Comment ID	Commenter	Comment Type	Date
1	OmniTrans	Letter	June 7, 2018
2	Alma Lopez	Public hearing comment cards (two received)	June 19, 2018
3	Marco Obezo	Public hearing comment card	June 19, 2018
4	Amelia Lopez	Public hearing comment cards (two received)	June 19, 2018
5	Nicolas Banuelos	Public hearing comment card	June 19, 2018
6	Loretta Valdez	Public hearing comment card	June 19, 2018
7	William Long	Public hearing comment card	June 19, 2018
8	Gabriel Delarosa	Public hearing transcript	June 19, 2018
9	Nicolas Banuelos	Public hearing transcript	June 19, 2018
10	Alma Lopez	Public hearing transcript	June 19, 2018
11	Marian Campos	Public hearing transcript	June 19, 2018
12	Reyes Rios	Public hearing transcript	June 19, 2018
13	Inland Empire Bike Alliance	Letter	June 29, 2018
14	South Coast Air Quality Management District	Letter	June 29, 2018
15	California Air Resources Board	Letter	June 29, 2018
16	Stephen Rogers	Email	June 28, 2018
17	Stephen Rogers	Email	July 16, 2018

Comment 1: OmniTrans

Letter 1

OmniTrans
Connecting Our Community

1700 W. Fifth St.
San Bernardino, CA 92411
909-379-7100
www.omnitrans.org

June 7, 2018

Caltrans District 8
ATTN: Aaron Burton, Senior Environmental Planner
Environmental Special Projects "C"
464 West Fourth Street, 6th Floor, MS 760
San Bernardino, CA 92401-1400

Subject: Comments on Mount Vernon Avenue Bridge Environmental Assessment – BRLS-6507(003)

Mr. Burton,

Thank you for providing Omnitrans, the public transportation provider for the San Bernardino Valley, the opportunity to provide comments on the Supplemental Environmental Assessment for the Mount Vernon Avenue Bridge Project. Upon completion of this important project, Omnitrans plans to reroute our bus route 3/4 to use the Mount Vernon Avenue Bridge and turn onto 2nd Street to serve the Santa Fe Depot.

1-1 In order to provide this bus service, Omnitrans will need 8-10'-wide curb-adjacent sidewalk southbound on Mount Vernon Avenue, between Fifth Street and the Bridge entrance. While the sidewalk must be at least 8' wide to meet ADA requirements at the bus stop boarding area, a 10' width (for a 25' length) would allow a bus shelter and passenger amenities to be installed. Omnitrans' Transit Design Guidelines, which are available at http://design.omnitrans.org/, provide more detail.

1-2 Pedestrian and bicycle facilities on the Bridge are also crucial to facilitating connections with public transit in the project area. As stated in Chapter 1 of the EA, "Mount Vernon provides an important linkage for pedestrians and cyclists … Bicycle usage is encouraged within the city of San Bernardino … A Class II or III bicycle facility is planned on Mount Vernon Avenue in the study area, as shown in the City of San Bernardino Bicycle Facilities Master Plan. The most recent pedestrian and bicycle counts, conducted on May 9, 2017, showed that a total of 249 pedestrians and cyclists (177 pedestrians and 72 cyclists) crossed the bridge (Caltrans 2018a)." Section 2.1.8.1 also states that "FHWA … directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of Federal-aid highway projects (see 23 Code of Federal Regulations [CFR] 652) … When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility."

Therefore, it is recommended that a Class II or III bicycle facility be provided on the Mount Vernon Avenue Bridge in accordance with the City of San Bernardino Bicycle Facilities Master Plan. Sidewalks wider than 5' are also desirable in order to accommodate the large pedestrian

Response to Comment 1

1.1. The project as proposed would not preclude an 8-foot wide Americans with Disabilities Act (ADA)–compliant bus stop boarding area from being constructed by OmniTrans.

1.2. The proposed project will incorporate bicycle facilities within the project limits that are consistent with the City of San Bernardino Bicycle Facilities Master Plan and SBCTA's adopted Non-Motorized Transportation Plan. The bike lanes will be incorporated during the Plans, Specifications, and Estimates (PS&E/final design) phase of the project. A six-foot sidewalk will be included in the final bridge design. Standard intersection striping is proposed for the project in conformance with the 2014 California MUTCD and Caltrans Standard Plans; however, high visibility crosswalks will be reviewed and considered if reasonable and feasible during final design.

Cont. 1-2

demand on this bridge. High-visibility crosswalks are also recommended at the intersection of Mount Vernon Avenue and 2nd Street, which is a major intersection with high pedestrian demand, especially because of its proximity to the Santa Fe Depot with train and bus service.

The reconstruction of the bridge, which will serve the community for decades, presents a unique opportunity to design and build the bridge to meet the community's vision for a walkable and bike-able community. A bridge that safely accommodates pedestrians and bicyclists will facilitate multimodal connections at the nearby Depot and will help to promote livability in this San Bernardino community.

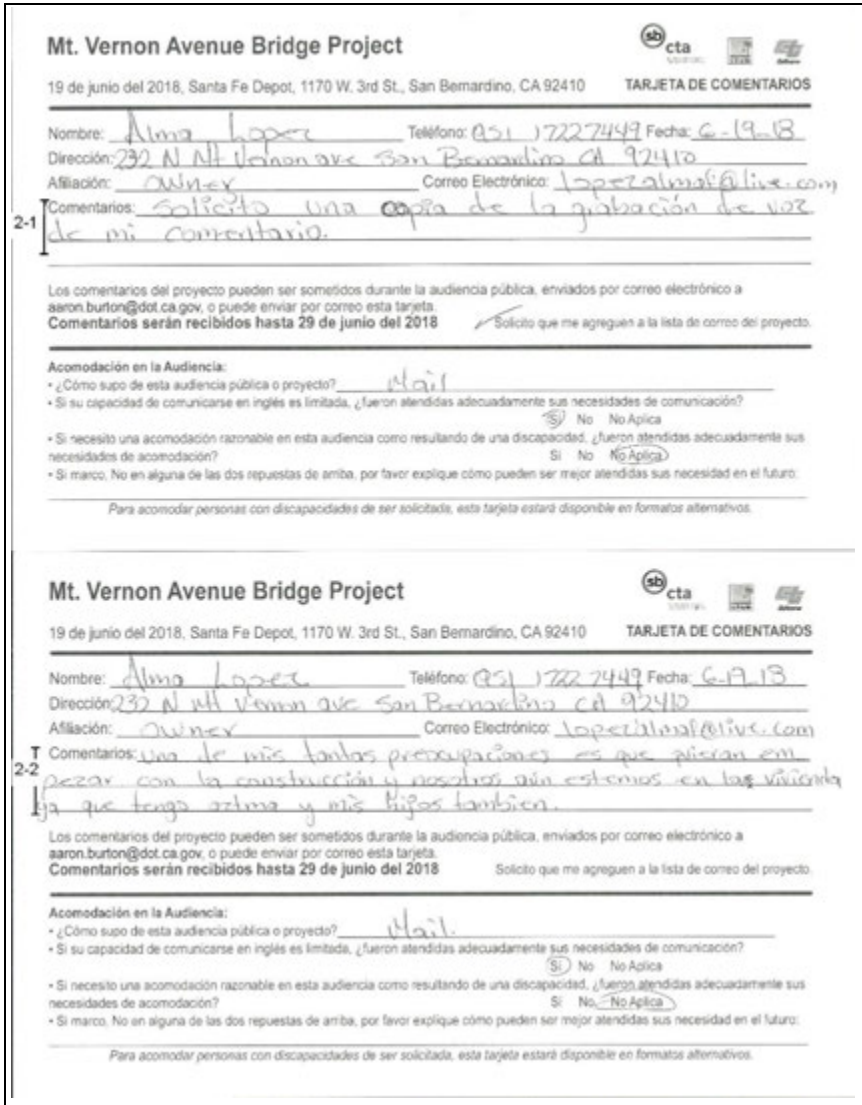
I look forward to the completion of this important project. I am also happy to meet and review plans if needed. Please feel free to contact me if you need further information, at anna.jaiswal@omnitrans.org or (909) 379-7256.

Sincerely,

Anna Jaiswal

Anna Jaiswal
Development Planning Manager

Comment 2: Alma Lopez



Mt. Vernon Avenue Bridge Project

19 de junio del 2018, Santa Fe Depot, 1170 W. 3rd St., San Bernardino, CA 92410 TARJETA DE COMENTARIOS

Nombre: Alma Lopez Teléfono: (951) 7227449 Fecha: 6-19-18

Dirección: 232 N Mt Vernon ave San Bernardino CA 92410

Afiliación: Owner Correo Electrónico: lopezalma@live.com

2-1 Comentarios: Solicito una copia de la grabación de voz de mi comentario.

Los comentarios del proyecto pueden ser sometidos durante la audiencia pública, enviados por correo electrónico a aaron.burton@dot.ca.gov, o puede enviar por correo esta tarjeta.
Comentarios serán recibidos hasta 29 de junio del 2018 Solicito que me agreguen a la lista de correo del proyecto.

Acomodación en la Audiencia:
- ¿Cómo supo de esta audiencia pública o proyecto? Mail
- Si su capacidad de comunicarse en inglés es limitada, ¿fueron atendidas adecuadamente sus necesidades de comunicación? (Si) No No Aplica
- Si necesito una acomodación razonable en esta audiencia como resultando de una discapacidad, ¿fueron atendidas adecuadamente sus necesidades de acomodación? Si No (No Aplica)
- Si marco, No en alguna de las dos repuestas de arriba, por favor explique cómo pueden ser mejor atendidas sus necesidad en el futuro:

Para acomodar personas con discapacidades de ser solicitada, esta tarjeta estará disponible en formatos alternativos.

Mt. Vernon Avenue Bridge Project

19 de junio del 2018, Santa Fe Depot, 1170 W. 3rd St., San Bernardino, CA 92410 TARJETA DE COMENTARIOS

Nombre: Alma Lopez Teléfono: (951) 722 7449 Fecha: 6-19-18

Dirección: 232 N Mt Vernon ave San Bernardino CA 92410

Afiliación: Owner Correo Electrónico: lopezalma@live.com

2-2 Comentarios: Una de mis tantas preocupaciones es que piensan empezar con la construcción y nosotros aún estamos en las viviendas ya que tengo asthma y mis hijos también.

Los comentarios del proyecto pueden ser sometidos durante la audiencia pública, enviados por correo electrónico a aaron.burton@dot.ca.gov, o puede enviar por correo esta tarjeta.
Comentarios serán recibidos hasta 29 de junio del 2018 Solicito que me agreguen a la lista de correo del proyecto.

Acomodación en la Audiencia:
- ¿Cómo supo de esta audiencia pública o proyecto? Mail
- Si su capacidad de comunicarse en inglés es limitada, ¿fueron atendidas adecuadamente sus necesidades de comunicación? (Si) No No Aplica
- Si necesito una acomodación razonable en esta audiencia como resultando de una discapacidad, ¿fueron atendidas adecuadamente sus necesidades de acomodación? Si No (No Aplica)
- Si marco, No en alguna de las dos repuestas de arriba, por favor explique cómo pueden ser mejor atendidas sus necesidad en el futuro:

Para acomodar personas con discapacidades de ser solicitada, esta tarjeta estará disponible en formatos alternativos.

Response to Comment 2

2-1. English translation of comment: **"**I am requesting a copy of my voice recording of my comment."

Response: A copy of the court transcript was mailed as requested on August 13, 2018.

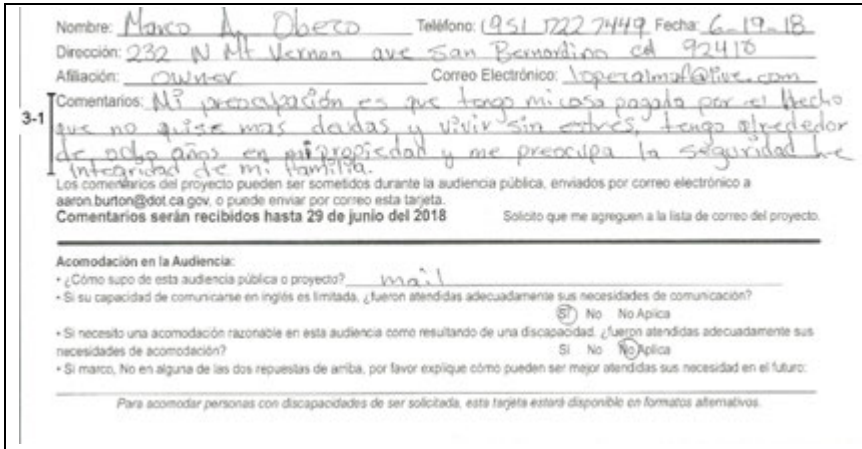
2-2. English translation of comment: **"**One of my greatest worries is that construction will start and we live nearby and I and my children have asthma."

Response: As identified in Table 2-9 in the Supplemental Environmental Assessment (EA), it is anticipated that acquisition of the property at 232 North Mount Vernon Avenue, and relocation of the occupants at this property, would be required for construction of the proposed project. Relocations would occur prior to the start of demolition and construction. As part of the proposed project, all property acquisitions would be conducted in accordance with the Uniform Act and the California Relocation Act (see measure **R-1** in Section 2.1.5.4 of the Supplemental EA). In addition, as described in measure **R-3** in Section 2.1.5.4 of the Supplemental EA, the San Bernardino County Transportation Authority (SBCTA) shall provide additional relocation assistance and counseling resources to persons and businesses, beyond the requirements of the Uniform Relocation Assistance and Real Properties Acquisition Policies Act, to ensure adequate relocation and a decent, safe, and sanitary home for displaced residents. In addition, Spanish-speaking relocation assistance personnel shall be available.

During construction, exhaust and fugitive dust emission control measures as identified in Section 2.2.5.4 of the Supplemental EA, which are standard for all California Department of Transportation (Caltrans) projects, will be

	implemented to minimize construction related emissions. This will include compliance with South Coast Air Quality Management District Rule 403 (Fugitive Dust) (measure **AQ-2** in Section 2.2.5.4 of the Supplemental EA) and conformance with Caltrans Standard Specifications related to air pollution and dust control (measure **AQ-3** in Section 2.2.5.4 of the Supplemental EA).

Comment 3: Marco Obezo



Nombre: Marco A. Obezo Teléfono: (951 722 7449 Fecha: 6-19-18
Dirección: 232 N Mt Vernon ave San Bernardino ca 92410
Afiliación: owner Correo Electrónico: loperalmaf@live.com
3-1 Comentarios: Mi preocupación es que tengo mi casa pagada por el hecho que no quise mas deudas y vivir sin estres, tengo alrededor de ocho años en mi propiedad y me preocupa la seguridad he integridad de mi familia.
Los comentarios del proyecto pueden ser sometidos durante la audiencia pública, enviados por correo electrónico a aaron.burton@dot.ca.gov, o puede enviar por correo esta tarjeta.
Comentarios serán recibidos hasta 29 de junio del 2018 Solicito que me agreguen a la lista de correo del proyecto.

Acomodación en la Audiencia:
• ¿Cómo supo de esta audiencia pública o proyecto? mail
• Si su capacidad de comunicarse en inglés es limitada, ¿fueron atendidas adecuadamente sus necesidades de comunicación? (Si) No No Aplica
• Si necesito una acomodación razonable en esta audiencia como resultando de una discapacidad, ¿fueron atendidas adecuadamente sus necesidades de acomodación? Si No (No Aplica)
• Si marco, No en alguna de las dos repuestas de arriba, por favor explique cómo pueden ser mejor atendidas sus necesidad en el futuro:

Para acomodar personas con discapacidades de ser solicitada, esta tarjeta estará disponible en formatos alternativos.

Response to Comment 3

3-1. English translation of comment: **"**I am worried because my house is paid off and I don't want to acquire more debt and stress. I have been at my property for around eight years and I am worried for the safety and integrity of my family."

Response: As identified in Table 2-9 in the Supplemental Environmental Assessment (EA), it is anticipated that acquisition of the property at 232 North Mount Vernon Avenue, and relocation of the occupants at this property, would be required for construction of the proposed project. Relocations would occur prior to the start of demolition and construction. As part of the proposed project, all property acquisitions would be conducted in accordance with the Uniform Act and the California Relocation Act (see measure **R-1** in Section 2.1.5.4 of the Supplemental EA). In addition, as described in measure **R-3** in Section 2.1.5.4 of the Supplemental EA, the San Bernardino County Transportation Authority (SBCTA) shall provide additional relocation assistance and counseling resources to persons and businesses, beyond the requirements of the Uniform Relocation Assistance and Real Properties Acquisition Policies Act, to ensure adequate relocation and a decent, safe, and sanitary home for displaced residents. In addition, Spanish-speaking relocation assistance personnel shall be available.

Comment 4: Amelia Lopez

Mt. Vernon Avenue Bridge Project

June 19, 2018, Santa Fe Depot, 1170 W. 3rd St., San Bernardino, CA 92410 COMMENT CARD

Name: Amelia S Lopez Phone: (909 326-6377 Date: 6/19/18

Address: 2888 Serrano Rd S.B. 92405

Affiliation: Neighborhood Assoc Co. of SB Email: lopezfamily909@msn.com

Comments:

4-1 Please consider traffic congestion along 5th St. between Mt. Vernon & Rancho Ave. There is already a lot of traffic there & the detour will be even more traffic in that area. As it is we (Our Lady of Guadalupe Church) are currently having problems with pedestrian safety because of the traffic.

Comments on the Project may be submitted during the Public Hearing, emailed to aaron.burton@dot.ca.gov, or submitted by mailing this postcard.

Comments are due by June 29, 2018. I request to be on the Project Mailing List

Hearing Accommodations:

• How did you hear about this public hearing or the project? flyer given to me by friend

• If you are limited in your ability to communicate in English, were your communication needs adequately met? Yes No Not Applicable

• If you were in need of a reasonable accommodation at this hearing as a result of a disability, were your accommodation needs adequately met? Yes No Not Applicable

• If you checked No to either of the two questions above, please explain below how your needs could be better met in the future.

Venue was too noisy, but appreciate the info

To accommodate persons with disabilities, this card will be made available in alternate formats upon request.

Response to Comment 4

4-1. The expected detour for the proposed project during construction would be via Rialto Avenue, G and H Streets, and 5th Street. This would be to the east of the existing bridge, while the portion of 5th Street between Mount Vernon Avenue and Rancho Avenue that is mentioned in the comment is to the west of the existing bridge.

As described in Section 2.1.8.3 of the Supplemental Environmental Assessment (EA) a construction period traffic detour analysis was performed. The results indicated that it is anticipated that several intersections would operate at an unacceptable level of service (LOS E or F) during the construction period; two of those being located along 5th Street/Foothill Boulevard between Mount Vernon Avenue and Rancho Avenue, which are:

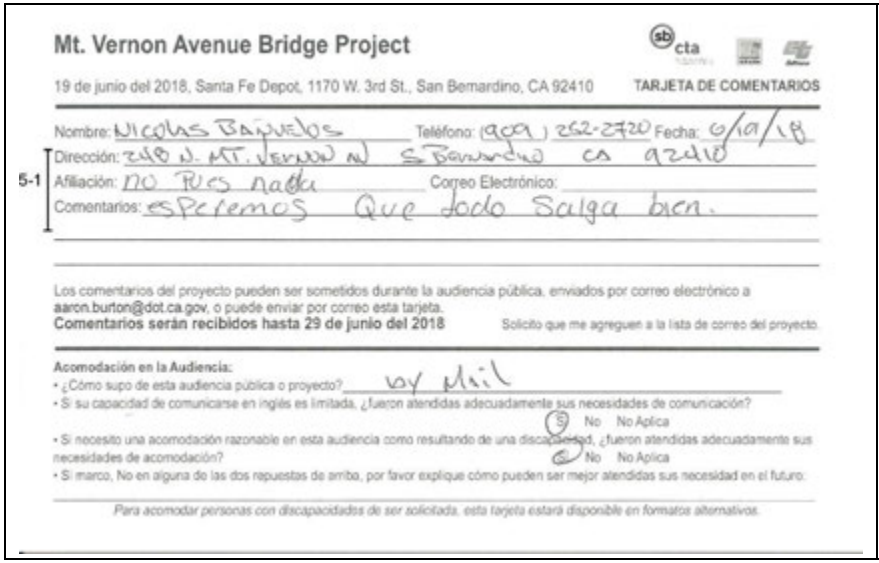
- Rancho Avenue/Foothill Boulevard (AM and PM peak hours)
- Mount Vernon Avenue/5th Street (PM peak hour)

As discussed in more detail in Section 2.1.8.3 of the Supplemental EA, the proposed project includes temporary and short-term improvements to the Mount Vernon Avenue/5th Street intersection to improve traffic operations under the with-detour condition. The proposed project also includes the preparation of a Traffic Management Plan (TMP) and an Access Management Plan (AMP) (measure **UT-5**).

The Rancho Avenue/Foothill Boulevard is a one-way stop-controlled intersection in the northbound direction; east–west traffic is free flowing and uncontrolled. The intersection is currently operating at LOS F and is projected to continue to operate at LOS F under 2021 without-detour and with-detour conditions; therefore, the LOS reflected at this intersection is not a result of the proposed detour, and

		temporary improvements to address the poor LOS at this intersection under the with-detour condition are not warranted as part of the proposed project.
Name: Amelia S. Lopez Phone: (909) 266-1377 Date: 6/18/2018 Address: 2888 Servando Rd Affiliation: Neighborhood Assoc. Co. of SB Email: LopezFamily909@msn.com 4-2 Comments: Please take in consideration the historic importance of the viaduct to the City & to the residents of this immediate area when selecting a design. It was a RR town. We want a bridge that is beautiful, functional & that preserves some of the history. Comments on the Project may be submitted during the Public Hearing, emailed to aaron.burton@dot.ca.gov, or submitted by mailing this postcard. **Comments are due by June 29, 2018.** I request to be on the Project Mailing List. **Hearing Accommodations:** • How did you hear about this public hearing or the project? flyer given to me by a friend • If you are limited in your ability to communicate in English, were your communication needs adequately met? Yes No Not Applicable • If you were in need of a reasonable accommodation at this hearing as a result of a disability, were your accommodation needs adequately met? Yes No Not Applicable • If you checked No to either of the two questions above, please explain below how your needs could be better met in the future: I was expecting a formal presentation & then Q&A, the venue was too noisy. the gentlemen I spoke with were considerate & answered my Qs. To accommodate persons with disabilities, this card will be made available in alternate formats upon request.	**4-2.**	As discussed in Section 2.1.10.2 of the Supplemental Environmental Assessment (EA), the Mount Vernon Avenue Bridge was determined to be eligible for listing on the National Register of Historic Places (NRHP) in consultation with the State Historic Preservation Officer (SHPO), and removal of the bridge is considered an adverse effect under Section 106 of the National Historic Preservation Act. Based on this finding, a Memorandum of Agreement (MOA) was executed between the State Historic Preservation Officer (SHPO) and the California Department of Transportation (Caltrans), with the San Bernardino County Transportation Authority (SBCTA) as a concurring party. As stipulated in the MOA, SBCTA is required to, among other items, work with the SHPO to develop a replacement bridge design that minimizes the visual impact on the setting of the NRHP-listed Atchison, Topeka, and Santa Fe passenger and freight depot (Depot). This includes the "incorporation of architectural details (e.g., bridge railings, lights, concrete abutments, stairways) that convey the character-defining elements of the original historic structure [bridge]." Section 2.1.10.4 of the Supplemental EA identifies measures **MOA CR-1** through **MOA CR-8**, which have been approved by the SHPO and will be implemented as part of the project. A copy of the approved MOA including these and the MOA amendment is included in Appendix F of the Supplemental EA.

Comment 5: Nicolas Banuelos



Mt. Vernon Avenue Bridge Project

sbcta

19 de junio del 2018, Santa Fe Depot, 1170 W. 3rd St., San Bernardino, CA 92410 TARJETA DE COMENTARIOS

Nombre: NICOLAS BANUELOS Teléfono: (909) 252-2720 Fecha: 6/19/18

Dirección: 2180 N. MT. VERNON AV SAN BERNARDINO CA 92410

5-1 Afiliación: NO RUES NADA Correo Electrónico:

Comentarios: ESPERAMOS QUE TODO SALGA BIEN.

Los comentarios del proyecto pueden ser sometidos durante la audiencia pública, enviados por correo electrónico a aaron.burton@dot.ca.gov, o puede enviar por correo esta tarjeta.
Comentarios serán recibidos hasta 29 de junio del 2018 Solicito que me agreguen a la lista de correo del proyecto

Acomodación en la Audiencia:

- ¿Cómo supo de esta audiencia pública o proyecto? BY MAIL
- Si su capacidad de comunicarse en inglés es limitada, ¿fueron atendidas adecuadamente sus necesidades de comunicación? (S) No No Aplica
- Si necesito una acomodación razonable en esta audiencia como resultando de una discapacidad, ¿fueron atendidas adecuadamente sus necesidades de acomodación? (S) No No Aplica
- Si marco, No en alguna de las dos repuestas de arriba, por favor explique cómo pueden ser mejor atendidas sus necesidad en el futuro.

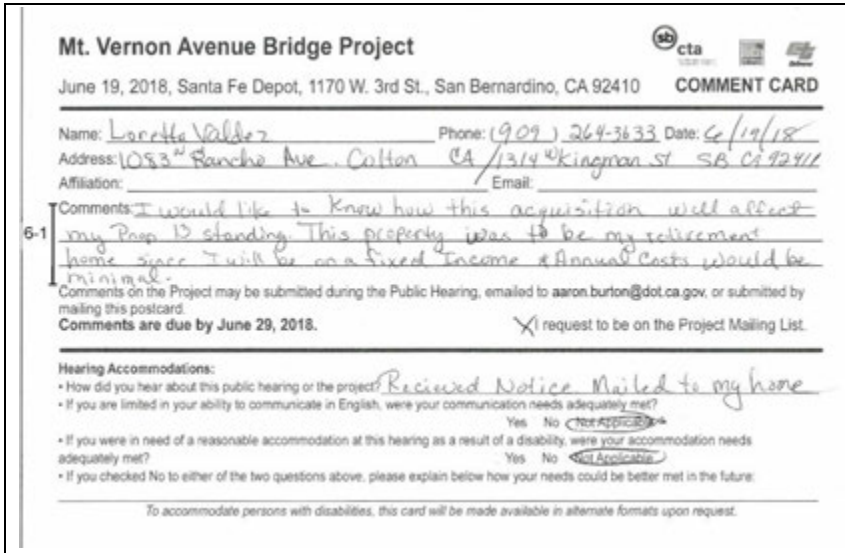
Para acomodar personas con discapacidades de ser solicitada, esta tarjeta estará disponible en formatos alternativos.

Response to Comment 5

5-1. English translation of comment: "I hope everything turns out good."

Response: The comment is noted for the record.

Comment 6: Loretta Valdez



Mt. Vernon Avenue Bridge Project

June 19, 2018, Santa Fe Depot, 1170 W. 3rd St., San Bernardino, CA 92410 COMMENT CARD

Name: Loretta Valdez Phone: (909) 264-3633 Date: 6/19/18

Address: 1083 N Rancho Ave. Colton CA / 1314 W Kingman St SB CA 92411

Affiliation: Email:

6-1 Comments: I would like to know how this acquisition will affect my Prop 13 standing. This property was to be my retirement home since I will be on a fixed income & Annual Costs would be minimal.

Comments on the Project may be submitted during the Public Hearing, emailed to aaron.burton@dot.ca.gov, or submitted by mailing this postcard.

Comments are due by June 29, 2018. X I request to be on the Project Mailing List.

Hearing Accommodations:

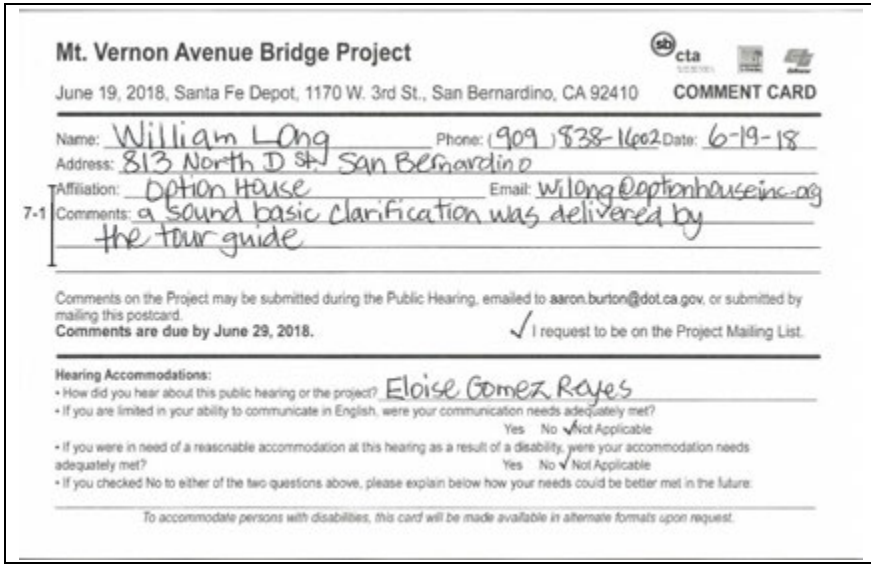
- How did you hear about this public hearing or the project? Recieved Notice Mailed to my home
- If you are limited in your ability to communicate in English, were your communication needs adequately met? Yes No (Not Applicable)
- If you were in need of a reasonable accommodation at this hearing as a result of a disability, were your accommodation needs adequately met? Yes No (Not Applicable)
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

To accommodate persons with disabilities, this card will be made available in alternate formats upon request.

Response to Comment 6

6-1. As identified in Table 2-9 in the Supplemental Environmental Assessment (EA), it is not anticipated based on the proposed project design that acquisition of the property at either 1083 North Rancho Avenue or 1314 West Kingman Street would be required for construction of the proposed project. However, should right of way requirements change during final design to include either of these parcels, all property acquisitions that are required for the proposed project would be conducted in accordance with the Uniform Act and the California Relocation Act (see measure **R-1** in Section 2.1.5.4 of the Supplemental EA). In addition, as described in measure **R-3** in Section 2.1.5.4 of the Supplemental EA, the San Bernardino County Transportation Authority (SBCTA) shall provide additional relocation assistance and counseling resources to persons and businesses, beyond the requirements of the Uniform Relocation Assistance and Real Properties Acquisition Policies Act, to ensure adequate relocation and a decent, safe, and sanitary home for displaced residents. If you have specific questions related to Proposition 13, then these questions should be directed to the appropriate governmental office that handles these matters, such as the San Bernardino County Assessor's Office.

Comment 7: William Long



Mt. Vernon Avenue Bridge Project

June 19, 2018, Santa Fe Depot, 1170 W. 3rd St., San Bernardino, CA 92410 COMMENT CARD

Name: William Long Phone: (909) 838-1602 Date: 6-19-18

Address: 813 North D St. San Bernardino

Affiliation: Option House Email: wilong@optionhouseinc.org

7-1 Comments: a sound basic clarification was delivered by the tour guide

Comments on the Project may be submitted during the Public Hearing, emailed to aaron.burton@dot.ca.gov, or submitted by mailing this postcard.

Comments are due by June 29, 2018.

✓ I request to be on the Project Mailing List.

Hearing Accommodations:

- How did you hear about this public hearing or the project? Eloise Gomez Reyes
- If you are limited in your ability to communicate in English, were your communication needs adequately met? Yes No ✓Not Applicable
- If you were in need of a reasonable accommodation at this hearing as a result of a disability, were your accommodation needs adequately met? Yes No ✓Not Applicable
- If you checked No to either of the two questions above, please explain below how your needs could be better met in the future:

To accommodate persons with disabilities, this card will be made available in alternate formats upon request.

Response to Comment 7

7-1. The comment is noted for the project record.

Comments 8-12: Public Hearing Court Transcript

PUBLIC HEARING

MOUNT VERNON AVENUE BRIDGE PROJECT

DATE: Tuesday, June 19, 2018

TIME: 5:36 p.m.

LOCATION:

Santa Fe Depot

1170 W. 3rd Street

San Bernardino, CA 92410

REPORTED BY: James Koralek, Notary Public

Page 1

Veritext Legal Solutions
866 299-5127

APPEARANCES

Mr. Gabriel Delarosa, Page 3

Ms. Romella Gonzales, Page 4

Mr. Nicolas Banuelos, Page 5

Ms. Alma Lopez, Page 6

Page 2

I can actually -- you guys can protect my house somewhat, as far as a car barreling down into my side of the house.

If you guys can widen it to where the -- the street isn't right next to my fence -- because the people in the tire shop are always doing burnouts, and driving really fast down the street, and I -- I've witnessed them drink, and you know sometimes the customers do drugs, and that's a bad combination, where they can just -- there's nothing stopping a car from going through my chain-link fence.

So if you guys can take in consideration that I'm right next to this street that I'm right next to this street that you guys are imposing, and you know get it -- make it as far as -- away from my house as possible, then that'd be great.

COURT REPORTER: That's it?

MR. DELAROSA: All right. Thanks.

MS. GONZALES: The problem that I have is that I want a property that will be appropriate for me and for my children.

I'm not -- I am not saying that I don't want to sell. I am willing to cooperate as far as my family will be relocated in a better house, my children and I.

Page 4

8-1 Cont.

8-2

PROCEEDINGS

COURT REPORTER: Good evening. This is the recorded public hearing for the Mount Vernon avenue Bridge Project, located at Santa Fe Depot, 1170 W. 3rd Street, San Bernardino, California, 92410. My name is James Kozalek, and I am the reporter from Veritext Legal Solutions. The translator is --

INTERPRETER: I'm Sonya Baroni, Spanish Estatz, Certified Court Interpreter, Certification Number 300504.

COURT REPORTER: Today's date is June 19th, 2018, and we are on the record at 5:36 p.m.

MR. DELAROSA: Yeah. This is Gabriel Delarosa, and I've seen the plans for the new construction.

My concern is that if -- if you guys are making the alleyway a street, the alleyway is right next to my house. So with you guys making that a street, cars have free access to just you know barrel down into my -- into my yard because there's nothing stopping them from going through my fence, which is on the side of my house where my kids and grandkids you know play outside.

So if you guys are going to you know have enough room, or you guys need to make something where

Page 3

8-1

The concern that I have is that I have two small grandchildren, and also my son is still young. He suffers from asthma, so I want a property that will be far away from the smoke.

The only thing I want is that everything will be okay for you, and also for me and my family. And hopefully everything will be okay. Thanks God. That's it. Thank you.

INTERPRETER: Okay. I'm here with Nicolas Banuelos, and I'm the Certified Court Interpreter, Sonia Baroni.

MR. BANUELOS: My name is Nicolas Banuelos, and I live with my family at the address 248 Mumbern Avenue, in California.

And I received a letter that they -- they say that they are going to purchase my property because they are going to build a bridge.

I'm not saying that I don't want to sell my property, as far as everybody will agree, and of course we will like if they will consider a -- consider that we have to live in a better condition.

We -- we have grandchildren, my wife, and I, and my son, and we have lived -- and -- and we are very pleased of living there at that proper -- in that property, and we would like to have another property

Page 5

8-2

9-1

2 (Pages 2 - 5)

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Response to Comment 8-1

8-1. During the Plans, Specifications, and Estimates (PS&E/final design) phase of the project, a review of potential traffic calming measures for the former alleyway will be evaluated and reasonable and feasible traffic calming measures will be implemented if identified.

8-2. As identified in Figure 1-3 and Table 2-9 in the Supplemental Environmental Assessment (EA), it is anticipated that the properties on the east side of the existing alleyway would be acquired as part of the proposed project, while those on the west side of the existing alleyway would remain. Relocations would occur prior to the start of demolition and construction. As part of the proposed project, all property acquisitions would be conducted in accordance with the Uniform Act and the California Relocation Act (see measure **R-1** in Section 2.1.5.4 of the Supplemental EA). In addition, as described in measure **R-3** in Section 2.1.5.4 of the Supplemental EA, the San Bernardino County Transportation Authority (SBCTA) shall provide additional relocation assistance and counseling resources to persons and businesses, beyond the requirements of the Uniform Relocation Assistance and Real Properties Acquisition Policies Act, to ensure adequate relocation and a decent, safe, and sanitary home for displaced residents. In addition, Spanish-speaking relocation assistance personnel shall be available.

During construction exhaust and fugitive dust emission control measures as identified in Section 2.2.5.4 of the Supplemental EA, which are standard for all California Department of Transportation (Caltrans) projects, will be implemented to minimize construction related emissions. This will include compliance with South Coast Air Quality Management District Rule 403 (Fugitive Dust) (measure **AQ-2** in Section 2.2.5.4 of the Supplemental EA) and conformance with Caltrans Standard Specifications related

	to air pollution and dust control (measure **AQ-3** in Section 2.2.5.4 of the Supplemental EA). **Response to Comment 9** **9-1.** As identified in Figure 1-3 and Table 2-9 in the Supplemental EA, it is anticipated that the single-family residence located at 248 North Mount Vernon Avenue would be acquired as part of the proposed project. All relocations would occur prior to the start of demolition and construction. As part of the proposed project, all property acquisitions would be conducted in accordance with the Uniform Act and the California Relocation Act (see measure **R-1** in Section 2.1.5.4 of the Supplemental EA). In addition, as described in measure **R-3** in Section 2.1.5.4 of the Supplemental EA, the San Bernardino County Transportation Authority (SBCTA) shall provide additional relocation assistance and counseling resources to persons and businesses, beyond the requirements of the Uniform Relocation Assistance and Real Properties Acquisition Policies Act, to ensure adequate relocation and a decent, safe, and sanitary home for displaced residents. In addition, Spanish-speaking relocation assistance personnel shall be available.

better.
So we agree -- we agree on doing that whenever they consider, as far -- as far as there will be like something good for us, and I would really appreciate this opportunity to let us give our concerns and opinions. Thank you very much. 9-1 Cont.
INTERPRETER: Okay. Sonia Baroni, Spanish Estate Certified Interpreter. I'm here with Norma Lopez -- Norma Lopez -- Alma Lopez, I'm sorry. Okay.
MS. LOPEZ: First of all, the concern I have is the safety -- the safety -- the safety of my whole family, and entirety of my family. 10-1
We, as a family, we bought this property, cash, with the purpose -- with the purpose of not having a mortgage. We thought the area was very good because even though the neighborhood is not as nice, we tried to make everything nice around the house. We cleaned everything, and also the homeless in the area.
So right now, we live in that neighborhood, and we -- it's a very quiet place. We live in a neighborhood with all the neighbors. We communicate to each other. So right now, we are like a community, that we know each other and we help each other. So then our concern is basically the entirety and the -- the wellbeing of our children.
Page 6

because we didn't have any intention to sell our properties. If that will be the case, I would've sold our property. We don't want to sell, even though today we know that we have to do it.
But we didn't want to do it for the fact that it's true that the prices are high, but right now that doesn't benefit us because what we want is a house that will be safe and good for us.
So if you move us -- if you move us to another place with a similar value, it's going to be a very big impact. I am a parent that is involved in the district. I am looking for the best for my children. I look for the best schools. I don't care to drive as far as I have to. That's why my major concern is the safety of my children.
I would like if you can think that we bought that house thinking that over there, our children will grow. And today we are with that concern, without knowing where are we going to be.
I would like you to think about our safety, our integrity, and our dreams, our goals, our future. We are the one that are going to be directly impacted, but mostly our children.
I have a daughter, three-years-old. As a matter of fact, I have three children. One is 18, one
Page 8

10-1 Cont.

Obviously, this is going to impact us as a family, but especially to our children. Now they have a -- they -- their age is -- basically now our children's age is at that point where they basically will have their personality established by the people around. They are very concerned because they think they belong to that place.
So then we are thinking mostly -- basically our major concern is mostly to know where is the place where they are going to relocate us.
So basically, they are talking about sending an adjuster to see the price of the property. And they are going to pay us the amount as the adjuster establishes.
So -- so then right now with all this, I was starting looking for different places and properties to see where -- and how much is the value of the properties right there. And I see the comparisons, and what I see properties the same amount -- same value, those houses are in very ugly neighborhoods where basically the crime concerns me, the gangs -- the gang's members, and -- and -- and all those things where my children are going to be surrounded by.
So then what I want that you think the impact that this is going to -- to produce in our lives
Page 7

10-1 Cont.

is 15, and the baby that is three-years-old. And this doesn't supposed to be in the mind of our baby, but listening the arguments among the families, she -- she's telling me, "Mom, I don't want to move. This is my house. I want to grow over here because right here we have a space for my dogs, and this is our little house. And that one is our bridge. Nobody should take that bridge away."
And I -- I feel very sad that my little girl will talk about this. I obviously do everything on my part for her to be okay and feel safety, but I know it's going to be the day that this is going to happen, so then I would like them to know -- to think the way -- the way that they are impacting the life our families, that please I -- I want you to offer us something that will be the best for us. Thank you very much.
COURT REPORTER: This marks the end of Media Number 1. The time is 6:38 p.m. We are off the record.
(Whereupon, at 6:38 p.m., the public hearing was concluded.)
Page 9

10-1 Cont.

3 (Pages 6 - 9)

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Response to Comment 10

10-1. As identified in Figure 1-3 and Table 2-9 in the Supplemental EA, it is anticipated that the single-family residence located at 248 North Mount Vernon Avenue would be acquired as part of the proposed project. All relocations would occur prior to the start of demolition and construction. As part of the proposed project, all property acquisitions would be conducted in accordance with the Uniform Act and the California Relocation Act (see measure **R-1** in Section 2.1.5.4 of the Supplemental EA). In addition, as described in measure **R-3** in Section 2.1.5.4 of the Supplemental EA, the San Bernardino County Transportation Authority (SBCTA) shall provide additional relocation assistance and counseling resources to persons and businesses, beyond the requirements of the Uniform Relocation Assistance and Real Properties Acquisition Policies Act, to ensure adequate relocation and a decent, safe, and sanitary home for displaced residents. In addition, Spanish-speaking relocation assistance personnel shall be available.

CERTIFICATE OF NOTARY PUBLIC

I, James Koralek, the officer before whom the foregoing proceeding was taken, do hereby certify that the proceedings were recorded by me and thereafter reduced to typewriting under my direction; that said proceedings are a true and accurate record to the best of my knowledge, skills, and ability; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this was taken; and, further, that I am not a relative or employee of any counsel or attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

James Koralek
Notary Public in and for the
State of California

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CERTIFICATE OF TRANSCRIBER

I, Darcy Rogers, do hereby certify that this transcript was prepared from audio to the best of my ability.

I am neither counsel for, related to, nor employed by any of the parties to this action, nor financially or otherwise interested in the outcome of this action.

July 2, 2018
DATE Darcy Rogers

Page 11

4 (Pages 10 - 11)

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James Koralek
Notary Public in and for the
State of California

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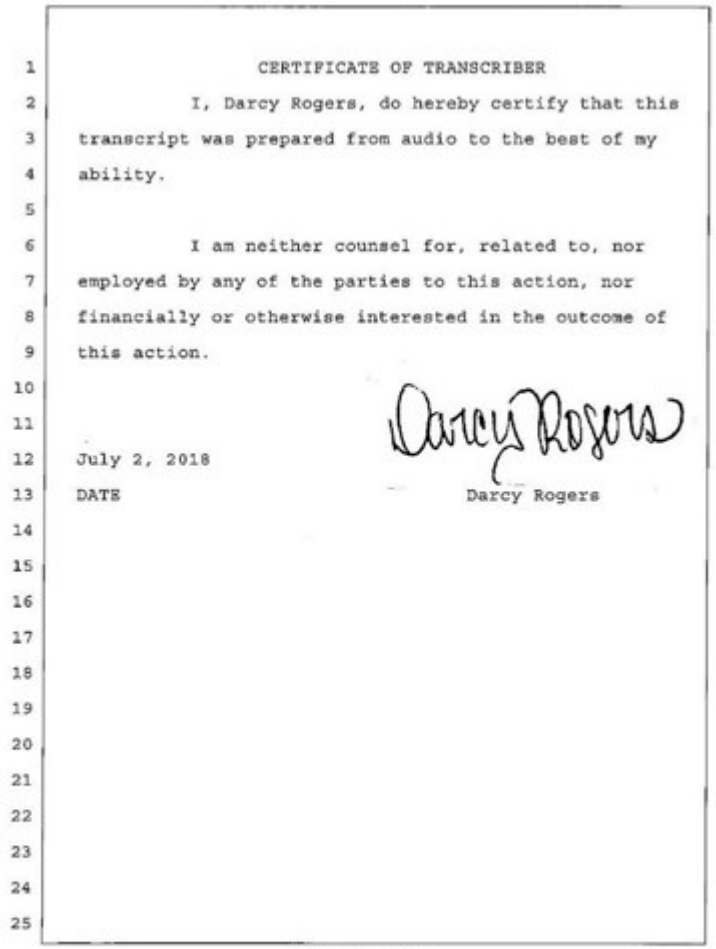

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July 2, 2018
DATE

Darcy Rogers

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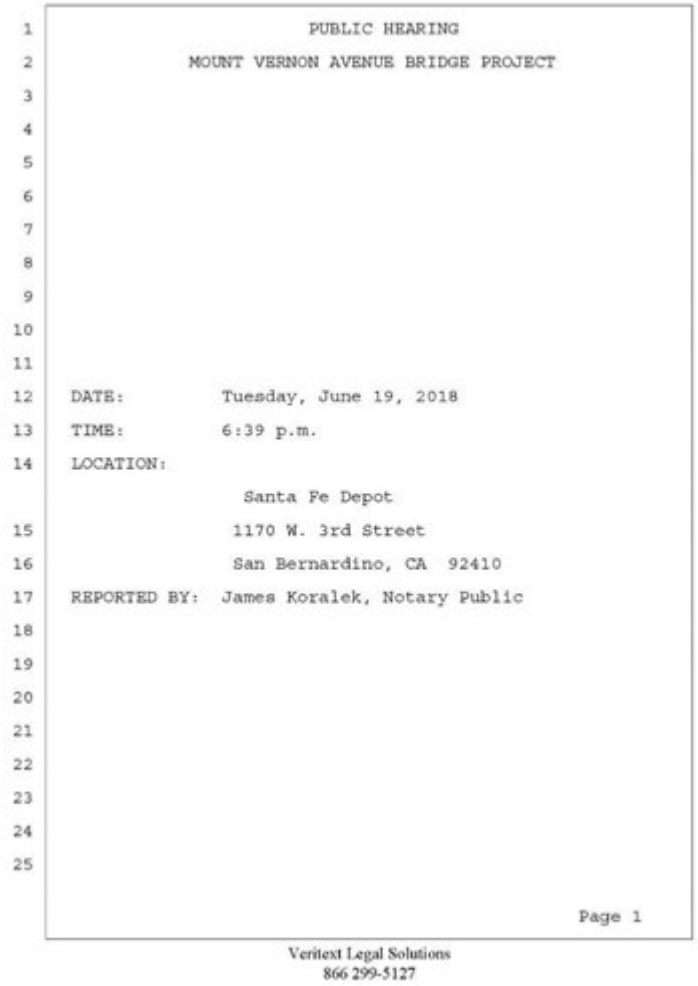

PUBLIC HEARING

MOUNT VERNON AVENUE BRIDGE PROJECT

DATE: Tuesday, June 19, 2018

TIME: 6:39 p.m.

LOCATION:

Santa Fe Depot

1170 W. 3rd Street

San Bernardino, CA 92410

REPORTED BY: James Koralek, Notary Public

Page 1

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APPEARANCES

Ms. Campos, Page 3

Mr. Rios, Page 5

Page 2

I've been making. And I guess that I have to go to -- these questions are for the City of San Bernardino.
It's -- I know I'm worried about it. I know that it's -- my mom walked out of here right as I was driving up, and she was happy. She's like, "We don't have to be here, mija," like, "Don't worry. This is - - this is not for us. We're okay. We're safe," and I -- I was like, "Mom, I printed out the map for you, for you to see how close it is to us, and how," you know?
But it made her happy, and I'm -- and I saw two of my neighbors, and it made them happy, and they're gone. They're not -- they didn't even walk in through the door, because you know my mom told them what they told her.
And for me, that's not enough because I mean that's -- you know I would like to know -- it just is the -- the right thing, is to let us know what time -- what time, especially if it's a couple years, that's perfect. One year, I mean, is amazing to know if we have to leave, because it's, you know, a house that's been bought, and we would just like to to know it, just it's -- it's a different way of living. It's a different way of waking up, and you know how to carry on our days.

Page 4

11-1 cont.

11-1 cont.

PROCEEDINGS

COURT REPORTER: This marks the beginning of Media Number 2. The time is 6:39 p.m. We are on the record.
MS. CAMPOS: My name is Marian Campos, and I live on Kingman -- on Kingman Street, in-between Tijuana and Cabrera.
I came in today to try to find out -- even though my house is not one of the ones that need to be relocated, I know that this -- the information of this came pretty -- pretty shocking to me, only because as I was reading online that -- that it's a project that's been approved since 2011, I knew I never in these past years saw anything leading up to this day until just recently, a month ago, that I got the paper in the mail.
So my concern is that since it was -- it says it's been you know being planned for so long, I wanted -- I came to find out what other projects have been started already?
Because I feel that the rest -- the -- pretty much the houses left, which include my house, when it -- when -- when is a project to take that going to start, or did it start already? I want to find out, and I want to know, and those are the questions that

Page 3

11-1

All of us, we work every single day and it's just -- it's hard to just think of something that you don't know about is really happening.
So -- so my questions were not answered. They were just -- I was just told where to find those answers, or who to question my questions to. And that's all I was given today, so thank you.
MR. RIOS: -- comments are pertaining to -- ready?
Yes. My name is Reyes Rios. I go by Rocket. And I am a Board Member of the California Historical Route 66 Association, and almost a lifetime member of the San Bernardino community.
The Mount Vernon Corridor Bridge has a lot of history, and a lot of significance to the community, specifically the Hispanic community. The bridge extension, being made longer, is a problem for us in the community because basically it's benefiting only one entity, which is a BNSF and the intermodal.
It doesn't benefit the community environmentally. It doesn't benefit the community economically, and it just puts more traffic after it's completed on the roads to the west side of San Bernardino.
It doesn't alleviate or recognize the history

Page 5

12-1

12-2

2 (Pages 2 - 5)

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Response to Comment 11

11-1. No other projects associated with the Mount Vernon Avenue Bridge Project have been proposed, initiated, or implemented since the project was originally proposed several years ago. There are other unrelated planned projects in the vicinity of the Mount Vernon Avenue Bridge. Those projects are listed in Table 2-1, and a discussion of the cumulative impacts associated with those projects is found in Section 2.4, Cumulative Impacts of the Supplemental Environmental Assessment.

As mentioned in Section 1.4.1, Proposed Build Alternative (Preferred Alternative), Mount Vernon Avenue is proposed to be closed between 5th Street and Rialto Street from late 2019 to late 2021 while the bridge is replaced. Demolition of the bridge and construction activities are anticipated to begin in the fall of 2019 and be completed by the fall of 2021. A public outreach program will be implemented prior to and during construction to disseminate information regarding construction scheduling and activities that could affect local residents and businesses (see measure **C-2** in Section 2.1.4.2 of the Supplemental EA).

The commenter did not provide the property address in question; however, no acquisitions are currently proposed as part of the project along Kingman Street between Tijuana Street and Cabrera Avenue. However, if relocation of this resident were to be required as part of the proposed project, all relocations would occur prior to the start of demolition and construction. As part of the proposed project, all property acquisitions would be conducted in accordance with the Uniform Act and the California Relocation Act (see measure **R-1** in Section 2.1.5.4 of the Supplemental EA). In addition, as described in measure **R-3** in Section 2.1.5.4 of the Supplemental EA, the San Bernardino County Transportation Authority (SBCTA) shall provide additional relocation assistance and counseling resources to persons and businesses, beyond the requirements of the Uniform

	Relocation Assistance and Real Properties Acquisition Policies Act, to ensure adequate relocation and a decent, safe, and sanitary home for displaced residents. **Response to Comment 12** **12-1.** As mentioned in Section 1.2.3 of the Supplemental Environmental Assessment (EA), the purpose of the project is to replace a structurally deficient bridge and not to increase capacity. While it is anticipated that there will be increased population growth in the future, volumes on Mount Vernon Avenue Bridge would not be expected to substantially increase based on future growth predictions. As demonstrated in Table 1-1 of the Supplemental EA, Mount Vernon Avenue Bridge currently operates at Level of Service (LOS) A and existing traffic volumes are 17,297. LOS A reflects a transportation facility operating at the highest quality of service, with free traffic flow with few restrictions on maneuverability or speed. In the Year 2022 (Opening Year) and Year 2040, the LOS is predicted to remain at LOS A. Mount Vernon Avenue is considered a Major Arterial per the City of San Bernardino General Plan. Thus, it is a connecting link between economic centers both within the City and the region as a whole. The bridge is currently closed to all commercial traffic, including trucks and buses. Any permanent long-term closure of the Mount Vernon Avenue Bridge would remove an important connection linking communities north and south of the Burlington Northern Santa Fe (BNSF) railyard.

of Forrest Street as the original alignment of Route 66. It doesn't give any consideration for the impact it's having on all the history that's accumulated from the people that have lived in this community, that have serviced and worked on the railroad, or for the railroad. That history's being lost, and set aside -- the historical significance of it. 12-2 Cont.

The extension -- the environmental impact extension of the railroad -- of the bridge, making it longer, is not in our favor. Kingman will be impacted because of the elevation, and the additional problems with safety at that particular intersection. Excuse me. 12-3

We feel that more studying needs to be done and keep the original footprint -- excuse me -- the original -- the bridge should keep its original footprint, and not be extended to affect the community for the benefit of one entity, to increase their economic, as effecting our community, and the folks that use the bridge on a daily basis. 12-4

And we shouldn't have to economically pay our tax dollars and suffer, in the long run, with the increased environmental impact for the diesels, the traffic, and nothing to mitigate that. 12-5

In the long run, it will effect the community

Page 6

CERTIFICATE OF NOTARY PUBLIC

I, James Koralek, the officer before whom the foregoing proceeding was taken, do hereby certify that the proceedings were recorded by me and thereafter reduced to typewriting under my direction; that said proceedings are a true and accurate record to the best of my knowledge, skills, and ability; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this was taken; and, further, that I am not a relative or employee of any counsel or attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

James Koralek
Notary Public in and for the
State of California

Page 8

immensely, and it'll effect historically what is not being preserved or recognized in this entire project. Thank you.

COURT REPORTER: This concludes today's hearing for the Mount Vernon Avenue Bridge Project. The time is 7:31 p.m. We are off the record.

(Whereupon, at 7:31 p.m., the public hearing was concluded.)

Page 7

CERTIFICATE OF TRANSCRIBER

I, Darcy Rogers, do hereby certify that this transcript was prepared from audio to the best of my ability.

I am neither counsel for, related to, nor employed by any of the parties to this action, nor financially or otherwise interested in the outcome of this action.

July 2, 2018
DATE

Darcy Rogers

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3 (Pages 6 - 9)

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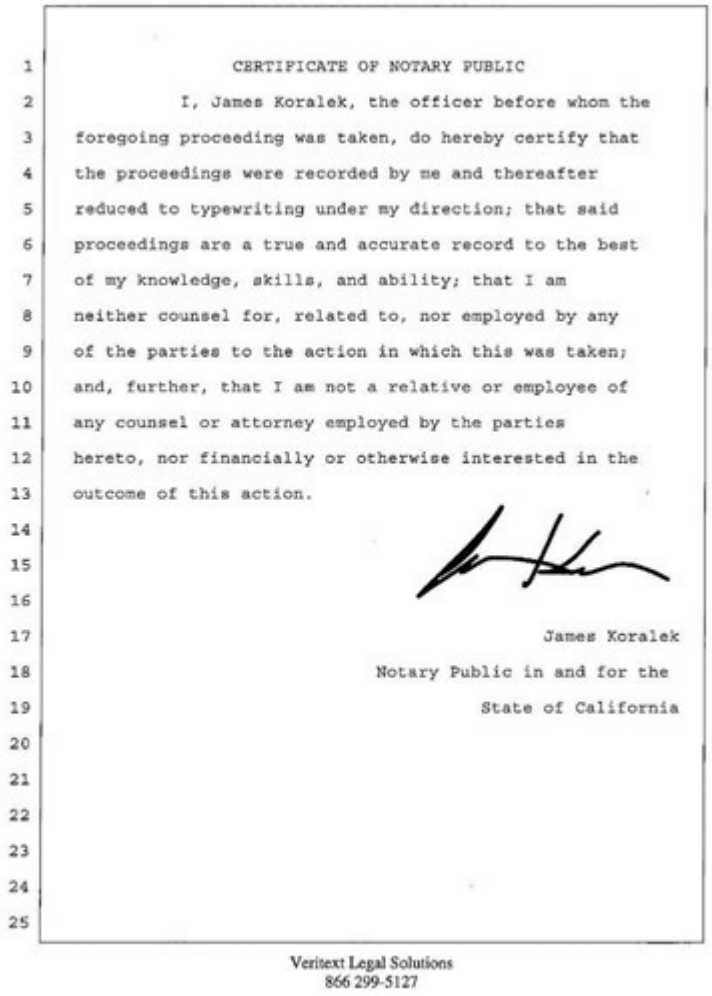
Response to Comment 12

12-2. The historical significance of the Mount Vernon Avenue Bridge has been studied extensively, as documented in Section 2.1.10.2 of the Supplemental Environmental Assessment (EA). Consultation with the State Historic Preservation Officer (SHPO) and other cultural resources stakeholders has been initiated since August 2000. As discussed in Section 2.1.10.2 of the Supplemental EA, the Mount Vernon Avenue Bridge was determined to be eligible for listing on the National Register of Historic Places (NRHP) in consultation with the State Historic Preservation Officer (SHPO), and removal of the bridge is considered an adverse effect under Section 106 of the National Historic Preservation Act. Based on this finding, a Memorandum of Agreement (MOA) was executed between the SHPO and the California Department of Transportation (Caltrans), with the San Bernardino County Transportation Authority (SBCTA) as a concurring party. As stipulated in the MOA, SBCTA is required to, among other items, work with the SHPO to develop a replacement bridge design that minimizes the visual impact on the setting of the NRHP-listed Atchison, Topeka, and Santa Fe passenger and freight depot (Depot). This includes the "incorporation of architectural details (e.g., bridge railings, lights, concrete abutments, stairways) that convey the character-defining elements of the original historic structure [bridge]." Section 2.1.10.4 of the Supplemental EA identifies measures **MOA CR-1** through **MOA CR-8**, which have been approved by the SHPO and will be implemented as part of the project. A copy of the approved MOA including these measures and the MOA amendment is included in Appendix F of the Supplemental EA.

12-3. The elevation of the roadway profile is not a function of the bridge length. The replacement bridge is required to be designed so that it meets all current design requirements; which dictate the height of the bridge and the associated roadway profile. The additional span of the bridge does not

	dictate the roadway profile. The modification of the intersection at Kingman Street is a result of the need to comply with current design standards for the bridge and is not related to the additional bridge span. **12.4.** The inclusion of the additional span has no impact on the project footprint. Although the bridge incorporates a longer span, this does not impact the overall project footprint, which would be the same regardless of the inclusion of this additional bridge span. The footprint of the bridge has been minimized to the extent feasible while still meeting the required design standards. **12.5.** As identified in Section 1.2.3.2, the existing bridge is structurally deficient and functionally obsolete. A sufficiency rating of 100 represents a perfect bridge, while a rating of 0 represents the worst possible bridge. The sufficiency rating for the Mount Vernon Bridge is 2. The bridge currently has temporary timber shoring to help support the bridge and it is currently closed to all commercial traffic, including trucks and buses. Consequently, the project is being funded to replace a structurally deficient and functionally obsolete bridge that can no longer meet its intended purpose. The Supplemental EA for the proposed project has evaluated the potential for environmental impacts from the project. Where necessary, based on impacts that have been identified, avoidance, minimization, and/or mitigation measures have been adopted to address those impacts.



CERTIFICATE OF NOTARY PUBLIC

I, James Koralek, the officer before whom the foregoing proceeding was taken, do hereby certify that the proceedings were recorded by me and thereafter reduced to typewriting under my direction; that said proceedings are a true and accurate record to the best of my knowledge, skills, and ability; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this was taken; and, further, that I am not a relative or employee of any counsel or attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

James Koralek

Notary Public in and for the

State of California

Veritext Legal Solutions
866 299-5127

CERTIFICATE OF TRANSCRIBER

I, Darcy Rogers, do hereby certify that this transcript was prepared from audio to the best of my ability.

I am neither counsel for, related to, nor employed by any of the parties to this action, nor financially or otherwise interested in the outcome of this action.

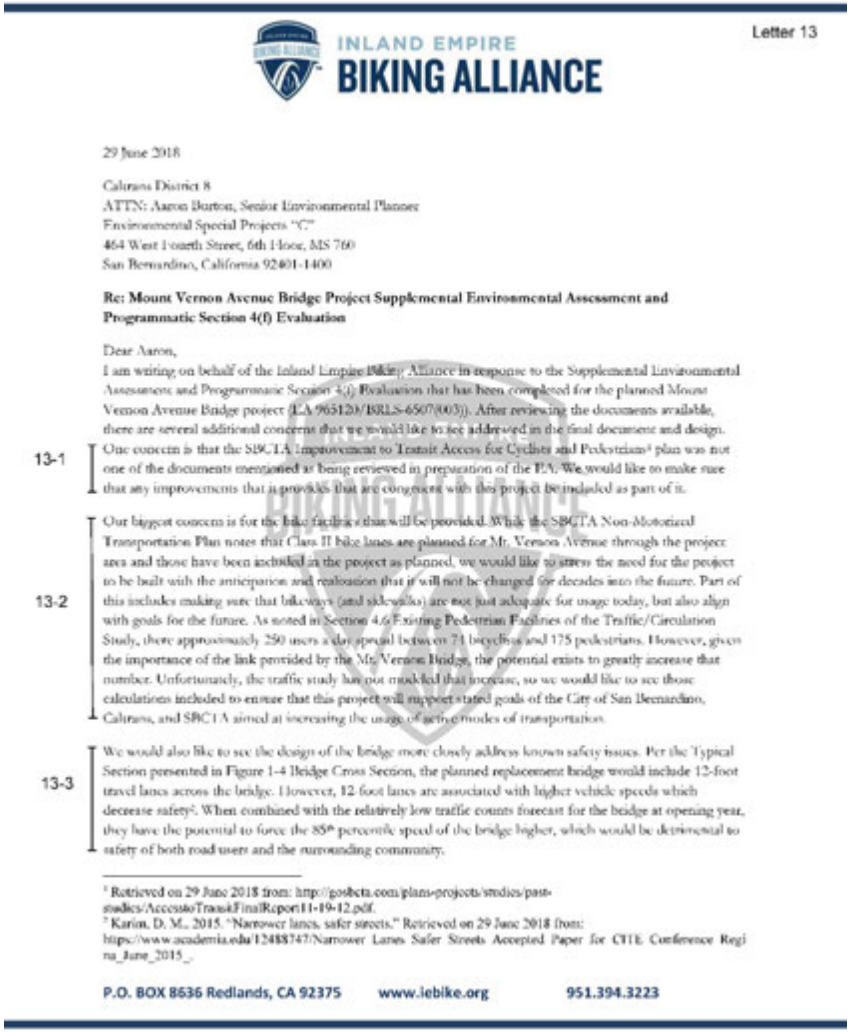
July 2, 2018
DATE

Darcy Rogers

Veritext Legal Solutions
866 299-5127

[take - years]

Comment 13: Inland Empire Bike Alliance



Letter 13

INLAND EMPIRE BIKING ALLIANCE

29 June 2018

Caltrans District 8
ATTN: Aaron Burton, Senior Environmental Planner
Environmental Special Projects "C"
464 West Fourth Street, 6th Floor, MS 760
San Bernardino, California 92401-1400

Re: Mount Vernon Avenue Bridge Project Supplemental Environmental Assessment and Programmatic Section 4(f) Evaluation

Dear Aaron,

I am writing on behalf of the Inland Empire Biking Alliance in response to the Supplemental Environmental Assessment and Programmatic Section 4(f) Evaluation that has been completed for the planned Mount Vernon Avenue Bridge project (EA 965120/BRLS-6507(003)). After reviewing the documents available, there are several additional concerns that we would like to see addressed in the final document and design.

13-1 One concern is that the SBCTA Improvement to Transit Access for Cyclists and Pedestrians[1] plan was not one of the documents mentioned as being reviewed in preparation of the EA. We would like to make sure that any improvements that is provided that are congruent with this project be included as part of it.

13-2 Our biggest concern is for the bike facilities that will be provided. While the SBCTA Non-Motorized Transportation Plan notes that Class II bike lanes are planned for Mt. Vernon Avenue through the project area and those have been included in the project as planned, we would like to stress the need for the project to be built with the anticipation and realization that it will not be changed for decades into the future. Part of this includes making sure that bikeways (and sidewalks) are not just adequate for usage today, but also align with goals for the future. As noted in Section 4.6 Existing Pedestrian Facilities of the Traffic/Circulation Study, there approximately 250 users a day spread between 71 bicyclists and 175 pedestrians. However, given the importance of the link provided by the Mt. Vernon Bridge, the potential exists to greatly increase that number. Unfortunately, the traffic study has not modeled that increase, so we would like to see those calculations included to ensure that this project will support stated goals of the City of San Bernardino, Caltrans, and SBCTA aimed at increasing the usage of active modes of transportation.

13-3 We would also like to see the design of the bridge more closely address known safety issues. Per the Typical Section presented in Figure 1-4 Bridge Cross Section, the planned replacement bridge would include 12-foot travel lanes across the bridge. However, 12 foot lanes are associated with higher vehicle speeds which decrease safety[2]. When combined with the relatively low traffic counts forecast for the bridge at opening year, they have the potential to force the 85th percentile speed of the bridge higher, which would be detrimental to safety of both road users and the surrounding community.

[1] Retrieved on 29 June 2018 from: http://gosbcta.com/plans-projects/studies/past-studies/AccesstoTransitFinalReport11-19-12.pdf.
[2] Karim, D. M., 2015. "Narrower lanes, safer streets." Retrieved on 29 June 2018 from: https://www.academia.edu/12488747/Narrower_Lanes_Safer_Streets_Accepted_Paper_for_CITE_Conference_Regina_June_2015_.

P.O. BOX 8636 Redlands, CA 92375 www.iebike.org 951.394.3223

Response to Comment 13

13-1. The San Bernardino County Transportation Authority (SBCTA) Improvement to Transit Access for Cyclists and Pedestrians Final Report has been reviewed and applicable elements (i.e., incorporation of bike lanes) from that plan that are reasonable and feasible for incorporation into this project will be incorporated during the Plans, Specifications, and Estimates (PS&E/final design) phase of the project.

13-2. The proposed project will incorporate bicycle facilities within the project limits that are consistent with the City of San Bernardino Bicycle Facilities Master Plan and SBCTA's adopted Non-Motorized Transportation Plan. This project component has been added to Section 1.4.1 of the Supplemental Environmental Assessment.

13-3. Lane configuration and widths will be further reviewed during PS&E/final design phase of the project. If reasonable and feasible modifications are identified, then these will be implemented as part of the project.

INLAND EMPIRE
BIKING ALLIANCE

13-4 We similarly concerned about the proposal for Class II bike lanes. While the Non-Motorized Transportation Plan (NMTP) identifies them as the bike facility for Mt. Vernon Ave., it is imperative that a bridge project include the infrastructure that is designed with the needs of future use in mind. While updated in 2015 with new routes, the NMTP was developed prior to the publication and refinement of Level of Traffic Stress analysis for bikeways[1]. Under such an analysis, a Class II bike lane is not an appropriate facility for such a critical link in the City of San Bernardino's bike network. Instead, recognizing the inherent longevity of such a structure as the Mt. Vernon Ave. Bridge, it needs to be planned as a Class IV separated bikeway to ensure that in the future, it is not a barrier in the network due to the potential cost of retrofitting a more appropriate bikeway.

13-5 To address both the concerns around wide lanes and speeding as well as the lack of adequate bikeways for the bridge, we are proposing alternative cross sections that provide safer alternatives. These are visualized in Figures 1 and 2 at the end of this letter. Both offer an improvement over the presently planned condition for all road users. The Cross Section in Figure 1 uses the existing 80 foot planned bridge more efficiently to provide wide sidewalks, a Class IV bikeway of adequate width, and narrower general travel lanes to maintain vehicle speeds at safe levels. The Cross Section in Figure 2 is the same except that it adds additional buffer space between the Class IV bikeway and outside lane that could be used as a shoulder if necessary.

13-6 Finally, although it is stated that there are no significant impacts to bicyclists and pedestrians, no LOS tabulations for those users could be found anywhere in the Traffic/Circulation Study to verify whether this was in fact true. We would like to see them included to be sure that all users are in fact receiving an improvement due to the project.

If there are any questions or concerns regarding our comments, please do not hesitate to reach out for clarification and to have them answered.

Sincerely,

Marven E. Norman, Executive Director

[1] Mekuria, M., P. Furth, and H. Nixon, 2012. "Low-stress bicycling and network connectivity." Mineta Transportation Institute. Retrieved on 29 June 2018 from: https://transweb.sjsu.edu/sites/default/files/1005-low-stress-bicycling-network-connectivity.pdf.

P.O. BOX 8636 Redlands, CA 92375 www.iebike.org 951.394.3223

Response to Comment 13

13-4. The proposed project will incorporate bicycle facilities within the project limits are consistent with SBCTA's Non-Motorized Transportation Plan, the SBCTA Improvement to Transit Access for Cyclists and Pedestrians Final Report, and the City of San Bernardino Bicycle Facilities Map.

13-5. As mentioned under Response 13-4, the project will construct bicycle facilities within the project limits on Mount Vernon Avenue that are consistent with SBCTA's Non-Motorized Transportation Plan. As mentioned under Response 13-3, lane configuration and widths will be further reviewed during PS&E/final design phase of the project. If reasonable and feasible modifications are identified, then these will be implemented as part of the project.

13-6. Level of Service predictions for pedestrian and bicycle counts were not required for the project. The proposed project will incorporate bicycle facilities that are consistent with SBCTA's Non-Motorized Transportation Plan. Inclusion of standard roadway widths, sidewalks and the inclusion of a bicycle path are improvements that would benefit the community and City.


INLAND EMPIRE
BIKING ALLIANCE
Mt. Vernon Ave.
BIKING ALLIANCE
Figure 1. Mt. Vernon Ave. Cross Section (80 foot)
P.O. BOX 8636 Redlands, CA 92375
www.iebike.org
951.394.8223


INLAND EMPIRE
BIKING ALLIANCE
INLAND EMPIRE
BIKING ALLIANCE
P.O. BOX 8636 Redlands, CA 92375
www.iebike.org
951.394.8223


INLAND EMPIRE
BIKING ALLIANCE
Mt. Vernon Ave.
BIKING ALLIANCE
Figure 2. Mt. Vernon Ave. Cross Section (84 foot)
P.O. BOX 8636 Redlands, CA 92375
www.iebike.org
951.394.8223

Comment 14: South Coast Air Quality Management District

Letter 14

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

SENT VIA EMAIL AND USPS
aaron.burton@dot.ca.gov
Caltrans District 8
ATTN: Aaron Burton, Senior Environmental Planner
Environmental Special Projects "C"
464 West Fourth Street, 6th Floor, MS 760,
San Bernardino, California 92401-1400

June 29, 2018

Draft Supplemental Environmental Assessment (EA) for the Proposed Mount Vernon Avenue Bridge Project

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above referenced document. The Draft Supplemental EA analyzes potential environmental impacts under the National Environmental Protection Act (NEPA) for replacement of the Mount Vernon Bridge over the BNSF intermodal rail yard. This NEPA document includes analysis of additional project refinements that were not included in the 2011 EA and Finding of No Significant Impact from a previous version of the project.

SCAQMD staff recognizes the importance of ensuring that the Mount Vernon bridge "is structurally safe, meeting current seismic, design, and roadway standards" as described in the Project Purpose of the Draft Supplemental EA. This comment letter addresses how this project could potentially affect operations at the BNSF rail yard beneath it, in particular with regards to air quality.

By way of background, the BNSF rail yard has been discussed in several other forums as a key facility in the San Bernardino area that can affect air quality. For example, in 2008 the California Air Resources Board (CARB) prepared an air quality Health Risk Assessment[1] that found that the facility posed a cancer risk of about 2,500 chances per million to nearby residents based on a 2005 emissions profile. In 2010, the SCAQMD initiated its Clean Communities Plan[2] that included San Bernardino of one of its two Pilot Study areas, in part because of air quality concerns related to the BNSF rail yard. Finally, under AB 617 passed in 2017, CARB must annually identify communities where local air districts are required to prepare and implement Community Emission Reduction Plans and/or Community Air Monitoring Plans. SCAQMD staff recently released its draft recommendation of four communities that CARB

[1] https://www.arb.ca.gov/railyard/hra/hra.htm
[2] http://www.aqmd.gov/home/air-quality/clean-air-plans/clean-communities-plan

Response to Comment 14

14-1. The project description in Section 1.4.1 of the Supplemental Environmental Assessment (EA) has been refined to clarify the situation regarding Tracks 216-219. As now clarified, Tracks 218 and 219 would be shoofly tracks to accommodate construction of the bridge. The bulleted items in the project description that address Track-219 are now as follows:

- To address impacts to BNSF railyard facilities and operations, SBCTA will provide two shoofly tracks (Tracks 218 and 219) during the bridge demolition, foundation work, and new bridge construction.[1]

- Existing Tracks 216 and 217 would be realigned in the immediate vicinity of the new bridge to accommodate the new bridge column locations. Since adoption of the 2011 EA/FONSI, BNSF realigned Track 216 and constructed Track 217 as part of operational improvements associated with the railyard, separate from the Mount Vernon Avenue Bridge Project.

These two shoofly tracks (Tracks 218 and 219) would be installed to maintain railroad operations during construction of the new bridge. No increase in intermodal activity (and related air pollutant emissions) is anticipated to occur as a result of shoofly track operation.

Section 2.2.5 of the Supplemental EA has been updated to address these shoofly tracks in terms of the potential for air quality impacts.

14-2. This comment concerns the components of the project and project design; it does not address the adequacy of the

[1] SBCTA has no jurisdiction or authority to determine the salvage, disposition, temporariness, or permanency of the shooflies upon completion of the project.

	environmental analysis of the project under review. Accordingly, no response is required. Also, air emissions associated with the current operation of the BNSF railyard are part of the baseline, not the result of the proposed project. As the California Supreme Court held in *In re Bay Delta Programmatic EIR* (2008) 43 Cal.4th 1143, 1167-1168, environmental review must evaluate the adverse effects *of the project*; an environmental document is not deficient simply because it fails to consider project variations that might achieve improvements over baseline conditions. It should be noted, however, that while crane replacement is not part of the Mount Vernon Avenue Bridge Replacement Project, the presence of the replacement bridge structure will not impede future implementation of hybrid/electric mobile gantry cranes, should BNSF propose to do so. Multiple gantry cranes are currently used by BNSF to service the railyard in order to load and unload trains. Since multiple cranes are needed to load and unload trains at this yard, as with any intermodal hub, there is no loss of efficiency in building trains due to the presence of the bridge over the railyard. Therefore, it is not expected that the new bridge would preclude the installation of lower emission or zero emission mobile gantry cranes following construction, should BNSF propose to do so.

Aaron Burton June 29, 2018

should consider[1]. One of these communities includes portions of San Bernardino, in part because of air quality concerns about the BNSF rail yard.

New Rail Lines

14-1 The 2011 EA and FONSI described two temporary shoofly tracks that would be installed at the rail yard as part of the project "to maintain railroad operations during construction of the new bridge". However, the Draft Supplemental EA states that one of these temporary tracks would now become a permanent track (Track 218) and another new permanent track will be built (Track 219). It is not clear from the maps provided in the Draft Supplemental EA how tracks 218 and 219 relate to what appears to be a separate new track (Track 217?) that is visible in a 2018 aerial photo and not in a 2016 aerial photo (see figures on last page).

The rationale for installing these two or three new permanent rail lines is not clear in the Draft Supplemental EA, or how they could potentially impact air quality. If these two or three new tracks add extra capacity to the rail yard, then there could be greater throughput of diesel locomotives and trucks, and greater activity of diesel cargo handling and other equipment, all potentially contributing to regional and localized air quality impacts.

SCAQMD staff recommends that the Final Supplemental EA describe the purpose of these two or three new rail lines, how they could be reasonably anticipated to affect the capacity of this intermodal rail yard, and how they could affect air quality.

New Bridge Design

14-2 During the development of the SCAQMD Clean Communities Plan, a concept that was explored was to install lower emission or zero emission gantry cranes. One impediment that was raised was that the design of the Mount Vernon Bridge precluded the installation of this new equipment. As bridge construction is costly and not expected to occur again for many decades after this project, the design of this bridge could affect the potential future installation of emission reducing technologies at this rail yard. SCAQMD staff recommends that the Final Supplemental EA include a discussion of how the proposed bridge design could affect the installation of lower emission or zero emission gantry cranes.

New Paved Right of Way Area South of Kingman Street

14-3 The revised project described in the Draft Supplemental EA includes relocating a relatively large part of the intermodal operations from east of the bridge to a newly acquired area in between Kingman Street and 4th Street, west of the bridge. This shifting of operations has the potential to bring emission sources closer to sensitive land uses, and potentially could increase localized air quality and health risk impacts. SCAQMD staff recommends that the Final Supplemental EA include a more thorough analysis of this proposed change, and how it could affect air quality.

CEQA Analysis and Project Conformity

14-4 The Draft Supplemental EA states that the project is statutorily exempt from CEQA because it is a railroad/road grade separation project. There are a number of additional elements to this project, including the addition of new permanent rail lines (that potentially also increase rail yard

[1] http://www.aqmd.gov/docs/default-source/Agendas/soc/soc-agenda-6-15-18.pdf - Item #3

14-3. The proposed project would require the acquisition of the homes/structures between Kingman Street and West 4th Street and from Cabrera Avenue to Mount Vernon Avenue. This area would be paved and a 12-foot-tall block wall and a 20-foot-wide landscape buffer would be constructed along Kingman Street and Cabrera Avenue to shield this area from surrounding uses. Removal of these homes would increase the distance of the closest sensitive receptor to the closest proposed shoofly rail tracks from just north of West 4th Street to just north of Kingman Avenue—a distance of approximately 325 feet. However, some Burlington Northern Santa Fe (BNSF) operations would be relocated temporarily from the east side of the bridge to this new paved area. Section 2.2.5 of the Supplemental EA has been revised to further discuss the potential for air quality impacts related to the relocation of emissions sources from the east side of the bridge to this new paved area west of the bridge.

Aaron Burton June 29, 2018

14-4 Cont.

capacity) and the acquisition of new right of way and subsequent relocation of rail yard intermodal operations that may not be covered by this statutory exemption. These additional elements of the project indicate that diesel vehicles that congregate at a rail terminal could be directly affected by this project, and that regional rail and goods movement activity could be affected by the project. These criteria may affect regional and project-level transportation conformity analyses. SCAQMD staff therefore recommends that the Final Supplemental EA include a more thorough discussion how this revised project is exempt from CEQA and how this project meets Transportation Conformity requirements.

Conclusion

Staff is also available to work with the Lead Agency to address any air quality questions that may arise from this comment letter. Please contact me at mkrause@aqmd.gov, or via phone at (909) 396-2706 if you have any questions.

Sincerely,

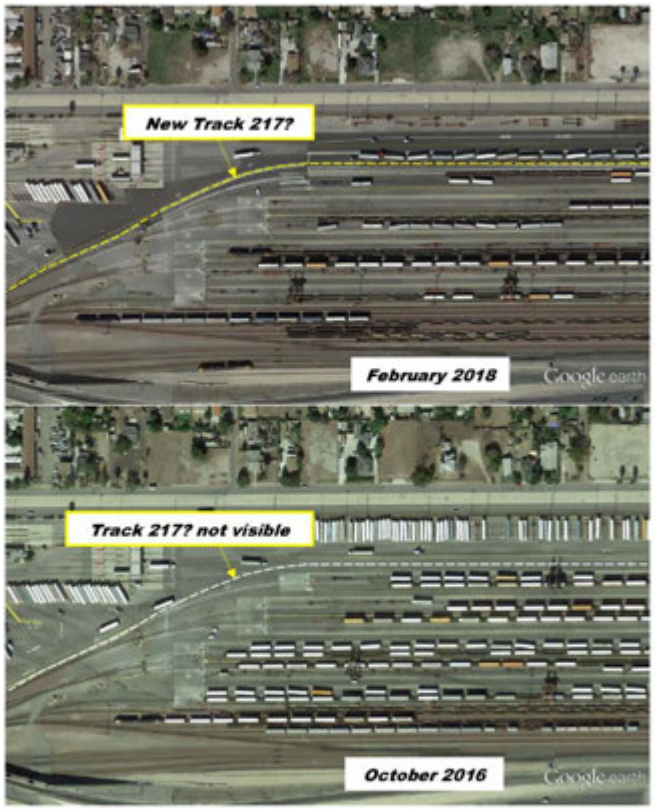
Michael Krause
Planning & Rules Manager
CEQA Section
Planning, Rule Development & Area Sources

PF:SR:IMM

SBC180605-07
Control Number

14-4. The proposed project is statutorily exempt under Title 14, California Code of Regulations, Chapter 3, Article 18, Section 15282(g), "Any railroad grade separation project which eliminates an existing grade crossing or which reconstructs an existing grade separation." This statutory exemption applies to the replacement of the Mount Vernon Avenue Bridge grade separation and all associated elements that are required to implement the grade separation. The project—and its associated elements as described in Section 1.4.1 of the Supplemental EA—has been determined by the California Environmental Quality Act (CEQA) lead agency, the San Bernardino County Transportation Authority, to be statutorily exempt from CEQA. Section 2.2.5 of the Supplemental EA has been updated to address these shoofly tracks and the relocation of the BNSF operations that are currently located to the east of the bridge, in terms of the potential for air quality impacts, and regarding how the project meets transportation conformity determination requirements.

Aaron Burton June 29, 2018



Comment 15: California Air Resources Board

Letter 15

CALIFORNIA AIR RESOURCES BOARD

Mary D. Nichols, Chair
Matthew Rodriquez, CalEPA Secretary
Edmund G. Brown Jr., Governor

June 29, 2018

Mr. Aaron Burton
Senior Environmental Planner
Caltrans District 8
Environmental Special Projects "C"
464 West Fourth Street
Sixth Floor, MS 760
San Bernardino, California 92401

Dear Mr. Burton:

Thank you for providing the California Air Resources Board (CARB) the opportunity to comment on the Supplemental Environmental Assessment (EA) for the Mount Vernon Avenue Bridge Project (Project) SCH#2010111051. The proposed Project is to entirely replace the existing Mount Vernon Avenue Bridge that carries vehicular traffic over the BNSF Rail Yard in San Bernardino. We understand that the purpose of the proposed Project is to provide a structurally-safe bridge that meets seismic, design, and roadway standards.

Of course, we recognize and support the need for a safe bridge, but there may also be an opportunity to facilitate a significant environmental improvement at the same time. Specifically, to consider a replacement bridge located and designed to allow installation of a very large electric crane in the BNSF Rail Yard below the bridge. We strongly encourage Caltrans to consider a project design that could accommodate such a crane.

15-1

Background: CARB has been working with BNSF for two decades in an effort to reduce the air pollution, including toxic diesel particulate matter, from locomotives, cargo equipment, drayage trucks and other sources serving the rail yard. In 2008, CARB published a health risk assessment for the BNSF San Bernardino Rail Yard showing that emissions from its 2005 operations resulted in the highest estimated cancer risk for any of the 18 major freight rail yards evaluated in California.

To reduce air pollution and the resulting health risk to the surrounding community, CARB subsequently urged BNSF to replace multiple pieces of diesel-powered cargo equipment that move containers within the yard (on both sides of the bridge) with zero-emission, electric widespan rail-mounted gantry cranes and the associated charging infrastructure. In a 2011 analysis, CARB estimated the cost to install each of these very large cranes with supporting infrastructure to be roughly $10 million.

arb.ca.gov 1001 I Street • P.O. Box 2815 • Sacramento, California 95812 (800) 242-4450

Response to Comment 15

15-1. This comment concerns the components of the project and project design; it does not address the adequacy of the environmental analysis of the project under review. Accordingly, no response is required. Also, air emissions associated with the current operation of the BNSF railyard are part of the baseline, not the result of the proposed Project. As the California Supreme Court held in *In re Bay Delta Programmatic EIR* (2008) 43 Cal.4th 1143, 1167-1168, environmental review must evaluate the adverse effects *of the project*; an environmental document is not deficient simply because it fails to consider project variations that might achieve improvements over baseline conditions. In addition, implementation of a bridge that could accommodate electric wide-span rail-mounted gantry cranes is not considered reasonable or feasible. The implementation of electric wide-span rail-mounted gantry cranes would require the bridge to provide a vertical clearance in excess of 90 feet. In comparison, the current proposed bridge provides a vertical clearance of 24 feet over the yard track operations. To provide the additional clearance, the approach roadway touchdown locations would extend significantly to the north and south and would result in severe impacts on property owners adjacent to Mount Vernon Avenue to accommodate the increase in vertical profile. For these reasons, implementation of a bridge that could accommodate the wide-span electric rail-mounted gantry cranes is not being pursued as part of the proposed project. However, the design as proposed will not preclude future use of lower emission hybrid/electric mobile gantry cranes, as described in Response 14-2.

15-2. As requested, CARB has been added to the distribution list for the final environmental document.

Mr. Aaron Burton
June 29, 2018
Page 2

15-1 cont. Among other issues, the railroad identified the location and height of the Mount Vernon Bridge as an obstacle to CARB's request. A single crane would have the capacity to handle container activity at the rail yard, but the current bridge does not have sufficient clearance to allow one of these very large electric cranes to cross under it and serve the entire yard. As a result, if BNSF wished to pursue the electric rail-mounted gantry crane option, it would need to invest in two cranes, one for each side of the bridge.

15-2 CARB staff appreciates the opportunity to comment on the EA for the proposed Project. Please include CARB on your list of selected State agencies that will receive the final environmental document as part of the formal public review and comment period. If you have questions, please contact me at (916) 322-8285 or via email at richard.boyd@arb.ca.gov.

Sincerely,

Richard Boyd

Richard Boyd, Chief
Risk Reduction Branch
Transportation and Toxics Division

cc: See next page.

Mr. Aaron Burton
June 29, 2018
Page 3

cc: Morgan Capilla
Environmental Review Section
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street, ENF-4-2
San Francisco, California 94105

John Lovenberg
Vice President of Environmental
BNSF Railway
2500 Lou Menk Drive
Fort Worth, Texas 76131

David Petitt
Natural Resources Defense Council
1314 Second Street
Santa Monica, California 90401

Ester Portillo-Gonzales
Programs Manager
Center for Community Action and Environmental Justice
P.O. Box 33124
Riverside, California 92519

Lijin Sun
Program Supervisor-CEQA
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

State Clearinghouse
P.O. Box 3044
Sacramento, California 95812

Comment 16: Stephen Rogers

Letter 16

From: "Stephen Rogers" <swr.engineer@gmail.com>
Date: Jun 25, 2018 9:59 AM
Subject: Mount Vernon Viaduct
To: "Paula Beauchamp" <pbeauchamp@gosbcta.com>
Cc: "Jerry Martin" <jmar2434@gmail.com>, "Jerry Martin" <JerryMartin@roadrunner.com>, "Timothy Krantz" <timothykrantz@gmail.com>, "Eddie Tejeda" <etejeda@cityofredlands.org>, "Toni Momberger" <toni@redlandscitycouncil.com>, "Bulinski, John C@DOT" <john.bulinski@dot.ca.gov>, "John Brown" <john.brown@bbklaw.com>, <steichert@gosbcta.com>, "Robyn Jones" <rjones@marylhurst.edu>, "Ryan Wicks" <rwicks76@gmail.com>

Hello Ms Beauchamp (Paula): I was speaking with Aaron Burton at the public meeting held for the subject project about reviewing a copy of the original Environmental Assessment document approved in 2011 for comparison with the new Supplemental EA. He indicated to me that there was only one copy of the document back at CalTrans' offices and that I would be able to review it sometime this week and in advance of the June 29 deadline for public comment. Before I review the document however, I would like an opportunity to meet with you to discuss the project, as there were a number of concerns which I raised to Aaron and others to include representatives from Parsons and AECOM, that remained unanswered at the hearing, the most important of which would be the project's anticipated level of review under the California Environmental Quality Act (CEQA).

16-1

Thank you in advance for your assistance and I look forward to meeting with you at your earliest availability to discuss this important project for the westside San Bernardino community.

Sincerely,

Steve Rogers cell (909)556-1988

Stephen W. Rogers, P.E. Consulting

Friendly Communities/ Community Ombudsman

Response to Comment 16

16-1. On June 29, 2018, Ms. Paula Beauchamp from the San Bernardino County Transportation Authority (SBCTA) sent Mr. Rogers an e-mail with a link to the electronic version of the 2011 Environmental Assessment (EA). On July 11, 2018, Ms. Paula Beauchamp sent Mr. Rogers an e-mail indicating that the project is statutorily exempt under the California Environmental Quality Act (CEQA). Mr. Rogers indicates he had many unanswered questions; however, he did not provide these comments for the record by the appropriate means provided to him. As a result, Caltrans and SBCTA were unable to respond to these comments and questions.

Comment 17: Stephen Rogers

Letter 17

From: Stephen Rogers [mailto:swr.engineer@gmail.com]
Sent: Thursday, June 28, 2018 3:49 PM
To: Burton, Aaron P@DOT <aaron.burton@dot.ca.gov>
Cc: Paula Beauchamp <pbeauchamp@gosbcta.com>; Bulinski, John C@DOT <john.bulinski@dot.ca.gov>; John Brown <john.brown@bbklaw.com>; Jerry Martin <jmar2434@gmail.com>; Jerry Martin <JerryMartin@roadrunner.com>; Timothy Krantz <timothykrantz@gmail.com>
Subject: Re: Fwd: Mount Vernon Viaduct

17-1 Hello Mr Burton (Aaron)- I am forwarding the subject communication sent to Ms Paula Beauchamp with sbcta. I have received no response to this June 25 email requesting to meet with Ms Beauchamp to speak about the project in advance of reviewing the 2011 EA at CalTrans District 8 offices, as we discussed at the June 19 public hearing. I would like to schedule a time to stop by your offices tommorow to review the originl EA, and would request that CalTrans and sbcta consider extending the comment period at this time to allow more time for my review of the reference materials and to prepare written public comments.

Thank you in advance for your time, considerations and assistance with this important transportation project located within the City of San Bernardino.

Sincerely,

Steve Rogers cell (909)556-1988

Stephen W. Rogers, P.E. Consulting

Friendly Communities/ Community Ombudsman

Response to Comment 17

17-1. On June 29, 2018, Ms. Paula Beauchamp from the San Bernardino County Transportation Authority (SBCTA) sent Mr. Rogers an e-mail with a link to the electronic version of the 2011 EA. Coordination between Mr. Rogers, the California Department of Transportation (Caltrans), and SBCTA has been ongoing. Caltrans met with Mr. Rogers on August 24, 2018 and provided him the opportunity to review a hardcopy at the of the 2011 EA including hardcopies of all related technical reports. Mr. Rogers requested to extend the public comment period; however, the review period was sufficient per Federal requirements. Federal regulations do not require the circulation of the draft EA for public comment; however, for this project Caltrans did circulate the draft EA to public agencies and to the public for comment. When a public hearing is held, as in the case for this project, the draft EA is required to be available for a minimum of 15 days in advance of the public hearing and public comments need to be submitted in writing within 30 days of the availability of the draft EA per 23 Code of Federal Regulations, Chapter 1, Section 771.1199(d) and (e).

Chapter 4 List of Preparers

This chapter lists the Caltrans staff and consultant staff who were primarily responsible for the preparation and/or review of this document and/or supporting technical studies for this project.

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Chapter 5 Distribution List

A compact disc copy of this Supplemental Environmental Assessment and/or a Notice of Availability were delivered to federal, state, regional and local agencies, and elected officials, as well as interested groups, organizations and individuals, and utilities and service providers on May 29, 2018. In addition, all property owners and occupants within a 500-foot radius of the project limits were provided the Notice of Availability on May 29, 2018.

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2959 Bluegrass Ln
Fullerton, CA 92835

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91 Los Altos Dr
Hollister, CA 95023

Kingsley Montclair LP
1619 W Garvey Ave N, Ste 201
West Covina, CA 91790

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1554 Webster St
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Downcycle LLC
3030 N Sandbar Cir
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1026 N Acacia St, #3
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Downey, CA 90241

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Occupant
981 3rd St
San Bernardino, CA 92405

Occupant
971 3rd St
San Bernardino, CA 92405

Occupant
936 W 3rd St
San Bernardino, CA 92410

Occupant
517 Spruce St
San Bernardino, CA 92411

Occupant
517 Garner Ave
San Bernardino, CA 92411

Occupant
501 N Mount Vernon Ave
San Bernardino, CA 92411

Occupant
480 Cabrera Ave
San Bernardino, CA 92411

Occupant
459 Cabrera Ave
San Bernardino, CA 92411

Occupant
443 Cabrera Ave
San Bernardino, CA 92411

Occupant
436 N Mount Vernon Ave
San Bernardino, CA 92411

Occupant
340 N I St
San Bernardino, CA 92410

Occupant
271 N K St
San Bernardino, CA 92410

Occupant
267 Kendall Ave
San Bernardino, CA 92410

Occupant
263 N K St
San Bernardino, CA 92410

Occupant
248 N J St
San Bernardino, CA 92410

Occupant
248 Kendall Ave
San Bernardino, CA 92410

Occupant
246 N J St
San Bernardino, CA 92410

Occupant
245 N J St
San Bernardino, CA 92410

Occupant
244 N J St
San Bernardino, CA 92410

Occupant
240 N Mount Vernon Ave
San Bernardino, CA 92410

Occupant
230 N Grape Ct
San Bernardino, CA 92410

Occupant
229 N K St
San Bernardino, CA 92410

Occupant
202 N Mount Vernon Ave
San Bernardino, CA 92410

Occupant
190 N Mount Vernon Ave
San Bernardino, CA 92410

Occupant
170 N Mount Vernon Ave
San Bernardino, CA 92410

Occupant
160 N Mount Vernon Ave
San Bernardino, CA 92410

Occupant
1594 W 4th St, Spc 7
San Bernardino, CA 92411

Occupant
1594 W 4th St
San Bernardino, CA 92411

Occupant
1582 W 4th St
San Bernardino, CA 92411

Occupant
1576 W Kingman St
San Bernardino, CA 92411

Occupant
1571 W Kingman St
San Bernardino, CA 92411

Occupant
1566 W Kingman St
San Bernardino, CA 92411

Occupant
1564 W 5th St
San Bernardino, CA 92411

Occupant
1548 W 5th St
San Bernardino, CA 92411

Occupant
1544 W 4th St
San Bernardino, CA 92411

Occupant
1539 W Kingman St
San Bernardino, CA 92411

Occupant
1533 W 5th St
San Bernardino, CA 92411

Occupant
153 N Mount Vernon Ave
San Bernardino, CA 92410

Occupant
1528 W Kingman St
San Bernardino, CA 92411

Occupant
1528 W 4th St
San Bernardino, CA 92411

Occupant
1522 W 4th St
San Bernardino, CA 92411

Occupant
1521 W Kingman St
San Bernardino, CA 92411

Occupant
1515 W Kingman St
San Bernardino, CA 92411

Occupant
1515 W 5th St
San Bernardino, CA 92411

Occupant
1513 W 5th St
San Bernardino, CA 92411

Occupant
1510 W 5th St
San Bernardino, CA 92411

Occupant
151 N Mount Vernon Ave
San Bernardino, CA 92410

Occupant
1502 W Kingman St
San Bernardino, CA 92411

Occupant
1500 W Rialto Ave
San Bernardino, CA 92410

Occupant
1499 W 5th St
San Bernardino, CA 92411

Occupant
1496 W 5th St
San Bernardino, CA 92411

Occupant
1496 W 4th St
San Bernardino, CA 92411

Occupant
149 N Mount Vernon Ave
San Bernardino, CA 92410

Occupant
1487 W Kingman St
San Bernardino, CA 92411

Occupant
1482 W Kingman St
San Bernardino, CA 92411

Occupant
1474 W Kingman St
San Bernardino, CA 92411

Occupant
1472 W 5th St
San Bernardino, CA 92411

Occupant
1472 W 4th St
San Bernardino, CA 92411

Occupant
1467 W 5th St
San Bernardino, CA 92411

Occupant
1461 W 5th St
San Bernardino, CA 92411

Occupant
1460 W 5th St
San Bernardino, CA 92411

Occupant
1458 W 5th St
San Bernardino, CA 92411

Occupant
1457 W 5th St
San Bernardino, CA 92411

Occupant
1455 W Kingman St
San Bernardino, CA 92411

Occupant
1449 W 5th St
San Bernardino, CA 92411

Occupant
1448 W 4th St
San Bernardino, CA 92411

Occupant
1446 W Kingman St
San Bernardino, CA 92411

Occupant
1445 W 5th St
San Bernardino, CA 92411

Occupant
1442 W 4th St
San Bernardino, CA 92411

Occupant
1439 W Kingman St
San Bernardino, CA 92411

Occupant
1436 W Kingman St
San Bernardino, CA 92411

Occupant
1432 W 4th St
San Bernardino, CA 92411

Occupant
1431 W 5th St
San Bernardino, CA 92411

Occupant
1430 W Kingman St
San Bernardino, CA 92411

Occupant
1430 W 5th St
San Bernardino, CA 92411

Occupant
1430 W 4th St
San Bernardino, CA 92411

Occupant
1423 W 2nd St
San Bernardino, CA 92410

Occupant
1418 W 4th St
San Bernardino, CA 92411

Occupant
1414 W Kingman St
San Bernardino, CA 92411

Occupant
1407 W Kingman St
San Bernardino, CA 92411

Occupant
1407 W 5th St
San Bernardino, CA 92411

Occupant
140 N Mount Vernon Ave
San Bernardino, CA 92410

Occupant
1390 W 4th St
San Bernardino, CA 92411

Occupant
1380 W Kingman St
San Bernardino, CA 92411

Occupant
1380 W 5th St
San Bernardino, CA 92411

Occupant
1379 W 5th St
San Bernardino, CA 92411

Occupant
1377 W 2nd St
San Bernardino, CA 92410

Occupant
1374 W 5th St
San Bernardino, CA 92411

Occupant
1372 W King St
San Bernardino, CA 92410

Occupant
1372 W 5th St
San Bernardino, CA 92411

Occupant
1371 W Kingman St
San Bernardino, CA 92411

Occupant
1371 W 2nd St
San Bernardino, CA 92410

Occupant
1370 W Kingman St
San Bernardino, CA 92411

Occupant
1365 W 2nd St
San Bernardino, CA 92410

Occupant
1364 W 4th St
San Bernardino, CA 92411

Occupant
1363 W 5th St
San Bernardino, CA 92411

Occupant
1358 W 4th St
San Bernardino, CA 92411

Occupant
1357 W Kingman St
San Bernardino, CA 92411

Occupant
1356 W King St
San Bernardino, CA 92410

Occupant
1355 W 5th St
San Bernardino, CA 92411

Occupant
1354 W Rialto Ave
San Bernardino, CA 92410

Occupant
1354 W King St
San Bernardino, CA 92410

Occupant
1149 W 5th St
San Bernardino, CA 92411

Occupant
1347 W 2nd St
San Bernardino, CA 92410

Occupant
1344 W 2nd St
San Bernardino, CA 92410

Occupant
1343 W Kingman St
San Bernardino, CA 92411

Occupant
1337 W Kingman St
San Bernardino, CA 92411

Occupant
1336 W 2nd St
San Bernardino, CA 92410

Occupant
1335 W Rialto Ave
San Bernardino, CA 92410

Occupant
1335 W King St
San Bernardino, CA 92410

Occupant
1335 W 3rd St
San Bernardino, CA 92410

Occupant
1335 W 2nd St
San Bernardino, CA 92410

Occupant
1331 W King St
San Bernardino, CA 92410

Occupant
1328 W Kingman St
San Bernardino, CA 92411

Occupant
1328 W 4th St
San Bernardino, CA 92411

Occupant
1325 W King St
San Bernardino, CA 92410

Occupant
1323 W 2nd St
San Bernardino, CA 92410

Occupant
1320 W Kingman St
San Bernardino, CA 92411

Occupant
1320 W King St
San Bernardino, CA 92410

Occupant
132 N Mount Vernon Ave
San Bernardino, CA 92410

Occupant
1317 W Kingman St
San Bernardino, CA 92411

Occupant
1314 W Kingman St
San Bernardino, CA 92411

Occupant
1314 W 4th St
San Bernardino, CA 92411

Occupant
1310 W 4th St
San Bernardino, CA 92411

Occupant
1305 W 5th St
San Bernardino, CA 92411

Occupant
1293 W 5th St
San Bernardino, CA 92411

Occupant
1285 W 5th St
San Bernardino, CA 92411

Occupant
1280 W Rialto Ave
San Bernardino, CA 92410

Occupant
1277 W King St
San Bernardino, CA 92410

Occupant
1272 W King St
San Bernardino, CA 92410

Occupant
1271 W Rialto Ave
San Bernardino, CA 92410

Occupant
1271 W King St
San Bernardino, CA 92410

Occupant
1266 W Rialto Ave
San Bernardino, CA 92410

Occupant
1265 W King St
San Bernardino, CA 92410

Occupant
1263 W 5th St
San Bernardino, CA 92411

Occupant
1263 Spruce St
San Bernardino, CA 92411

Occupant
1259 W King St
San Bernardino, CA 92410

Occupant
1258 W 5th St
San Bernardino, CA 92411

Occupant
1257 W 5th St
San Bernardino, CA 92411

Occupant
1255 W 5th St
San Bernardino, CA 92411

Occupant
1249 Spruce St
San Bernardino, CA 92411

Occupant
1248 W 5th St
San Bernardino, CA 92411

Occupant
1238 W King St
San Bernardino, CA 92410

Occupant
1235 Spruce St
San Bernardino, CA 92411

Occupant
1229 W 5th St
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Occupant
1226 W King St
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Occupant
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Occupant
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Occupant
1219 Spruce St
San Bernardino, CA 92411

Occupant
1216 W King St
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1215 W King St
San Bernardino, CA 92410

Occupant
1214 W Rialto Ave
San Bernardino, CA 92410

Occupant
121 N Mount Vernon Ave
San Bernardino, CA 92410

Occupant
1208 W Rialto Ave
San Bernardino, CA 92410

Occupant
1208 W King St
San Bernardino, CA 92410

Occupant
1208 W 5th St
San Bernardino, CA 92411

Occupant
1203 W 5th St
San Bernardino, CA 92411

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1199 W 5th St
San Bernardino, CA 92411

Occupant
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San Bernardino, CA 92410

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San Bernardino, CA 92411

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San Bernardino, CA 92410

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San Bernardino, CA 92411

Occupant
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San Bernardino, CA 92411

Occupant
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ARCO
542 N Mount Vernon Ave
San Bernardino, CA 92411

Occupant
1432 W 4th Street
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Occupant
1434 W 4th Street
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Occupant
525 Mt Vernon Ave
San Bernardino, CA 92411

Occupant
1511 W 5th St
San Bernardino, CA 92411

Occupant
1551 W 5th St
San Bernardino, CA 92411

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Appendix A. Programmatic Section 4(f) Evaluation

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Programmatic Section 4(f) Evaluation

Submitted Pursuant to:
49 U.S.C. 303

MOUNT VERNON AVENUE BRIDGE PROJECT

Bridge No. 54C-0066

City of San Bernardino, California

08-SBd-0-Local Assistance

San Bernardino County Transportation Authority

California Department of Transportation, District 8

The environmental review, consultation, and any other actions required by applicable Federal environmental laws for this project are being, or have been, carried out by Caltrans pursuant to 23 USC 327 and the Memorandum of Understanding dated December 23, 2016, and executed by FHWA and Caltrans.

October 2018

Mount Vernon Avenue Bridge Project

CITY OF SAN BERNARDINO
SAN BERNARDINO COUNTY, CALIFORNIA
08-SBd-0-Mount Vernon Avenue

EA 965120 BRLS-6507(003)

PROGRAMMATIC SECTION 4(F) EVALUATION
Submitted Pursuant to:

49 USC 303

THE STATE OF CALIFORNIA

Department of Transportation as assigned

10-8-2018
Date of Approval

Aaron Burton
Senior Environmental Planner

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 USC 327.

Contents

List of Tables

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Acronyms and Abbreviations

ADA	Americans with Disabilities Act
APE	Area of Potential Effects
BMPs	Best management practices
CRHR	California Register of Historical Resources
DIB	Design Information Bulletin
DPR	Department of Parks and Recreation
EBL	Eligible Bridge List
FHWA	Federal Highway Administration
FO	Functionally Obsolete
FOE	Finding of Effect
FTIP	Federal Transportation Improvement Program
HAER	Historic American Engineering Record
HBP	Highway Bridge Program
MLD	Most Likely Descendent
MOA	Memorandum of Agreement
NAHC	Native American Heritage Commission
NHPA	National Historic Preservation Act
NPS	National Parks Service
NRHP	National Register of Historic Places
PCI	paint condition index
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SBCTA	San Bernardino County Transportation Authority
Santa Fe Depot	Santa Fe Passenger and Freight Depot
SCAG	Southern California Association of Governments
SD	Structurally Deficient
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
USGS	U.S. Geological Survey
VMT	vehicle miles traveled

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Chapter 1 Introduction

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 U.S.C. 303 (including 23 USC 138, and 23 CFR 774) declares that "it is the policy of the United States Government that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites."

Section 4(f) specifies that the Secretary [of Transportation] may approve a transportation program or project requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the federal, state, or local officials having jurisdiction over the park, area, refuge, or site) only if:

- There is no prudent and feasible alternative to using that land; and
- The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

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Chapter 2 Description of Proposed Project and Alternatives

2.1 Project Purpose and Need

2.1.1 Project Purpose

The purpose of the proposed project is to provide a bridge that is structurally safe, meeting current seismic, design, and roadway standards.

2.1.2 Project Need

2.1.2.1 SEISMICALLY DEFICIENT

The existing Mount Vernon Bridge was constructed in 1934 and incorporated steel girders salvaged from an earlier 1907 structure. As part of the Local Bridge Seismic Safety Retrofit Program, a seismic analysis and retrofit study were conducted in 1996. The Final Seismic Retrofit Strategy Report, issued in June 1997, determined that the bridge fell under Category 1, a category for bridges that could potentially collapse in a seismic event and threaten public safety.

2.1.2.2 SUFFICIENCY RATING

Caltrans maintains the *National Bridge Inventory—Structure Inventory and Appraisal* for bridges both on and off the federal highway system in the state. The inventory includes a sufficiency rating for each bridge. The sufficiency rating is typically determined by three considerations: (1) structural adequacy and safety, (2) serviceability and functional obsolescence, and (3) essentiality for public use. A special reduction factor is considered to account for conditions related to detours, traffic safety features, and structure type. When a bridge has a deficient sufficiency rating, it is placed on the Federal Highway Administration (FHWA) Federal Eligible Bridge List (EBL) to receive high priority for retrofit/rehabilitation or replacement under the Federal Highway Bridge Program (HBP). A deficient bridge is defined as having a sufficiency rating ≤ 80 and a status flag as Structurally Deficient (SD). Bridges with a sufficiency rating ≤ 80 and SD or Functionally Obsolete (FO) status are eligible for rehabilitation, while bridges with a sufficiency rating ≤ 50 and SD or FO status are eligible candidates for replacement. In 2002, the sufficiency rating for the Mount Vernon Avenue Bridge was 45.6 with flags for both SD and FO. The major bridge deficiencies in 2002 were identified as poor deck condition, nonstandard deck geometry, and nonstandard under clearance at West 3rd Street. In 2004, Caltrans established the sufficiency rating for the bridge as 2.0 after cracks were found in the main steel girders supporting the bridge. With the results of the 2004 bridge inspections, the sufficiency rating for the bridge is the result of the following factors: low superstructure capacity, poor substructure condition, serious deck condition, inadequate deck geometry, and substandard vertical clearance at West 3rd Street. Additionally, the capacity of the existing bridge railing does not meet current standards. The bridge was closed by the City of San Bernardino for six months while timber shoring supports were installed to carry loads in the vicinity of the cracks. In December 2016, the

sufficiency rating for the Mount Vernon Avenue Bridge was confirmed at 2.0. The bridge is currently closed to all commercial traffic including trucks and buses.

2.1.2.3 STRUCTURALLY DEFICIENT

The bridge has a low superstructure capacity, poor substructure conditions, and deck deficiencies. The deck has moderate and severe transverse cracks and spalls at various locations. The steel bents have structural damage and heavy corrosion on almost all steel element connections. The girders receive a score of 0.0 for operating and inventory ratings due to several severe fatigue cracks on the girder-to-cap beam connections; however, the bridge remains open because of temporary supports that were installed in the early 2000s. Inventory and operating capacity is calculated at 32 tons per vehicle (29 metric tons) and 34 tons per semi-trailer combination (31 metric tons). The load rating for this structure is adequate as long as the temporary shorings at bents 7, 14, 18, and 19 remain in place and in good satisfactory condition. All commercial vehicles except for commercial pickup trucks, vans, and passenger cars are currently prohibited from using this structure.

2.1.2.4 FUNCTIONALLY OBSOLETE (FO)

The existing bridge is considered to be FO because of the nonstandard deck geometry, misaligned south approach, and nonstandard vertical clearance at West 3rd Street.

2.1.2.5 OTHER DEFICIENCIES

In addition to the previously described deficiencies, other serious conditions exist, such as substandard vertical clearance over the railroad and substandard vertical clearance for 3rd Street. Additionally, the bridge was last painted in 1954. The paint condition index (PCI) dropped from 74.5 in 2000 to 38 in 2016. Bridges on the EBL with a PCI of 65.0 or less qualify as a stand-alone painting project under the federal HBP guidelines. Additionally, the existing bridge has nonstandard vertical and horizontal clearances at the BNSF railroad yard.

2.2 Project Description/Alternatives

2.2.1 Alternatives

2.2.1.1 PROPOSED BUILD ALTERNATIVE

The project is located in the City of San Bernardino, San Bernardino County, California (Figures 1 and 2), along the Mount Vernon Bridge 54C-066, Section 7, Township 1 South, and Range 4 West, on the San Bernardino South U.S. Geological Survey (USGS) 7.5-minute quadrangle map. The project sponsor is now the San Bernardino County Transportation Authority (SBCTA) instead of the City of San Bernardino.

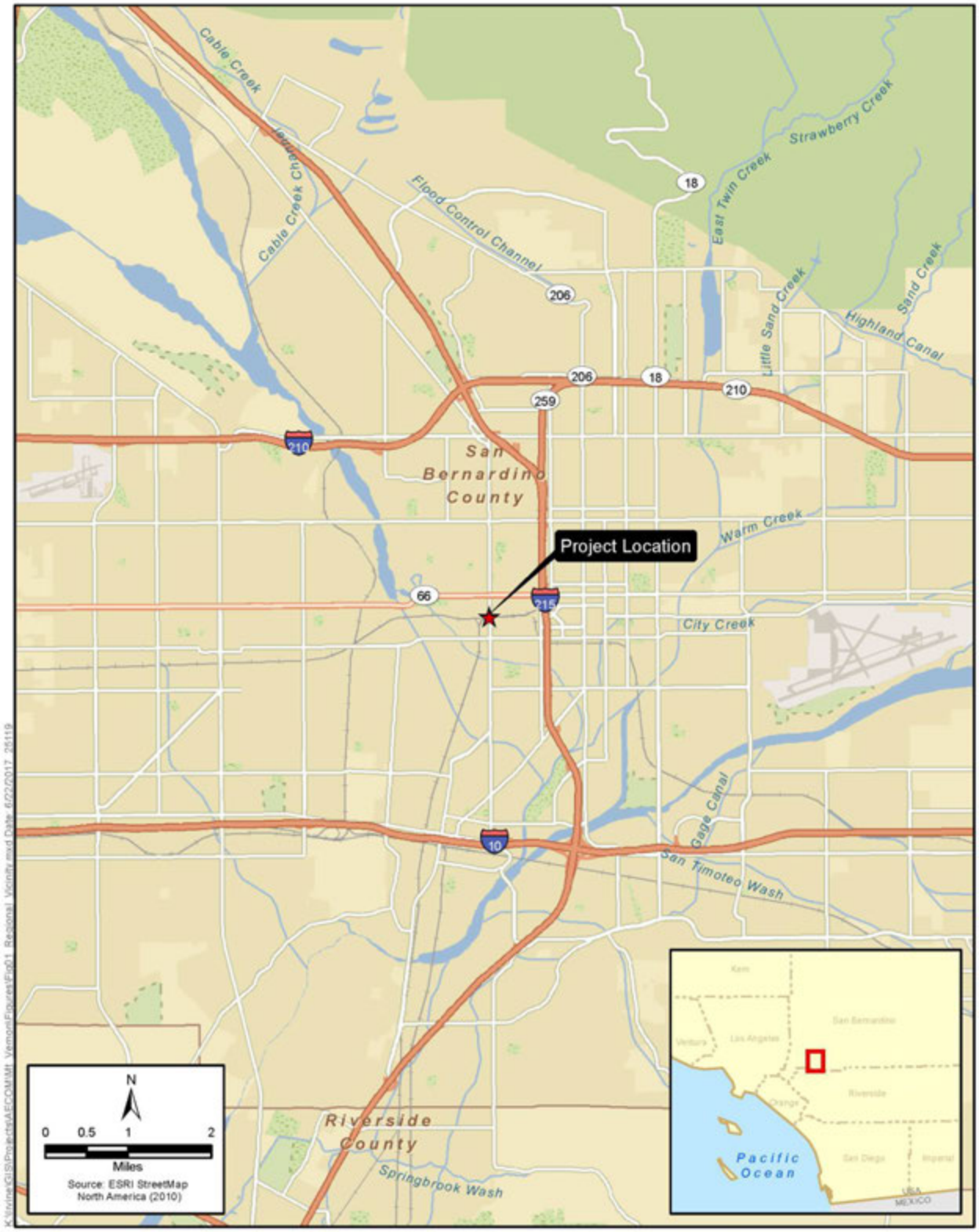

Figure 1
Regional Vicinity Map
Mount Vernon Avenue Bridge Project

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Figure 2
Project Location
Mount Vernon Avenue Bridge Project

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The Preferred Alternative (Alternative 3 – Bridge Replacement), would extend from just south of 5th Street to Rialto Avenue and would involve removal of the existing bridge structure, construction of a new replacement bridge structure, and improvements to bridge approaches and roadways in the project vicinity. The new replacement bridge would be 1130.5 feet long and 80 feet wide with four travel lanes (two in each direction), a 2-foot-wide median, and 4-foot-wide minimum shoulders which will accommodate a Class II bicycle facility. Sidewalks on each side of the new bridge would be 6 feet wide and would meet Americans with Disabilities Act (ADA) requirements for sidewalk width and slopes, including preservation of existing access directly from the bridge to the Santa Fe Depot and Metrolink Station. Concrete barrier railings (2.8 feet high) topped with fencing (8 feet high) would be provided on each side of the new bridge.

Design Speed. The Build Alternative would be designed for speeds of 35 miles per hour and up to 40 miles per hour due to vertical profile.

Vertical Clearance/Horizontal Alignment/Street Geometrics. The profile of the new replacement bridge would be raised to at least 24 feet with a maximum clearance of approximately 36 feet. This alternative would also provide for the minimum 15-foot clearance over West 3rd Street. Southbound left-turn pockets are proposed at 2nd Street. At the Mount Vernon Avenue/2nd Street intersection, the free right turn from westbound 2nd Street to the northbound Mount Vernon Avenue would be replaced by a right-turn pocket.

Horizontal Clearance. Per BNSF request, the bridge columns are to be a minimum of six feet in diameter, which qualifies as "heavy construction," and therefore avoids the need to construct crash walls.

Bridge Alignment/Street Geometrics. To correct the misalignment with the south approach roadway, the bridge would be widened on the west side closer to some of the existing residential land uses within the project vicinity. This widening would require the service road at the southwest end of the bridge between West 2nd and West 3rd Streets to be closed.

Service Road and Westerly Alleyway. The bridge widening would require that the Mount Vernon Avenue service road between West 2nd and West 3rd Streets be closed. Access to the parallel alleyway behind the four residential parcels in this area would maintained. A parallel alleyway behind four residential parcels in this area would be upgraded to "Access Roadway" standards, providing a traveled way of 26 feet (curb-to-curb) consisting of two un-striped 13-foot wide lanes (beyond 10-foot standard lanes).

Roadway Improvements. Roadway improvements at the south end of the bridge would include retaining walls or concrete walls that would be constructed along both sides of the south approach, minor restriping, repaving, and installing of curbs and gutters. At the north end of the new bridge, similar types of roadway improvements would be provided. Additionally, retaining walls or concrete walls would be constructed along both sides of the north approach between about Kingman Avenue and West 4th Street. The walls would be landscaped with vegetation that has aerial rootlets to cover the wall, potentially with creeping fig. The intersection of West 4th Street and Mount Vernon Avenue has been reconstructed in a cul-de-sac configuration as part of a separate City public works project. Pedestrian access to existing parcels on Mount Vernon Avenue would be constructed, which would be provided with ADA compliant ramps in addition to steps.

Construction Methods. Construction methods that would minimize impacts on railroad operations would be employed for the new replacement bridge. Removal of the existing bridge would be performed prior to construction using techniques approved by BNSF. The girders would be precast concrete bulb-tee girders (concrete deck). The bridge foundation would be formed by large diameter driven piles (commonly referred to as cast-in-steel-shell piles, or CISS) to avoid the substantial footprint area required for pile-group-type foundations. Minimizing the footprint of the substructure would reduce the impact to railroad operations. Columns would be supported on the CISS piles, and where required, crash walls would be implemented. Construction of the replacement bridge would be carried out using standard techniques that are typical in California and would be staged in the railroad right-of-way using BNSF and Metrolink authorized work windows.

The following improvements would also be included:

- A portion of the BNSF intermodal operations/parking area east of the bridge on the north side of the existing tracks would be removed and a new area between Kingman Street and West 4th Street and from Cabrera Avenue to Mount Vernon Avenue would be constructed (this will involve acquisition and removal of existing residences/businesses within these limits) to accommodate BNSF operational uses that are displaced by the project. A 12-foot-tall block wall and a 20-foot-wide landscape buffer would be constructed along Kingman Street and Cabrera Avenue to shield this area from surrounding uses.
- Just west of Mount Vernon Avenue, West 4th Street would form an intersection with Cabrera Avenue and be vacated east of that intersection.
- The existing Eagle Building and four associated buildings would be relocated from the east side of Mount Vernon Avenue to the west side of Mount Vernon Avenue.
- The two existing crane repair pads would be relocated north of their current location (one on either side of Mount Vernon Avenue).
- To address impacts to BNSF railyard facilities and operations, SBCTA will provide two shoofly tracks (Tracks 218 and 219) during the bridge demolition, foundation work, and new bridge construction[1].
- Existing Tracks 216 and 217 would be realigned in the immediate vicinity of the new bridge to accommodate the new bridge column locations. Since adoption of the 2011 EA/FONSI, BNSF realigned Track 216 and constructed Track 217 as part of operational improvements associated with the railyard, separate from the Mount Vernon Avenue Bridge Project.
- Three single-family residences and two commercial businesses located at the southwest end of the bridge—bordered by Mount Vernon Avenue to the east, the alley behind the structures to the west, West 3rd Street to the north, and West 2nd Street to the south—would be acquired and removed.
- The access associated with structures fronting Mount Vernon Avenue south of West 2nd Street and north of King Street would be reconstructed as needed to match the new road/sidewalk grade.

[1] SBCTA has no jurisdiction or authority to determine the salvage, disposition, temporariness, or permanency of the shooflies upon completion of the project.

Consistent with the updated project layout the following would be incorporated:

- Utilities would be relocated as needed, to accommodate the proposed improvements.
- Best management practices (BMPs) for water quality treatment would be provided as part of the proposed project where feasible.
- Signage would be incorporated within the project's limits of disturbance, where necessary.
- Pedestrian facilities would be compliant with Americans with Disability Act (ADA) standards.
- Geotechnical borings would be conducted within the project's limits of disturbance as needed for the design of the project.
- Temporary advanced signage would be required during construction, which would involve portable changeable message signs or other temporary signage that would not require any ground disturbance.
- The proposed project will incorporate bicycle facilities within the project limits that are consistent with the City of San Bernardino Bicycle Facilities Master Plan and SBCTA's adopted Non-Motorized Transportation Plan.

The profile of the replacement bridge would be different from that of the existing bridge, necessitating the raising of the intersection of Mount Vernon Avenue and 2nd Street. Mount Vernon Avenue is proposed to be closed between 5th Street and Rialto Street from late 2019 to late 2021 while the bridge is replaced. Demolition of the bridge and construction activities are anticipated to begin in the fall of 2019 and be completed by the fall of 2021.

2.2.1.2 NO-BUILD ALTERNATIVE

Under the No-Build Alternative, no new or modified bridge or other physical improvements would be constructed on Mount Vernon Avenue between Rialto Avenue and West 5th Street. The existing bridge would be left in its current condition, and no structural or functional deficiencies would be corrected. Ongoing maintenance would continue. The No-Build Alternative does not assume that the existing bridge would undergo seismic retrofitting. The existing shoring that currently supports the bridge was upgraded in 2014 for a 10-year life; the BNSF license was extended for 10 years. Barring other safety issues, the bridge would remain open until at least 2024 under the No-Build Alternative. After 2024, it is unknown if the bridge would remain open or not. Describing and analyzing a No-Build Alternative helps decision-makers and the public compare the impacts of approving the proposed project with the consequences of not approving the proposed project.

Permanent closure of the bridge would result in an unreasonable social and economic burden on the local community. Accordingly, the No-Build Alternative has been determined to be imprudent and infeasible and would not meet the project purpose and need as previously described.

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Chapter 3 Description of Section 4(f) Properties

Resources subject to Section 4(f) consideration include publicly owned lands consisting of a public park/recreational area; public wildlife and waterfowl refuges of national, state, or local significance; or historic sites of national, state, or local significance, whether publicly or privately owned. There are no publicly owned parks/recreational areas or wildlife and waterfowl refuges in the immediate project area. However, there are significant historic sites in the vicinity of the project area that are considered to be Section 4(f) resources (see Chapter 5 of this report for a summary of additional cultural resources in the project area). Under Section 4(f), a significant historic site is defined as on, or eligible for listing in the NRHP. The resources that are on the list or eligible for listing are provided in Table 3-1.

This section will discuss only the Section 4(f) resources in which a "use" occurs. Use occurs when 1) the property is acquired for a transportation project, 2) there is an occupancy of land that is adverse to the preservationist purpose of Section 4(f), or 3) there is a proximity impact that substantially impairs the purpose of the land.

Table 3-1. Resources Listed or Eligible for Listing in the National Register of Historic Places

Name	Location	Use	Significance
Mount Vernon Avenue Bridge	Project site	Yes	Eligible for listing in the NRHP
Atchison, Topeka & Santa Fe Passenger and Freight Depot	1170 West 3rd Street	No	Listed in the NRHP (February 2, 2001)

Source: Supplemental Historic Property Survey Report Mount Vernon Avenue Bridge, January 2018.

As indicated by the table, a use of the Mount Vernon Avenue Bridge occurs as part of the project and is considered a Section 4(f) resource where there is a use. However, a use of the Atchison, Topeka & Santa Fe Passenger and Freight Depot does not occur as part of the project and a detailed discussion of this resource is included under Section 5.4, "Cultural Resources." These are discussed in detail below.

3.1 Mount Vernon Avenue Bridge

The Mount Vernon Avenue Bridge (Bridge Number 54C-0066) is located on Mount Vernon Avenue between West 2nd and West 4th Streets in the western portion of the City. The original Mount Vernon Avenue viaduct was built in 1907. It was constructed over ATSF's yard tracks between West 3rd and West 4th Streets in order to eliminate a dangerous at-grade crossing. Between 1933 and 1934, the bridge was rebuilt. As much steel as possible was salvaged from the original viaduct for re-use in the new bridge (Department of Parks and Recreation [DPR] 523 form attached to the HPSR [Snyder 2001]).

The character-defining features of the bridges are 1) the light poles with the original globes (now missing), 2) the bridge railing, 3) the overhanging sidewalk deck, 4) the steel arched brackets supporting the bridge deck, 5) the steel supporting piers (bents 4 to 21), 6) the steel girders

(between bents 3 and 21), 7) the concrete abutments (located at the north and south ends of the bridge), 8) the concrete bents (bent 1, 2, and 3), and 9) the stairwell on the southeast corner.

In 2001, the Federal Highway Administration and the City proposed to undertake the replacement of the bridge. At that time, the viaduct was considered a Category 5 bridge (not eligible for listing in the National Register; Caltrans Historic Bridge Inventory Sheet attached to the HPSR [Snyder 2001]). In 2001, the bridge was re-evaluated for significance as part of the Historic Architectural Survey Report prepared for the bridge replacement project (document attached to the HPSR [Snyder 2001]). The report concluded that the Mount Vernon Avenue Bridge appeared to meet NRHP criteria. It was subsequently determined eligible for inclusion in the NRHP on March 1, 2002 (Mellon 2002 in the HPSR [Snyder 2001]).

See Figure 3 for the 2018 revised APE map which shows the previous APE limits as well as the Mount Vernon Avenue Bridge as Map Reference #26.

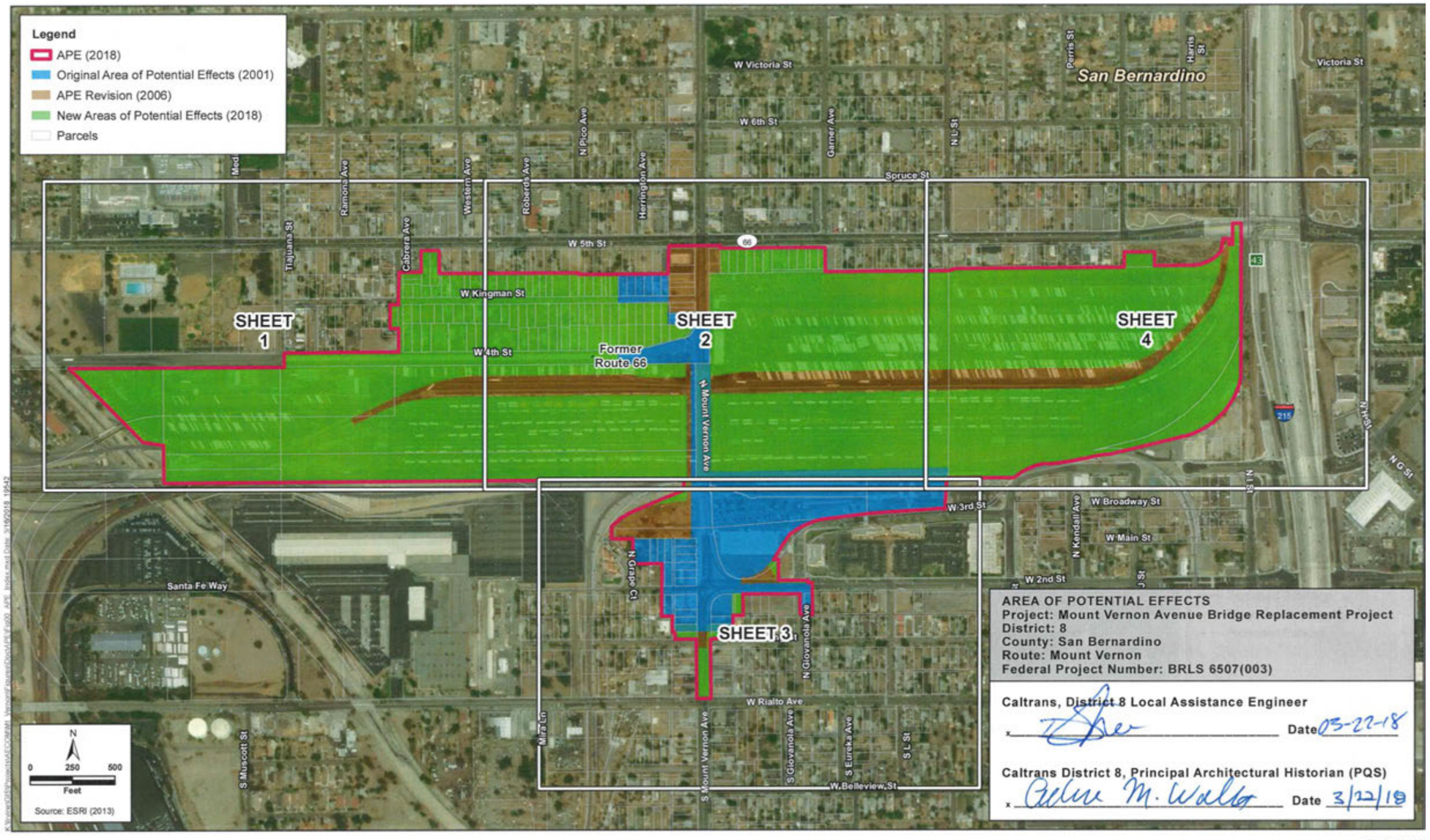

Figure X
Area of Potential Effect Sheet Index
Mount Vernon Avenue Bridge Replacement Project

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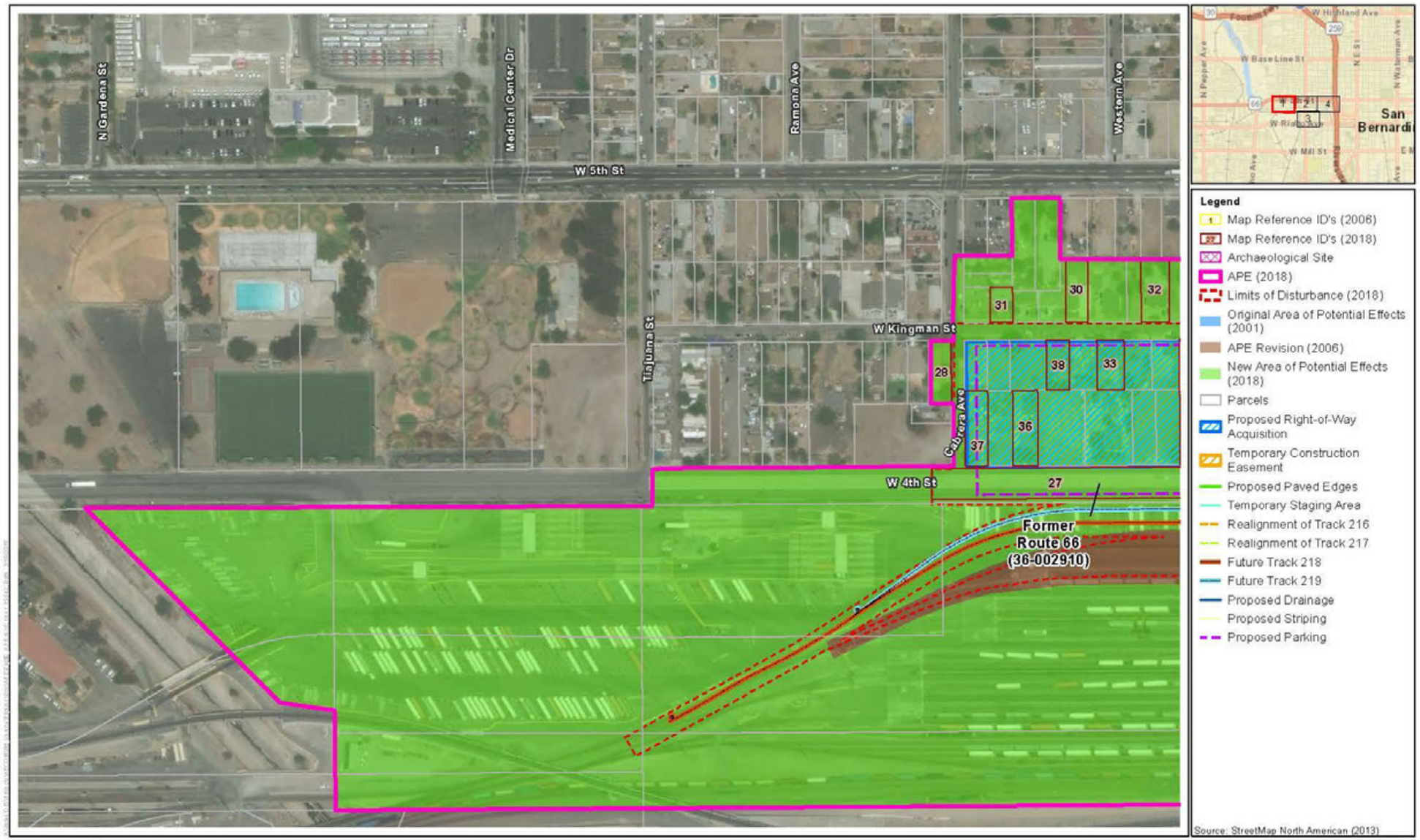

Figure X - Sheet 1
Area of Potential Effect
Mount Vernon Avenue Bridge Replacement Project

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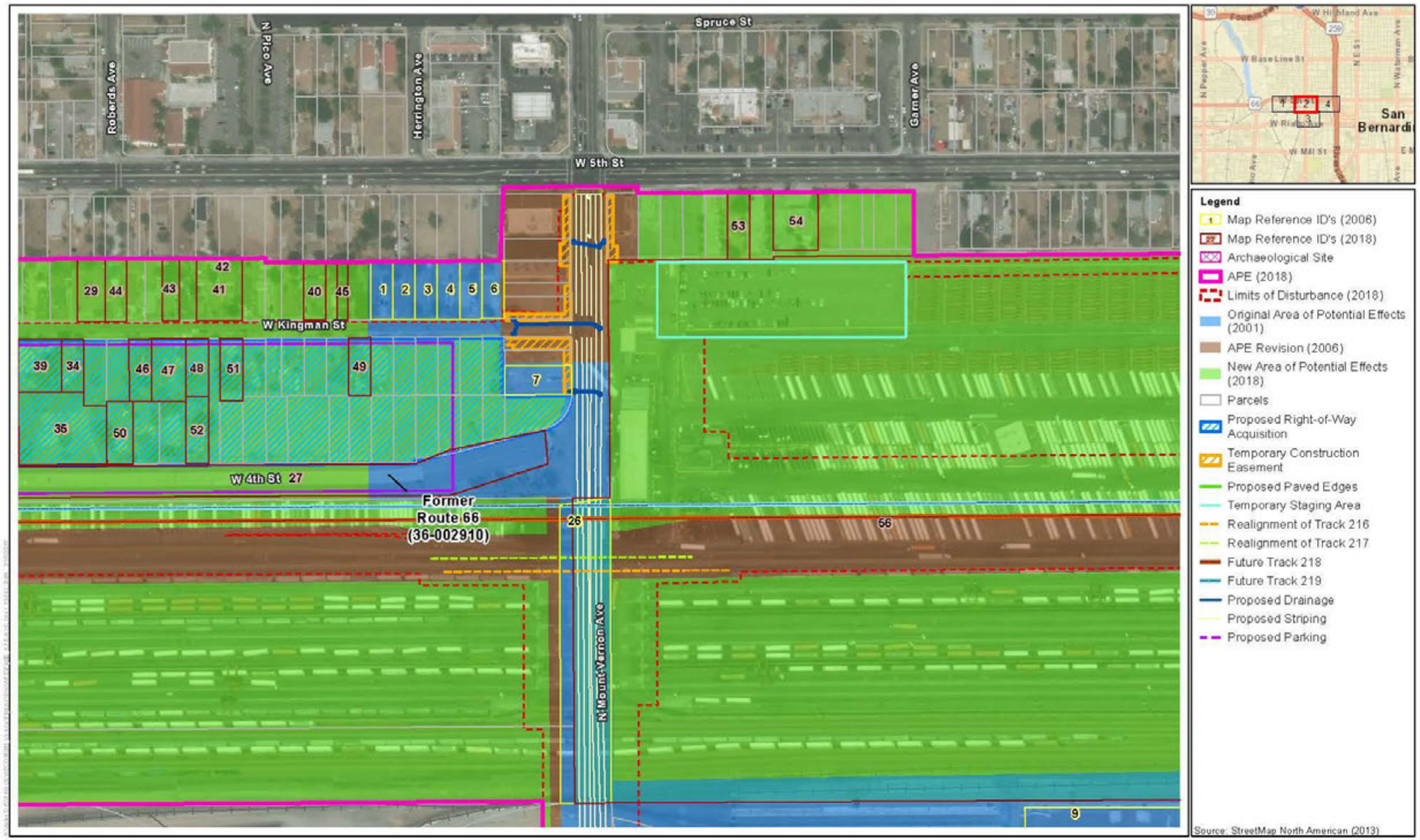

Figure X - Sheet 2
Area of Potential Effect
Mount Vernon Avenue Bridge Replacement Project

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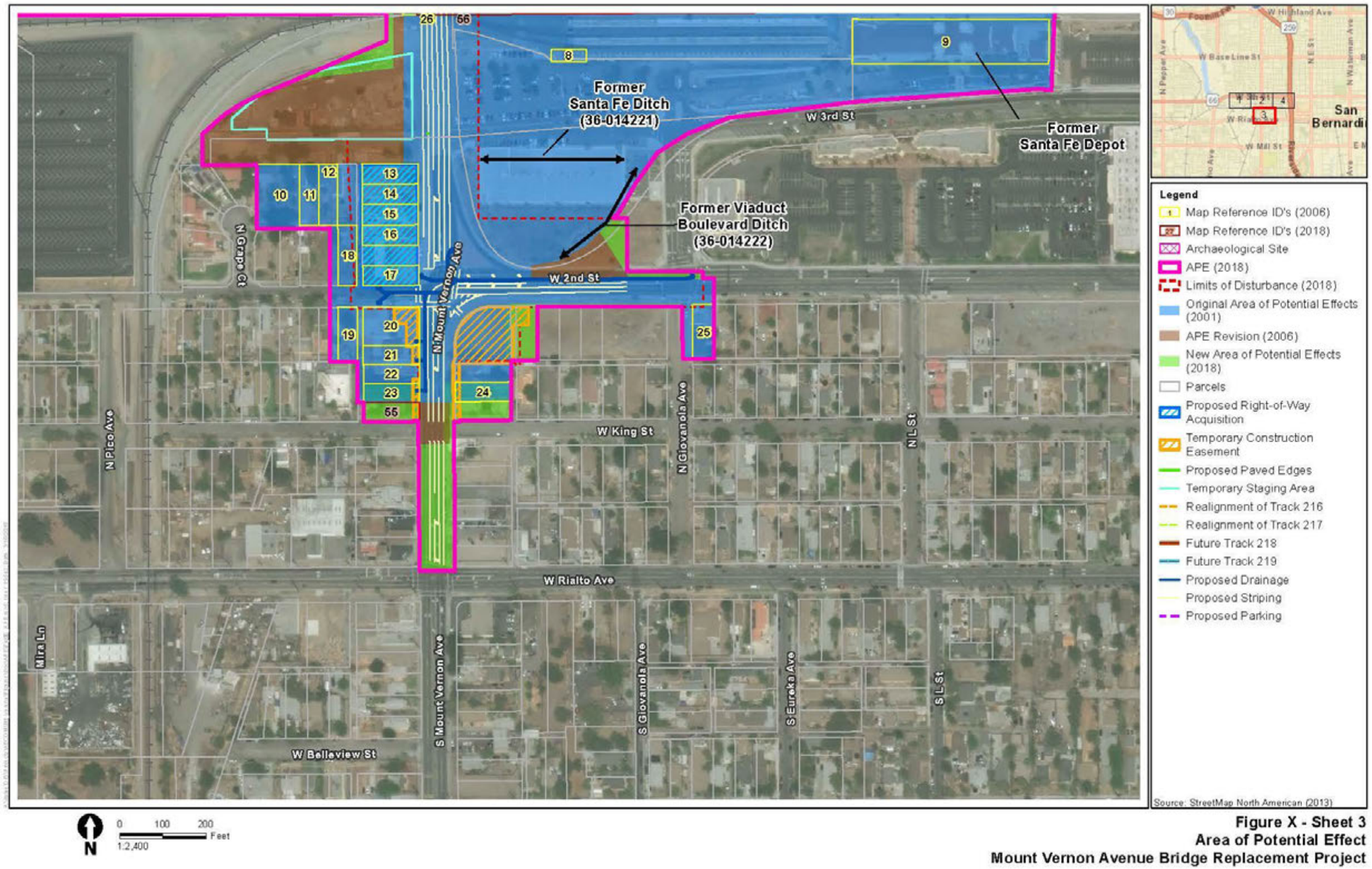

Figure X - Sheet 3
Area of Potential Effect
Mount Vernon Avenue Bridge Replacement Project

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Figure X - Sheet 4
Area of Potential Effect
Mount Vernon Avenue Bridge Replacement Project

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3.1.1 Impacts on Section 4(f) Property – Mount Vernon Avenue Bridge

3.1.1.1 BUILD ALTERNATIVE

Under the Preferred Alternative (bridge replacement), the Mount Vernon Avenue Bridge would be demolished resulting in a finding of Adverse Effect on a historic property. The existing bridge would be demolished, but its replacement would still function as a vehicular and pedestrian bridge, however, the physical features that characterize its historic significance would be destroyed under this alternative, which would be an adverse effect.

Additional impacts related to construction and operation are presented below:

Facilities, Functions, and/or Activities Potentially Affected

There are no existing facilities (bike lanes, trails, or recreational facilities) affected by the project. No impacts would occur.

Accessibility

Under this alternative, the following would most likely occur: (1) temporary impact on pedestrian access across the BNSF rail yard; (2) a temporary decrease in intersection LOS at three intersections (5th/H, 2nd/G, and Rialto/G) and alleyway improvements, resulting in impacts on secondary residential access; and (3) a temporary impact on secondary residential access due to alleyway improvements (approximately three months in duration). These impacts are not related to the historic value of the Mount Vernon Avenue Bridge.

Visual

Under the Build Alternative, the existing Mount Vernon Avenue Bridge would be demolished in its entirety and replaced with a new bridge. As a result, visual changes would occur due to the demolition of the character-defining features of the bridge, the installation of the replacement sidewalks, and the potential removal of vegetation. The demolition of the existing bridge, and the character-defining features contained within it, would be the most immediate visual change. The replacement bridge would be at a higher elevation and would be wider than the existing bridge. Furthermore, the replacement sidewalks would differ from the existing sidewalk configurations as they would be designed to meet ADA standards and Caltrans' Design Information Bulletin (DIB) 82. Lastly, vegetation could be removed to accommodate the increased width of the new bridge.

Through the implementation of measures **MOA CR-6** to **MOA CR-8**, SBCTA has made a commitment to make the replacement bridge structure consistent with the architectural details of the existing historic structure. In addition, the SBCTA has committed that the new bridge would make reference to the massing, scale, materials, and design of the existing bridge as required by measures **MOA CR-6** to **MOA CR-8**.

Noise

There are no impacts related to noise that are related to the historic value of the Mount Vernon Avenue Bridge.

Air Quality

There are no impacts related to air quality that are related to the historic value of the Mount Vernon Avenue Bridge.

Water Quality

The following temporary construction-related impacts could occur (1) release of hazardous materials (this effect is unlikely as explained further in the 2011 adopted EA/FONSI and 2018 Supplemental Environmental Assessment for the project); (2) excavation and substantial earthwork, resulting in an increase in surface water runoff, erosion, and increased pollution to local surface waters due to increased sediment loadings or discharge of construction-related pollutants (this effect is unlikely as explained further in the 2011 adopted EA/FONSI and 2018 Supplemental Environmental Assessment for the project); and potential exposure to contaminated groundwater, if encountered. These temporary construction-related impacts are not related to the historic value of the Mount Vernon Avenue Bridge. No permanent impacts would occur.

Regardless of groundwater depth, exposure to potential contaminated groundwater could result in substantial health effects, if encountered; however, it is unlikely that an identified hazardous waste groundwater plume will extend underneath Mount Vernon Avenue Bridge.

Vegetation

Within the Mount Vernon Avenue Bridge project site and immediate vicinity, there are (1) no special-status plants; (2) no natural vegetation communities (vegetation consisted of severely disturbed ruderal and/or nonnative plant species); (3) no applicable habitat conservation plans; and (4) no applicable natural community conservation plan. No impacts would occur.

Wildlife

There are no impacts related to wildlife that are related to the historic value of the Mount Vernon Avenue Bridge.

3.1.1.2 NO-BUILD ALTERNATIVE

Facilities, Functions, and/or Activities Potentially Affected

It is anticipated under the No-Build Alternative that the bridge would be closed after 2024, and there would be no crossing on Mount Vernon Avenue between West 2nd and West 5th Streets. Although there would be no direct impacts to the bridge that would constitute a decrease in historical significance, the bridge would become unsafe and would lose its value as a working piece of architecture. In addition to this seismic deficiency, the bridge was placed on the FHWA Federal Eligible Bridge List because of its low sufficiency rating. The bridge was found to be Structurally Deficient because of its poor deck condition. The bridge also meets the classification of being Functionally Obsolete with a low rating on the deck geometry (i.e., roadway width on the bridge) and because of the nonstandard deck geometry, misaligned south approach, and nonstandard vertical under clearance at West 3rd Street. Closure of the bridge may eventually result in the removal of the bridge and if this were to occur then impacts under the No-Build Alternative would be similar to what would occur under the Build Alternative.

Accessibility

The elimination of the bridge crossing would severely disrupt the local and regional circulation system; this alternative would result in an effect on traffic, transportation, pedestrian, and bicycle facilities in the area surrounding Mount Vernon Avenue Bridge.

Visual

Under the No-Build Alternative, neither bridge modifications nor replacement would occur; therefore, impacts on Key Viewpoints and the visual setting/ aesthetic conditions would not occur.

Noise

Under the No-Build Alternative, neither bridge modifications nor replacement would occur. However, if the bridge ultimately has be closed to pedestrian and vehicular traffic, this would most likely result in traffic being rerouted on adjacent streets, which could result in increased traffic noise along these adjacent streets. These impacts would not affect the historic value of the Mount Vernon Avenue Bridge.

Air Quality

Under the No-Build Alternative, neither bridge modifications nor replacement would occur. However, if the bridge ultimately has to be closed this could result in an increase in vehicle miles traveled (VMT) in the area because traffic would have to use more circuitous routes to travel from one side of the bridge to the other. This increase in VMT could result in increased air quality emissions. These impacts would not affect the historic value of the Mount Vernon Avenue Bridge.

Water Quality

Under the No-Build Alternative, neither bridge modifications nor replacement would occur; therefore, impacts on water quality would not occur.

Vegetation

Under the No-Build Alternative, neither bridge modifications nor replacement would occur; therefore, impacts on vegetation would not occur.

Wildlife

Under the No-Build Alternative, neither bridge modifications nor replacement would occur; therefore, impacts on wildlife would not occur.

3.1.2 Applicability of the Programmatic Section 4(f)

As an alternative to preparing a full individual Section 4(f) evaluation, a programmatic evaluation may be utilized. Programmatic Section 4(f) evaluations streamline the documentation and approval process and amount of interagency coordination that is required for an individual Section 4(f) evaluation. Draft and final evaluations do not need to be prepared and FHWA legal sufficiency review is not required. Interagency coordination is required only with the official(s) with jurisdiction and not with DOI, USDA, or HUD. If any of the following conditions exist, use of any of the programmatic applications do not apply:

- Construction of transportation facilities on new alignment;
- Projects for which an EIS is prepared (does not apply to the Net Benefit Programmatic);
- Specific conditions of each type of programmatic application are not met;
- Projects with one or more Section 4(f) uses that do not meet the criteria for use of any of the programmatic 4(f)s; or
- Proximity impacts resulting in constructive use are involved.

Caltrans, as assigned by FHWA, has determined that certain highway projects may comply with the requirements of Section 4(f) under a nationwide programmatic evaluation rather than through an individual evaluation. Five nationwide programmatic Section 4(f) evaluations are available. One covers projects that use historic bridges. The second covers projects that use minor amounts of land from parks, recreational areas, and wildlife and waterfowl refuges. The third covers projects that use minor amounts of land from historic sites. The fourth covers bikeway projects. The fifth applies when there is a net benefit to a Section 4(f) property. For the historic bridge programmatic Section 4(f) Evaluation, the project must meet the conditions for all programmatic 4(f) applications (above) with regard to the type of project, lack of proximity impacts resulting in a constructive use, and the type of environmental document and all of the following conditions:

- The bridge is to be replaced or rehabilitated using federal funds;
- The bridge must be listed on or eligible for listing on the National Register of Historic Places;
- The bridge cannot be a National Historic Landmark;
- Caltrans, as delegated by FHWA, determines that the facts of the project match those set forth in the sections of this document labeled Alternatives, Findings, and Mitigation; and
- Caltrans, SHPO, and the ACHP must have reached agreement through full implementation of the Section 106 process on project effects and a Memorandum of Agreement on mitigation measures.

The project meets the applicability criteria for the Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges (1983) because:

- The Build Alternative for the Mount Vernon Avenue Bridge Project includes replacement of the bridge, which would be implemented using funds from the Federal HBP[2] administered by Caltrans;
- The Mount Vernon Avenue Bridge is eligible for listing in the National Register of Historic Places under Criterion A at the state level of significance and under Criterion C at the local level of significance;
- The Mount Vernon Bridge is not a National Historic Landmark; and
- Caltrans, as delegated by FHWA, has determined that the facts of the project match those set forth in the sections of this document labeled Alternatives, Findings, and Mitigation.

[2] Formerly known as the federal Highway Bridge Replacement and Rehabilitation (HBRR) program.

The historic bridges covered by this Programmatic Section 4(f) Evaluation are historic, yet also part of either a Federal-aid highway system or a state or local highway system. The programmatic evaluation can be used because, even though historic bridges are on or eligible for inclusion on the NRHP, the bridges must perform as an integral part of a modern transportation system.

The programmatic evaluation acknowledges that the project will impair the historic integrity of the bridge by replacement/demolition. If the project meets the certain conditions as outlined in requirements for this programmatic evaluation, it will satisfy the requirements of Section 4(f) and confirm there is (1) no feasible and prudent alternative and (2) that the project includes all possible planning to minimize harm.

At the time the FONSI is signed, the Department will also approve this Programmatic Section 4(f) Evaluation based on SHPO approval of the MOA which occurs after public circulation of the environmental document. An executed Memorandum of Agreement details the stipulations required to resolve the adverse effects of the undertaking on these Historic Properties, as required by CFR 800 and the Section 106 Programmatic Agreement (see Appendix F of the Supplemental EA). The text that follows is supporting documentation for Caltrans' determination.

3.1.3 Avoidance Alternatives and Other Findings

The following alternatives avoid any use of the historic bridge:

1. Do-Nothing (No-Build) Alternative.
2. Build a new structure at a different location without affecting the historic integrity of the old bridge, as determined by procedures implementing the National Historic Preservation Act (NHPA).
3. Rehabilitate the historic bridge without affecting the historic integrity of the structure, as determined by procedures implementing the NHPA.

Each of these alternatives have been evaluated and determined not to be feasible and prudent.

Under the No-Build Alternative, no new or modified bridge or other physical improvements would be constructed on Mount Vernon Avenue between Rialto Avenue and West 5th Street. The existing bridge would be left in its current condition, and no structural or functional deficiencies would be corrected. Ongoing maintenance would continue. The No-Build Alternative does not assume that the existing bridge would undergo seismic retrofitting. The existing shoring that currently supports the bridge was upgraded in 2014 for a 10-year life; the BNSF license was extended for 10 years. Barring other safety issues, the bridge would remain open until at least 2024 under the No-Build Alternative. After 2024, it is unknown if the bridge would remain open or not.

The bridge has been rated by the California Division of Structure Maintenance & Investigations as structurally deficient and functionally obsolete. In 2004, Caltrans established the Sufficiency Rating for the bridge as 2.0 after cracks were found in the main steel girders supporting the bridge. The bridge was closed by the City for six months while timber shoring supports were installed to carry loads in the vicinity of the cracks. In December 2016, the sufficiency rating for

the Mount Vernon Avenue Bridge was confirmed at 2.0. The bridge is currently closed to all commercial traffic, including trucks and buses.

- Maintenance—The Do-Nothing Alternative does not correct the situation that causes the bridge to be considered structurally deficient or deteriorated. These deficiencies can lead to sudden collapse and potential injury or loss of life. Normal maintenance is not considered adequate to cope with the situation.
- Safety—The Do-Nothing Alternative does not correct the situation that causes the bridge to be considered deficient.

Replacement of the Mount Vernon Avenue Bridge is necessary because the current facility exhibits structural and functional deficiencies per the Department's National Bridge Inventory—Structure Inventory and Appraisal, which addresses bridges both on and off the federal highway system in the State of California. A Final Seismic Retrofit Strategy Report was consequently developed and approved on June 2, 1997. The report concluded that the bridge falls under Category 1, a category for bridges that may potentially collapse in a seismic event and potentially threaten public safety.

In addition to this seismic deficiency, the bridge was placed on the FHWA Federal Eligible Bridge List because of its low sufficiency rating. The bridge was found to be Structurally Deficient because of its poor deck condition. The bridge also meets the classification of being Functionally Obsolete with a low rating on the deck geometry (i.e., roadway width on the bridge) and because of the nonstandard deck geometry, misaligned south approach, and nonstandard vertical under clearance at West 3rd Street.

Because of these deficiencies, the existing bridge poses serious and unacceptable safety hazards to the traveling public or places intolerable restriction on transport and travel.

Build on new location without using the old bridge. Investigations have been conducted to construct a bridge on a new location or parallel to the old bridge on a new location or parallel to the old bridge (allowing for a one-way couplet); however, for one or more of the following reasons, this alternative is not feasible and prudent.

- **Terrain—**The present bridge structure is already located at the only feasible and prudent site. To build a new bridge at another site would result in extraordinary bridge and approach engineering and construction costs or extraordinary disruptions to established traffic patterns. It would also introduce new air quality and noise impacts.
- **Adverse Social, Economic, or Environmental Effects—**Building a new bridge away from the present site would result in social, economic, or environmental impacts of extraordinary magnitude. Impacts such as displacement of a significant number of families or businesses and serious disruption of established traffic patterns/access may individually or cumulatively weigh heavily against relocation to a new site.
- **Engineering and Economy—**Where difficulties associated with the new location are less extreme than those encountered above, a new site would not be feasible and prudent where cost and engineering difficulties reach extraordinary magnitude. Factors supporting this conclusion include significantly increased roadway and structure costs or serious foundation

problems. Additional design and safety factors to be considered include an ability to achieve minimum design standards or meet requirements of various permitting agencies such as those involved with navigation, pollution, and the environment.

- **Preservation of Old Bridge—**It is not feasible and prudent to preserve the existing bridge even if a new bridge were to be built at a new location. This could occur when the historic bridge is beyond rehabilitation for transportation or an alternative use, when no responsible party can be located to maintain and preserve the bridge, or when a permitting authority requires removal or demolition of the old bridge.

It is not feasible and prudent to construct a new bridge adjacent to or away from the existing bridge due to the existing street configuration, substantial social and economic impacts, and infeasibility of bridge preservation. The existing bridge provides access from 2nd Street across the BNSF railroad to where historic State Route 66 jogs west from its southerly extension. The existing 2nd Street extends approximately two blocks west of the existing bridge in a residential neighborhood that is bisected by a rail line. Construction of a new bridge in this area is expected to involve acquisition of existing homes, resulting in displacement of residents and redirection of traffic from Mount Vernon Avenue through an existing residential neighborhood. Additionally, the location and design of the bridge would be further constrained by an existing rail spur.

The street grid does not exist east of historic State Route 66 since this area, adjacent to Interstate 215, is used for railroad storage/parking. Construction of a new bridge on land to the east would require an increase of several hundred feet over the existing storage/parking area to meet State Route 66 and would result in significant additional cost and engineering difficulties. Additionally, construction of a bridge to the east could result in adverse impacts to an additional 4(f) resource, the Atchison, Topeka & Santa Fe Passenger and Freight Depot, located at 1170 West 3rd Street.

Rehabilitate the historic bridge without affecting the historic integrity of the structure— Although the 2004 Bridge Study Report found that a retrofit/rehabilitation alternative was technically feasible, the following important caveats were noted:

- Even with all possible planning to minimize harm to the historic property, direct or indirect alterations to the historic characteristics that qualify the resource for listing in the National Register of Historic Places (NRHP would likely result in an adverse effect under Section 106 and a direct use under Section 4(f). These issues would be more fully examined in the Section 106 of the NHPA and Section 4(f) documentation.
- The retrofitted bridge would have a limited service life of only 15 to 20 years because (1) major portions of the steel girders that were salvaged from the 1907 bridge could have questionable rivet connections as a result of corrosion; and (2) the bridge has been carrying heavy daily truck traffic since it was constructed in 1934, causing the aged carbon steel to reach the maximum allowable truck load cycles associated with fatigue.
- Some of the timber piles supporting the bridge foundations could be decayed from aging.

3.1.4 Measures to Minimize Harm to the Section 4(f) Property

As part of the Section 106 process, a Memorandum of Agreement (MOA) has been approved and executed, between the State Historic Preservation Officer (SHPO) and Caltrans to address the finding of Adverse Effect for the bridge. In addition, an amendment to the MOA was made in March 2018 to include SBCTA as a concurring party. The MOA provides stipulations that SBCTA will construct the replacement bridge with a design developed in consultation with the SHPO to minimize the visual impact on the setting of the Depot. The MOA was finalized after public review of the 2011 Environmental Assessment. This MOA also requires concurrence of Caltrans' local office (Caltrans District 8) and SBCTA. Architectural design of the proposed structures will be submitted to and approved by SBCTA officials prior to alteration of the existing historical resources.

The following measures are identified in the 2011 MOA and approved by the SHPO, pursuant to Section 106 PA Stipulation XI and 36 CFR 800.6(a) and (b)(1), which has been submitted to SHPO during public review of the Supplemental Environmental Assessment and Programmatic Section 4(f) Evaluation. An amendment to the MOA was completed in March 2018 to extend the expiration date of the original MOA and to replace the City of San Bernardino with SBCTA. A copy of the approved MOA and the first amendment is included in Appendix G of this Supplemental EA. A second amendment to the MOA was prepared when Caltrans in consultation with SHPO determined that project scope changes subsequent to execution of the MOA resulted in the expansion of the APE, resulting in the potential to effect subsurface historical archaeological deposits within the northwest quadrant of the APE. As a result, a second amendment to the MOA and a Cultural Resources Discovery and Monitoring Plan to address the potential for subsurface sensitivity for historical archaeological deposits were prepared. The second amendment to the MOA, which includes the CDRMP, was approved by SHPO on September 5, 2018 and is included in Appendix G of this Supplemental EA.

MOA CR-1 Prior to the start of any work that could adversely affect any characteristics that qualify the Mount Vernon Avenue Bridge as an historic property, Caltrans shall ensure that the recordation measures specified in Section A of the MOA are completed.

MOA CR-2 San Bernardino County Transportation Authority shall take a large-format (4" by 5" or larger negative size) photographs showing the Mount Vernon Avenue Bridge in context as well as details of its historic engineering features. Photographs shall be processed for archival permanence in accordance with the Historic American Engineering Record (HAER) photographic specifications. Views of the Mount Vernon Avenue Bridge shall include: (1) Contextual views showing the bridge in its setting; (2) Elevation views; (3) Views of the bridge's approaches and abutments; and (4) Detail views of significant engineering and design elements.

MOA CR-3 San Bernardino County Transportation Authority (SBCTA) shall make a reasonable and good faith effort to locate historic construction drawings for the Mount Vernon Avenue Bridge. If these drawings are located, SBCTA shall photographically reproduce plans, elevations and selected details form these drawings in accordance with HAER photographic specifications. If they are

legible in this format, reduced size (8.5 by 11 inches) copies of the construction drawings may be included as pages of the report cited in subsection A.3 of the MOA rather than photographed and included as photographic documentation. SBCTA shall promptly notify the Caltrans if historic construction drawings for Bridge #54C-0066 cannot be located. In that event, the requirements of this paragraph shall not apply.

MOA CR-4 A written historical and descriptive report for the Mount Vernon Avenue Bridge will be completed. This report will provide a physical description of the bridge, discuss its construction and its significance under applicable NRHP criteria, and address the historical context for its construction following the format and instructions in the September 1993 National Parks Service (NPS) HAER Guidelines for Preparing Written Historical and Descriptive Data guidelines for written documentation.

MOA CR-5 Upon completion, copies of the documentation prescribed in subsection A.3 of the MOA shall be retained by Caltrans, District 8, and offered to the California Room of the City's Feldhym Library.

MOA CR-6 Caltrans shall ensure that SBCTA constructs the replacement bridge in accordance with a design developed in consultation with the SHPO and submitted to the SHPO for comments, to minimize the indirect visual impact (profile, scale, color, and material) of the replacement bridge on the setting of the adjacent NRHP listed historic property, the Atchison, Topeka & Santa Fe Passenger and Freight Depot (Santa Fe Depot). The proposed bridge replacement design is depicted in Attachment A of the MOA and simulations for the replacement are included in Attachment B of the MOA. In addition, existing photographs of the Mount Vernon Avenue Bridge are located in Attachment C of the MOA.

MOA CR-7 Caltrans, in consultation with the SHPO, shall ensure that the replacement bridge will be designed to include architectural details (bridge railing, lighting, concrete abutments, stairways) in order to convey the character-defining elements of the original historic structure and to be visually compatible with the adjacent Santa Fe Depot.

MOA CR-8 Caltrans shall ensure that SBCTA will replace any landscape elements (e.g., fan palm trees [*Washingtonia robusta*]) that were 50 years old or older and contributing to the historic setting of the bridge but removed as a result of the bridge replacement project. Appropriate replacement trees should be planted in planned landscaped areas northwest and southeast of the bridge alignment.

3.1.5 Least Harm Analysis and Concluding Statement

The analysis and identification of the alternative that has the overall least harm must be documented in the final Section 4(f) evaluation. Only one Build Alternative has been identified for this project, and the No-Build Alternative does not meet the project's purpose and need, and thus is not a prudent and feasible alternative. Based on the above considerations, there is no feasible and prudent alternative to the use of land from the Mount Vernon Avenue Bridge. The proposed action includes all possible planning to minimize harm to Mount Vernon Avenue

Bridge resulting from such use and causes the least overall harm in light of the statute's preservation purpose.

3.1.6 Coordination

Consultation with the SHPO and other cultural resources stakeholders has been initiated. Caltrans, as assigned by FHWA, has obtained SHPO concurrence with the determination of eligibility and the finding of effect for this resource. Notification letters were sent to various local entities requesting information regarding cultural resources that may be located within the Area of Potential Effects (APE).

The following coordination has occurred to address cultural resources pursuant to Section 106 of the National Historic Preservation Act:

- August 2000—The APE for Cultural Resources was signed by the Department (District 8) Environmental Branch Chief.
- December 2000—The APE for Cultural Resources was signed by the FHWA Transportation Engineer.
- August 2001—A HPSR was prepared and submitted to the SHPO based on the study area delineated by the APE.
- March 2002—SHPO concurrence on the HPSR.
- April 2004—Due to expanded footprint, a supplemental records and literature search was requested from the San Bernardino Archaeological Information Center at the San Bernardino Museum.
- April 2004—A revised APE for Cultural Resources was signed by the Department.
- June 2007—A 1st Supplemental HPSR and Finding of Effect (FOE) was prepared and submitted to SHPO based on the revised APE.
- September 2007—SHPO concurrence was received on the HPSR and FOE.
- December 2009—Informal review of a draft MOA occurred
- February 2011—Caltrans and SHPO, as delegated by ACHP, finalized a FOE for the Mount Vernon Avenue Bridge and approved a list of minimization measures in the MOA signed by SHPO on June 8, 2009, and executed on February 8, 2011, subsequent to public circulation of the MOA within the draft environmental document.
- March 2018— 2nd SHSPR, APE map, SHRER and SASR were completed per Section 106 requirements. Caltrans, pursuant to Section 106 PA Stipulation X.C and if applicable PRC 5024 MOU Stipulation X.C, has determined a Finding of Adverse Effect is appropriate for this undertaking. SHPO concurred with this finding May 1, 2018.

Chapter 4 Letters and Other Correspondence

Copies of letters and correspondence related to the coordination efforts performed for the Programmatic Section 4(f) Evaluation are included on the following pages. The MOA and Amendment to the MOA, with SHPO approval, is provided in Appendix F of the NEPA Environmental Assessment. SHPO also concurred with the Supplemental Historic Property Survey Report, Supplemental Historic Resources Evaluation Report, and Supplemental Archaeological Survey Report determinations on May 1, 2018. A copy of the SHPO letter is also included in Chapter 3 of this Environmental Assessment.

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Preserving America's Heritage

December 12, 2008

Gregory P. King, Chief
Cultural and Community Studies Office
Division of Environmental Analysis
1120 N Street – P.O. Box 942874
Sacramento, CA 94274-0001

Ref: *Proposed Mount Vernon Avenue Bridge Replacement Project*
San Bernardino County, California

Dear Mr. King:

On November 17, 2008, the Advisory Council on Historic Preservation (ACHP) received your notification and supporting documentation regarding the adverse effects of the referenced undertaking on a property or properties listed or eligible for listing in the National Register of Historic Places. Based upon the information you provided, we have concluded that Appendix A, *Criteria for Council Involvement in Reviewing Individual Section 106 Cases*, of our regulations, "Protection of Historic Properties" (36 CFR Part 800), does not apply to this undertaking. Accordingly, we do not believe that our participation in the consultation to resolve adverse effects is needed. However, if we receive a request for participation from the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer, affected Indian tribe, a consulting party, or other party, we may reconsider this decision. Additionally, should circumstances change, and you determine that our participation is needed to conclude the consultation process, please notify us.

Pursuant to 36 CFR §800.6(b)(1)(iv), you will need to file the final Memorandum of Agreement (MOA), developed in consultation with the California State Historic Preservation Office (SHPO) and any other consulting parties, and related documentation with the ACHP at the conclusion of the consultation process. The filing of the MOA and supporting documentation with the ACHP is required in order to complete the requirements of Section 106 of the National Historic Preservation Act.

Thank you for providing us with your notification of adverse effect. If you have any questions or require our further assistance, please contact Carol Legard at 202 606-8522 or via e-mail at clegard@achp.gov.

Sincerely,

LaShavio Johnson

LaShavio Johnson
Historic Preservation Technician
Federal Permitting, Licensing and Assistance Section
Office of Federal Agency Programs

ADVISORY COUNCIL ON HISTORIC PRESERVATION

1100 Pennsylvania Avenue NW, Suite 803 • Washington, DC 20004
Phone:202-606-8503 • Fax: 202-606-8647 • achp@achp.gov • www.achp.gov

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STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, Governor

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
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calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov

September 18, 2007 Reply To: FHWA000302A

Gregory P. King, Chief
Cultural and Community Studies Office
Division of Environmental Analysis
Department of Transportation
PO Box 942874
Sacramento, CA 94274-0001

Re: Finding of Effect for the Proposed Replacement of the Mt. Vernon Avenue Bridge, San Bernardino, CA

Dear Mr. King:

Thank you for consulting with me about the subject undertaking in accordance with the *Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA).

The Federal Highway Administration (FHWA) is requesting my concurrence that the proposed project will have an adverse effect on historic properties, specifically the Mount Vernon Ave Bridge, a property determined eligible for the National Register of Historic Places in 2002. Based on my review of the submitted documentation I concur.

Thank you for considering historic properties as part of your project planning. If you have any questions, please contact Natalie Lindquist of my staff at your earliest convenience at (916) 654-0631 or e-mail at nlindquist@parks.ca.gov .

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

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STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY EDMUND G. BROWN, Jr., Governor

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Flex your power!
Be energy efficient!

February 22, 2011

Mr. Milford Wayne Donaldson, FAIA
State Historic Preservation Officer
Office of Historic Preservation
P. O. Box 942896
Sacramento, CA 94296-0001

FHWA979414B

Dear Mr. Donaldson:

Subject: Signed Memorandum of Agreement for the Mount Vernon Avenue Bridge Replacement Project, City of San Bernardino, San Bernardino County, California

Enclosed for your records is a copy of the executed Memorandum of Agreement for the above referenced undertaking. A copy is also being provided to the Advisory Council for Historic Preservation.

Caltrans is transmitting this as a federal agency, following the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program,* which became effective on July 1, 2007. The MOU was signed pursuant to Section 6005 of the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, which allows the Secretary of Transportation to assign, and the State of California to assume, responsibility for FHWA's responsibilities under NEPA as well as consultation and coordination responsibilities under other Federal environmental laws. In that this project is covered by the above referenced MOU, FHWA has assigned, and Caltrans has assumed, FHWA responsibility for environmental review, consultation, and coordination on this project. Please direct all future correspondence on this project to Caltrans.

If you need additional information, please do not hesitate to contact Jill Hupp at (916-654-3567). Thank you.

Sincerely,

ANMARIE MEDIN
Chief
Cultural Studies Office
Division of Environmental Analysis

"Caltrans improves mobility across California"

M. Wayne Donaldson, FAIA
February 22, 2011
2

Enclosure: executed MOA

bc: Andrew Walters – D8; Jill Hupp – HQ

"Caltrans improves mobility across California"

State of California • Natural Resources Agency
Edmund G. Brown Jr., *Governor*

DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION
Lisa Ann L. Mangat, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

March 8, 2018

VIA EMAIL

In reply refer to: FHWA000302A

Ms. Alexandra Bevk Neeb, Section 106 Coordinator
Cultural Studies Office
Caltrans Division of Environmental Analysis
1120 N Street, PO Box 942873, MS-27
Sacramento, CA 94273-0001

Subject: Determinations of Eligibility for the Mount Vernon Avenue Bridge Replacement Project, San Bernardino County, CA

Dear Ms. Bevk Neeb:

Caltrans is continuing consultation regarding the above project in accordance with the February 8, 2011, *Memorandum of Agreement Between the California Department of Transportation and the California State Historic Preservation Officer Regarding the Replacement of the Mount Vernon Avenue Bridge, San Bernardino County, California.(MOA.),* amended March 2018. Caltrans is also consulting under the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration (FHWA), the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA). As part of your documentation, Caltrans submitted a Supplemental #2 Historic Property Survey Report (SHPSR), Supplemental Historical Resources Evaluation Report, 2nd Supplemental Archaeological Survey Report, Revised Finding of Effect, and a Cultural Resources Discovery and Monitoring Plan.

A Historic Property Survey Report (HPSR) was completed in August of 2001. The State Historic Preservation Officer (SHPO) concurred with the 2001 HPSR on March 1, 2002. A Supplemental HPSR was prepared in March 2007 to take into account modifications to the project design. Caltrans approved a Finding of Effect in 2007 and a MOA was signed by the SHPO in 2009 and later by Caltrans in 2011.

Ms. Bevk Neeb FHWA000302A
May 1, 2018
Page 2

Expansion of the area of potential effect (APE) required further identification and evaluation efforts. As a result, Caltrans has found the following properties to be not eligible for the National Register of Historic Places (NRHP):

- 1340 Kingman Avenue
- 1314 Kingman Avenue
- 436 N Mount Vernon Avenue
- 1335 3rd Street
- 248 N Mount Vernon Avenue
- 232 N Mount Vernon Avenue
- 202 N Mount Vernon Avenue
- 1324 2nd Street
- 190 N Mount Vernon Avenue
- 1225-1227 2nd Street
- Segments of Route 66
- 440-442 Cabrera Avenue
- 1456 Kingman Avenue
- 1510 Kingman Avenue
- 1528 4th Street
- 1486 Kingman Avenue
- 1499 Kingman Avenue
- 1457 Kingman Avenue
- 1472 4th Street
- 1522 4th Street
- 1528 Kingman Avenue
- 1515 Kingman Avenue
- 1479 Kingman Avenue
- 1388 Kingman Avenue
- 1428-1429 Kingman Avenue
- 1440 Kingman Avenue
- 1454 Kingman Avenue
- 1370 Kingman Avenue
- 1447 Kingman Avenue
- 1439 Kingman Avenue
- 1431 Kingman Avenue
- 1367 Kingman Avenue
- 1448 4th Street
- 1415 Kingman Avenue
- 1432 and 1434 4th Street
- 1257 5th Street
- 1241 5th Street

Ms. Bevk Neeb FHWA000302A
May 1, 2018
Page 3

- 160 Mt. Vernon Avenue
- ATSF Rail Yard

Based on my review of the submitted documentation I concur.

Based on our conversation of May 1, 2018, Caltrans will be submitting an amendment to the MOA due to the potential sensitivity in the northwestern quadrant of the APE for encountering historic archaeological deposits. The SHPO will review the Cultural Review Discovery and Monitoring Plan when Caltrans submits the MOA amendment.

If you have any questions, please contact Natalie Lindquist of my staff at (916) 445-7014 with e-mail at natalie.lindquist@parks.ca.gov or Alicia Perez at (916) 445-7020 with e-mail at alicia.perez@parks.ca.gov .

Sincerely,

Julianne Polanco
State Historic Preservation Officer

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Chapter 5 Other Park, Recreational Facilities, Wildlife Refuges, and Historic Properties Evaluated Relative to the Requirements of Section 4(f)

This section of the document discusses parks, recreational facilities, wildlife refuges, and historic properties found within or adjacent to the project area that do not trigger Section 4(f) protection either because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, 4) the project does not permanently use the property and does not hinder the preservation of the property, or 5) the proximity impacts do not result in constructive use.

Archaeological and historic sites within the Section 106 APE and all public and private parks, recreational facilities, and wildlife refuges within approximately 0.5 mile of have been analyzed to determine whether they are protected Section 4(f) resources and whether the project would "use" the properties (refer to Figure 4, Section 4(f) Resources). There are no wildlife refuges with the 0.5 mile buffer.

5.1 Trails

There is an existing proposal for a "Local Multi-Purpose Trail" on Mount Vernon Avenue, both on the bridge and the adjacent northern and southern segments of Mount Vernon Avenue (November 2005 City of San Bernardino General Plan, Page 8-13); therefore, the multi-purpose trail was subject to Section 4(f) consideration. However, currently there is no existing trail that is officially designated on Mount Vernon Avenue Bridge, nor the adjacent northern and southern segments of Mount Vernon Avenue. Additionally, both the existing bridge and proposed replacement bridge are wide enough to accommodate any future development of the Local Multi-Purpose Trail; therefore, a "use" of the proposed Section 4(f) resource does not occur and provisions of Section 4(f) are not triggered.

5.2 Parks

Active parks in the project vicinity are shown in Table 5-1, below.

Table 5-1. Parks Within 0.5 mile of the Project Site

Park Name	Address	Size and Facilities	Distance to Project Limits
Pioneer Park[3]	555 W 6th Street San Bernardino, CA 92410	5 acres. San Bernardino Public Library shares grounds; public benches and memorials.	0.45 Mile
Lytle Creek Park	San Bernardino, CA 92410	17.98 acres. Community center, basketball court, tennis courts, volleyball courts, handball courts, playgrounds, trails, public benches, and BBQ grills.	0.38 Mile
Guadalupe Field Park	780 Roberds Avenue N, San Bernardino, CA 92411	2.25 acres. Baseball diamond, picnic tables and BBQ grills.	0.40 Mile
Nunez Park and Gateway Park	1717 W 5th Street, San Bernardino, CA 92411	These two parks share some facilities. Combined they equal 22.04 acres. Baseball diamond, soccer field, basketball courts, tennis courts, racquetball courts, swimming pool and playground areas.	0.15 Mile
Ninth Street Park (also known as Bobby Vega Park)	2931 Garner Avenue, San Bernardino, CA 92411	3.62 acres. Tennis courts, picnic area, BBQ grills and playground.	0.45 Mile
La Plaza Park	685 N Mt Vernon Avenue San Bernardino, CA 92411	2.04 acres. Playground, picnic area, and benches, BBQ grills.	0.25 Mile
Gateway Park	1717 W 5th Street, San Bernardino, CA 92411	See notes on Nunez Park above.	0.20 Mile

Viaduct Park, located on North Mount Vernon Avenue, immediately south of West 2nd Street and southeast of the project area, was previously considered a Section 4(f) resource in the adopted 2011 EA/FONSI. However, it is no longer considered as a Section 4(f) resource because it was removed and that property not contains a parking garage. The last known use at Viaduct Park was in 1986 when Santa Fe Engine 3751 was removed from display at the park. Currently, there are no improvements at Viaduct Park, nor is it landscaped/maintained by the City for park use. Additionally, Viaduct Park does not appear in the City's General Plan, Table PRT-2, Existing City Parks and Recreation Facilities; therefore, "use" of Viaduct Park as a potential Section 4(f) resource does not occur, and provisions of Section 4(f) are not triggered. Because of these factors, what was formally known as Viaduct Park is not included in Figure 4, which shows schools and parks within 0.5 mile of the project footprint that are subject to Section 4(f) protection.

The proposed project will not require acquisition or temporary construction easements on any of these resources nor will the project result in temporary access impacts to any of these resources, given their distances from the project A "use" of these parks would not occur as a result of the project and provisions of Section 4(f) are not triggered.

[3] Pioneer Park appears to have been officially closed by the City of San Bernardino; however, the grounds appear to be maintained as part of the San Bernardino Public Library that also sits on the site and is therefore still included in this table.

5.3 Public Schools

There are six schools (either public schools or schools with facilities open for public use) located within a half mile of the project footprint. See Table 5-2 for a list of these.

Table 5-2. Schools within 0.5 mile of the Project Site

School Name	Distance To Project Limits	Grades
Casa Ramona Academy for Technology, Community, and Education	0.32 Mile	K-12
Juanita Blakely Jones Elementary	0.30 Mile	K-6
Lytle Creek Elementary	0.40 Mile	K-6
Richardson Prep Hi Middle School	0.50 Mile	5-8
Ramona-Alessandro Elementary	0.20 Mile	K-5
Alta Vista South Public Charter	0.50 Mile	K-12

The project will not require acquisition or temporary construction easements on any of these resources nor will the project result in temporary access impacts due available detour routes. A "use" of these schools would not occur as a result of the project and provisions of Section 4(f) are not triggered.

Figure 4 shows the location of these parks and schools subject to Section 4(f) protection within a half mile to the project footprint.

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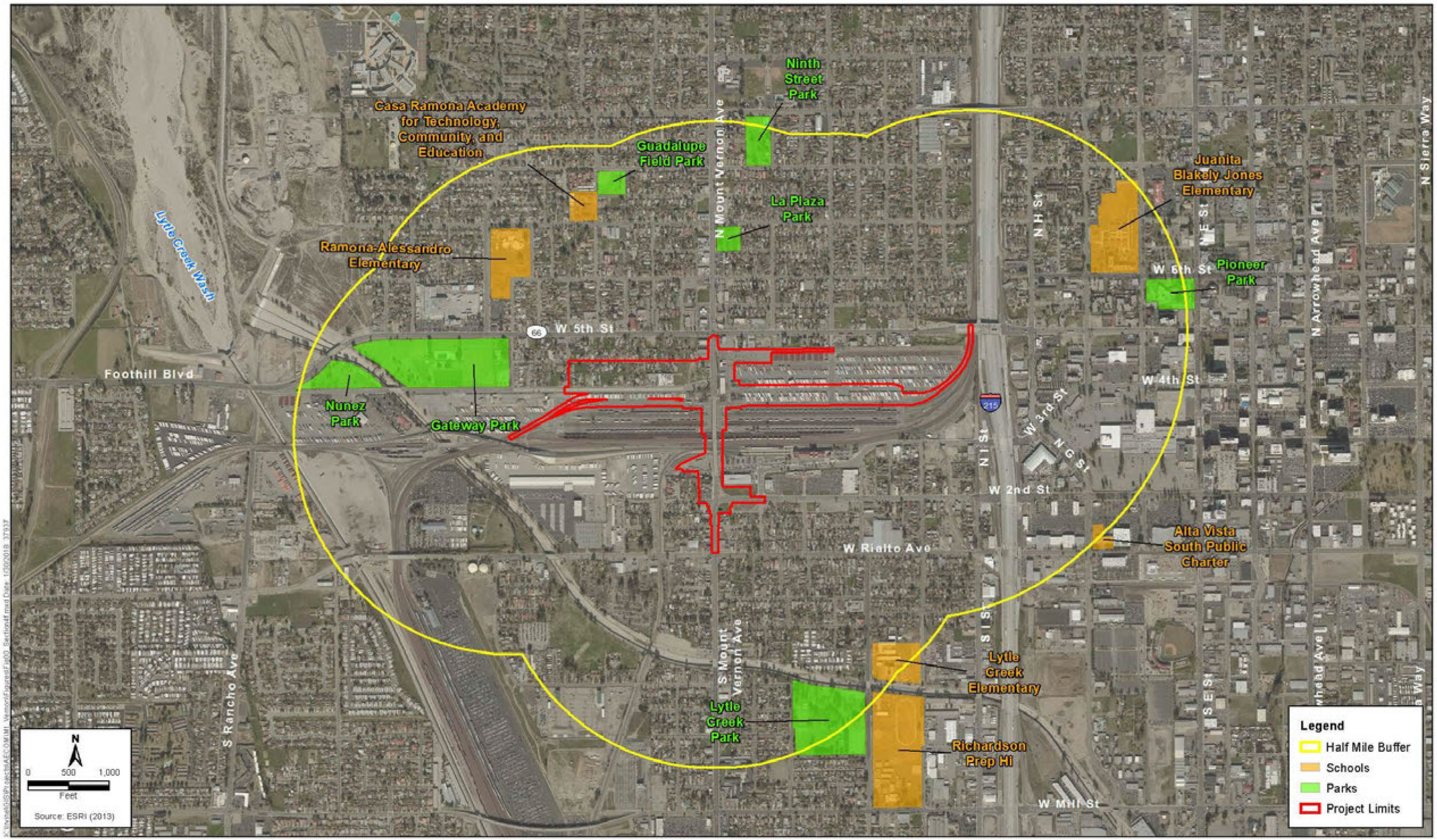

Figure 4
Section 4(f) Resources
Mount Vernon Avenue Bridge Project

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5.4 Cultural Resources

An HPSR was originally completed in August 2001 for the proposed Mount Vernon Avenue Bridge Replacement Project. The SHPO concurred with the 2001 HPSR on March 1, 2002. An SHPSR was prepared in March 2007 to take into account modifications to the project design, which required changes to the 2001 APE. The results of the 2007 study found that a building located at 240 North Mount Vernon Avenue, determined eligible for the NRHP in 2001, had been demolished in 2003. Caltrans approved a Finding of Effect for the undertaking in 2007. Because the SHPO did not formally concur on Caltrans' proposed Adverse Effect finding, Caltrans assumed concurrence and proceeded with a Memorandum of Agreement, signed by the SHPO in 2009 and later by Caltrans in 2011.

Since additional project improvements/refinements have been identified that were not included in the first SHPSR in 2007, supplemental Section 106 compliance documents were required. A second SHPSR was prepared to take into account these proposed improvements/refinements to the project design, which resulted in additional changes to the APE and caused updated studies to be conducted.

Out of the 87 historical period built-environment resources in the APE, 23 historical period built-environment resources were reviewed again for the current effort. As a result of the current study, ten of the previously determined ineligible historical period built-environment resources from the 2007 SHRER were re-evaluated. An additional 29 historical period built-environment properties in the expanded APE were recorded and evaluated for the purposes of the SHRER, resulting in a total of 39 properties being evaluated. It was determined that none of these 39 properties are eligible for the NRHP, which SHPO concurred with on May 1, 2018.

Two existing historic properties were found to be listed or eligible for listing in the NRHP as historic resources:

- Mount Vernon Avenue Bridge, and
- Santa Fe Depot.

No other historic properties that qualify as Section 4(f) resources occur in the project APE.

This section discusses only the Section 4(f) resources in which a "use" does not occur. A use of the Santa Fe Depot does not occur as part of the project. A use of the Mount Vernon Avenue Bridge does occur as part of the project, and a discussion of this resource was included under Chapter 3, "Description of Section 4(f) Properties."

On March 1, 2002, SHPO provided concurrence on the HPSR which included an No Adverse Effect finding for the Santa Fe Depot. The Santa Fe t Depot is located at 1170 West 3rd Street, approximately 310 meters (1,020 feet) east of the Mount Vernon Avenue Bridge. It was constructed between 1918 and 1921, the period of significance. The Santa Fe Depot has a three-story central block with 2 two-story wings to either side. The Mission Revival style is evident in the single and grouped arched windows, towers, and domes; rounded balconettes with metal railings; a quatrefoil window in the third-story front-gabled end; and shaped parapets. The

building was restored after having fallen into disrepair and is currently occupied in part by the San Bernardino County Transportation Authority (SBCTA).

The Santa Fe Depot was listed in the NRHP under Criterion C on February 2, 2001, as an outstanding example of Mission Revival-style architecture. Structures listed in the NRHP are automatically listed on the California Register of Historical Resources (CRHR).

As defined in 23 CFR Section 774.17, the "use" of a protected Section 4(f) resource occurs when any of the following conditions are met.

- When land is permanently incorporated into a transportation facility (direct use);
- When there is a temporary occupancy of land that is adverse in terms of the statute's preservation purpose as determined by the criteria in §774.13(d) (temporary use).
- When there is a constructive use of a Section 4(f) property as determined by the criteria in §774.15 (constructive use).

Direct Use—A direct use of a Section 4(f) resource takes place when the property is permanently incorporated into a proposed transportation facility/project (23 CFR Section 771.17). This may occur as a result of partial or full acquisition of a fee simple interest, permanent easements, or temporary easements that exceed regulatory limits (23 CFR Section 771.135[p][7]).

The depot is not located within the project footprint for replacement of the Mount Vernon Avenue Bridge and will not be incorporated into the project or project alternatives through partial or full acquisition. Additionally, no permanent change to the depot is proposed. Therefore, implementation of the project or project alternatives will not result in a direct use of this 4(f) resource and provisions of Section 4(f) are not triggered.

Temporary Use—A temporary use of a Section 4(f) resource occurs when there is a temporary occupancy of property that is considered adverse in terms of the preservationist purposes of the Section 4(f) statute. Under the FHWA regulations (23 CFR Section 774.13[b]), a temporary occupancy of property does not constitute a use of a Section 4(f) resource when the following conditions are satisfied.

- The occupancy must be of temporary duration (i.e., shorter than the period of construction) and not involve a change in ownership of the property.
- The scope of work must be minor, with only minimal changes to the protected resource.
- There are no permanent adverse physical effects on the protected resource, and there will be no temporary or permanent interference with activities or purpose of the resource.
- The property being used must be fully restored to a condition that is at least as good as that which existed prior to the project.
- There must be documented agreement of the appropriate officials having jurisdiction over the resource regarding the foregoing requirements.

The project and project alternatives do not involve temporary occupancy or change in property ownership of the depot property. Therefore, implementation of the project or project alternatives

will not result in an indirect use of this 4(f) resource, and provisions of Section 4(f) are not triggered.

Constructive Use—A constructive use of a Section 4(f) resource happens when a transportation project does not permanently incorporate land from the resource, but the proximity of the project results in impacts (i.e., noise, vibration, visual, access, and/or ecological) so severe that the protected activities, features, or attributes that qualify the resource for protection under Section 4(f) are substantially impaired (23 CFR Section 774.15). Substantial impairment occurs only if the protected activities, features, or attributes of the resource are substantially diminished. This determination is made through the following practices:

- Identification of the current activities, features, or attributes of the resource that may be sensitive to proximity impacts;
- Analysis of the potential proximity impacts on the resource; and
- Consultation with the appropriate officials having jurisdiction over the resource (23 CFR Section 774.5).

The project will not cause a constructive use of the Santa Fe Depot because the proximity impacts will not substantially impair the protected activities, features, or attributes of the historic site.

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Chapter 6 Additional References

23 CFR 774: Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites (Section 4(f))

23 CFR 771.135: FHWA Environmental Impact and Related Procedures; Section 4(f) Technical Advisory T6640.8A, Guidance for Preparing and Processing

Section 4(f) Policy Paper, March 1, 2005

Section 4(f) Checklist (FHWA Western Resource Center)
FHWA Interim Guidance, August 22, 1994. Applying Section 4(f) on Transportation Enhancement Projects and National Recreation Trail Projects

FHWA Guidance on Section 4(f) De Minimis

Caltrans. 2018. *Draft Supplemental Historic Property Survey Report prepared for the Mount Vernon Avenue Bridge Project.* Prepared by ICF for Caltrans. January.

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Chapter 7 List of Preparers

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Jean Lafontaine, Senior Transportation Environmental Planner

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Shilpa Trisal, Environmental Planner

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Appendix B. Title VI Policy Statement

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DEPARTMENT OF TRANSPORTATION
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Making Conservation a California Way of Life.

April 2018

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures *"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."*

Related federal statutes and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, please visit the following web page: http://www.dot.ca.gov/hq/bep/title_vi/t6_violated.htm.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Business and Economic Opportunity, 1823 14th Street, MS-79, Sacramento, CA 95811. Telephone (916) 324-8379, TTY 711, email Title.VI@dot.ca.gov, or visit the website www.dot.ca.gov.

LAURIE BERMAN
Director

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Appendix C. Summary of Relocation Benefits

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Appendix C. Summary of Relocation Benefits

California Department of Transportation Relocation Assistance Program

RELOCATION ASSISTANCE ADVISORY SERVICES

This appendix is general in nature and is not intended to be a complete statement of federal and state relocation laws and regulations. Any questions about relocation should be addressed to the Department's Division of Right of Way and Land Surveys. This section provides some general descriptive information on Public Law (PL) 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. This is often referred to simply as the "Uniform Act." The information in this appendix is provided only as background and is not intended as a complete statement of all the state or federal laws and regulations; for specific details the environmental planner should contact the Department's District or Regional Right-of-Way Relocation Branch. After presenting an outline of the basic legal foundation for relocation policy, the appendix looks at important relocation assistance information, including advisory services and the payment program. Refer to the Department's Right-of-Way Manual Chapter 10, for more detailed and specific information on relocation and housing programs.

DECLARATION OF POLICY

"The purpose of this title is to establish a ***uniform policy for fair and equitable treatment*** of persons displaced as a result of federal and federally assisted programs in order that such persons ***shall not suffer disproportionate injuries*** as a result of programs designed for the benefit of the public as a whole."

The Fifth Amendment to the U.S. Constitution states, "No Person shall… be deprived of life, liberty, or property, without due process of law, nor shall private property be taken for public use without just compensation." The Uniform Act sets forth in statute the due process that must be followed in Real Property acquisitions involving federal funds. Supplementing the Uniform Act is the government-wide single rule for all agencies to follow, set forth in 49 Code of Federal Regulations (CFR) Part 24. Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments, as discussed below.

FAIR HOUSING

The Fair Housing Law (Title VIII of the Civil Rights Act of 1968) sets forth the policy of the United States to provide, within constitutional limitations, for fair housing. This act, and as amended, makes discriminatory practices in the purchase and rental of most residential units illegal. Whenever possible, minority persons shall be given reasonable opportunities to relocate to any available housing regardless of neighborhood, as long as the replacement dwellings are decent, safe, and sanitary and are within their financial means. This policy, however, does not require the Department to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized and that all regulations are observed, thereby avoiding the possibility of displacees jeopardizing or forfeiting any of their benefits or payments. At the time of the initiation of negotiations (usually the first written offer to purchase), owner-occupants are given a detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted soon after the initiation of negotiations and also are given a detailed explanation of the Caltrans Relocation Assistance Program. To avoid loss of possible benefits, no individual, family, business, farm, or nonprofit organization should commit to purchase or rent a replacement property without first contacting a Department relocation advisor.

RELOCATION ASSISTANCE ADVISORY SERVICES

In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, the Department will provide relocation advisory assistance to any person, business, farm or nonprofit organization displaced as a result of the acquisition of real property for public use, so long as they are legally present in the United States. The Department will assist eligible displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are "decent, safe, and sanitary." Nonresidential displacees will receive information on comparable properties for lease or purchase (for business, farm, and nonprofit organization relocation services, see below).

Residential replacement dwellings will be in a location generally not less desirable than the displacement neighborhood at prices or rents within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings will be offered to displacees that are open to all persons regardless of race, color, religion, sex, national origin, and consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include the supplying of information concerning Federal and State assisted housing programs and any other known services being offered by public and private agencies in the area.

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without first being given at least 90 days written notice. Residential occupants eligible for relocation payment(s) will not be required to move unless at least one comparable "decent, safe, and sanitary" replacement dwelling, available on the market, is offered to them by the Department.

RESIDENTIAL RELOCATION PAYMENTS

The Relocation Assistance Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of a replacement dwelling and actual reasonable moving expenses to a new location within 50 miles of the displacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Assistance Program can be summarized as follows:

Moving Costs
Any displaced person, who lawfully occupied the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed payment based on a fixed moving cost schedule. Lawful occupants who move into the displacement property after the initiation of negotiations must wait until the Department obtains control of the property in order to be eligible for relocation payments.

Purchase Differential
In addition to moving and related expense payments, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 90 days or more prior to the date of the initiation of negotiations (usually the first written offer to purchase the property), may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of the replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate.

Rent Differential
Tenants and certain owner-occupants (based on length of ownership) who have occupied the property to be acquired by the Department prior to the date of the initiation of negotiations may qualify to receive a rent differential payment. This payment is made when the Department determines that the cost to rent a comparable "decent, safe, and sanitary" replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted under the *Down Payment* section below.

To receive any relocation benefits, the displaced person must buy or rent and occupy a "decent, safe and sanitary" replacement dwelling within one year from the date the Department takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

Down Payment
The down payment option has been designed to aid owner-occupants of less than 90 days and tenants in legal occupancy prior to the Department's initiation of negotiations. The one-year eligibility period in which to purchase and occupy a "decent, safe and sanitary" replacement dwelling will apply.

Last Resort Housing
Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program on Federal-aid projects. Last Resort Housing benefits are, except for the amounts of payments and the methods in making them, the same as those benefits for

standard residential relocation as explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payments exceed the limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances.

After the initiation of negotiations, the Department will within a reasonable length of time, personally contact the displacees to gather important information, including the following:

- Number of people to be displaced.
- Specific arrangements needed to accommodate any family member(s) with special needs.
- Financial ability to relocate into comparable replacement dwelling which will adequately house all members of the family.
- Preferences in area of relocation.
- Location of employment or school.

NONRESIDENTIAL RELOCATION ASSISTANCE

The Nonresidential Relocation Assistance Program provides assistance to businesses, farms and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms, and nonprofit organizations are: searching and moving expenses, and possibly reestablishment expenses; or a fixed in lieu payment instead of any moving, searching and reestablishment expenses. The payment types can be summarized as follows:

Moving Expenses

Moving expenses may include the following actual, reasonable costs:

- The moving of inventory, machinery, equipment and similar business-related property, including: dismantling, disconnecting, crating, packing, loading, insuring, transporting, unloading, unpacking, and reconnecting of personal property. Items acquired in the right-of-way contract may not be moved under the Relocation Assistance Program. If the displacee buys an Item Pertaining to the Realty back at salvage value, the cost to move that item is borne by the displacee.
- Loss of tangible personal property provides payment for actual, direct loss of personal property that the owner is permitted not to move.
- Expenses related to searching for a new business site, up to $2,500, for reasonable expenses actually incurred.

Reestablishment Expenses

Reestablishment expenses related to the operation of the business at the new location, up to $25,000 for reasonable expenses actually incurred.

Fixed In Lieu Payment
A fixed payment in lieu of moving, searching, and reestablishment payments may be available to businesses that meet certain eligibility requirements. This payment is an amount equal to half the average annual net earnings for the last two taxable years prior to the relocation and may not be less than $1,000 nor more than $40,000.

ADDITIONAL INFORMATION
Reimbursement for moving costs and replacement housing payments are not considered income for the purpose of the Internal Revenue Code of 1954, or for the purpose of determining the extent of eligibility of a displacee for assistance under the Social Security Act, or any other law, *except* for any federal law providing local "Section 8" Housing Programs.

Any person, business, farm or nonprofit organization that has been refused a relocation payment by the Department relocation advisor or believes that the payment(s) offered by the agency are inadequate may appeal for a special hearing of the complaint. No legal assistance is required. Information about the appeal procedure is available from the relocation advisor.

California law allows for the payment for lost goodwill that arises from the displacement for a public project. A list of ineligible expenses can be obtained from the Department's Division of Right of Way and Land Surveys. California's law and the federal regulations covering relocation assistance provide that no payment shall be duplicated by other payments being made by the displacing agency.

If your project includes relocations, include a link to the Division of Right of Way's Relocation Assistance Program at:

http://www.dot.ca.gov/hq/row/rap/index.htm

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Appendix D. Avoidance, Minimization, and/or Mitigation Summary

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										YES	NO
COMMUNITY CHARACTER AND COHESION											
C-1: During construction, access to all properties will be maintained.	2-24	2017 Supplemental Community Impact Assessment (CIA)	San Bernardino County Transportation Authority (SBCTA)	Following PS&E final design and prior to construction							
C-2: SBCTA shall prepare a sensitive community outreach plan that will identify and develop outreach activities targeted to minority and low-income residents during the final design and implementation process for the project. Community outreach should include providing timely information about anticipated construction activities to affected citizens and adjacent property owners. Notification methods will include options that are readily available to the target population, such as multi-language fliers, mailers, and posters, as well as emails.	2-24	2017 Supplemental CIA	SBCTA	Following PS&E final design and prior to construction							
See also measures **R-1, R-2** in Section 2.1.5. Relocations and Real Property Acquisition; **EJ-1** in Section 2.1.6, Environmental Justice; **UT-1** and **UT-2** in Section 2.1.7 Utilities/Emergency Services; and **TR-2** in Section 2.1.8 Traffic/Transportation.											
Relocations and Real Property Acquisitions											
R-1: In accordance with the federal Uniform Act, compensation for partial acquisition will be provided to eligible recipients. The Uniform Act provides for fair and equitable treatment of persons whose property will be acquired as a result of federally funded projects. The programs and assistance provided under the Uniform Act will be available to all eligible recipients without discrimination. For partial acquisition, compensation will be provided to eligible recipients for the portion of the property acquired. Additional compensation may be provided for any demonstrated damage to the remainder property. If it is determined that the remainder property will have little or no value or utility (i.e., an uneconomic remnant), then the property owner will have the option of either accepting full purchase of the remnant or keeping it.	2-30	2011 EA/FONSI	SBCTA	Following PS&E final design and prior to construction							
R-2: An encroachment permit application will be submitted to the California Public Utilities Commission (CPUC) and BNSF during PS&E final design. Cooperative Agreement process, six-week General Order (GO) 88-B application/request for authorization will commence during PS&E final design in compliance with GO 88-B: "Rules for Altering Public Highway-Rail Crossings" and will be finalized once concurrence of all parties (railroad, City and (CPUC) is obtained. The Cooperative Agreement and GO 88-B application will be coordinated with the CPUC's Rail Crossings Engineering Section.	2-30	2011 EA/FONSI	SBCTA	Following PS&E final design and prior to construction							
R-3: SBCTA shall provide additional relocation assistance and counseling resources to persons and businesses beyond the requirements of the Federal Uniform Relocation Assistance and Real Properties Acquisition Policies Act, as amended, to ensure adequate relocation and a decent, safe,	2-31	2017 Supplemental CIA and 2018 Supplemental EA	SBCTA	Following PS&E final design and prior to construction							

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										YES	NO
and sanitary home for displaced residents. Spanish-speaking relocation assistance personnel will be required and will be provided by SBCTA. All eligible displacees will be entitled to moving expenses. All benefits and services will be provided equitably to all residential and business displacees without regard to race, color, religion, age, national origins, or disability, as specified under Title VI of the Civil Rights Act of 1964. All relocation activities will be conducted by the implementing agencies in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended.											
Environmental Justice											
EJ-1: Actively and effectively engage all segments of the affected community with mechanisms to reduce cultural, language, and economic barriers to participation for example by providing bilingual materials on construction updates and detours, holding community meetings with bilingual facilitators, and holding meetings at a time convenient to the local community	2-38	2011 EA/FONSI	SBCTA, Resident Engineer, and Contractor	Following PS&E final design, prior to construction and during construction							
Utilities/Emergency Services											
UT-1: Implement a construction management program that maintains access to and from the project area community through signage, detours, flagmen, etc.	2-42	2011 EA/FONSI	SBCTA, Resident Engineer, and Contractor	Prior to any grading or construction activities							
UT-2: Coordinate with emergency services providers to ensure that alternative response routes to and from the project area community are in place during construction of the proposed project.	2-42	2011 EA/FONSI	SBCTA, Resident Engineer, and Contractor	Prior to any grading or construction activities							
UT-3: Consult with local school officials to identify safe pedestrian and vehicular routes for students traveling to and from schools in the project area community during construction of the proposed project.	2-42	2011 EA/FONSI	SBCTA, Resident Engineer, and Contractor	Prior to any grading or construction activities							
UT-4: San Bernardino County Transportation Authority will coordinate all utility relocation work with the affected utility companies to ensure minimum disruption to customers in the service areas during construction	2-42	2011 EA/FONSI	SBCTA, Resident Engineer, and Contractor	Prior to any grading or construction activities							
UT-5: The potential for disruption or obstruction of emergency services access in the project area to occur as a result of construction activities will be avoided with the preparation of a Traffic Management Plan (TMP) and an Access Management Plan (AMP). These plans will be written by the San Bernardino County Transportation Authority and approved by Caltrans' traffic operations staff. The TMP will include a public awareness campaign to ensure that the public is aware of when and where any traffic closures or detours, or utility disruptions, if	2-40	2011 EA/FONSI 2018 Traffic Study	SBCTA, Resident Engineer, and Contractor	Prior to any grading or construction (prepare) / During any grading or construction (implement)							

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										YES	NO
any, will occur. The AMP will be designed in coordination with emergency services personnel and local school officials to ensure that the communities within the project vicinity will remain accessible during the construction phase. The TMP will include a requirement to maintain access to all businesses and residences during project construction. Temporary improvements will be implemented prior to closure of the existing bridge and remain in place until the new bridge is opened to traffic. The temporary improvements will be removed and the intersections returned to their existing configurations after the new bridge is opened to traffic. Temporary circulation improvements will be included at the following locations to improve operations: Mount Vernon Avenue/5th Street: Restripe westbound approach as a through lane and an exclusive right-turn lane. Mount Vernon Avenue/Rialto Avenue: Restripe northbound approach as a shared left-turn/through lane and two exclusive right-turn lanes. H Street/5th Street: Restripe northbound approach as two exclusive left-turn lanes and a shared through/right-turn lane. G Street/Rialto Avenue: Restripe eastbound approach as two exclusive left-turn lanes and a shared through/right-turn lane. Change the phasing on eastbound and westbound approaches to split phasing.										
UT-6: All utility lines shall be protected in place, relocated, replaced, and/or upgraded as necessary with minimal disruption of existing domestic water or fire protection service	2-42	2011 EA/FONSI									
See also measure **R-2** in Section 2.1.5, Relocations and Real Property Acquisitions											
Traffic and Transportation/Pedestrian and Bicycle Facilities											
TR-1: Notices of the bridge closure, including corresponding vehicle/pedestrian detours, shall be provided and posted at both approaches to the bridge in advance of the scheduled bridge closure. A public awareness campaign and/or community outreach/public involvement program will be conducted to ensure that the public is aware of traffic closures or detours. Emergency response personnel and local school officials will be notified in advance of any planned street closures (including partial and/or full closures) or traffic diversions.	2-63	2011 EA/FONSI	SBCTA	During PS&E final design and construction							
TR-2: San Bernardino County Transportation Authority will make arrangements to provide free bus passes to residents of the area surrounding the bridge. These passes will be valid for travel on Omnitrans buses that serve the area. This will provide mobility to area residents affected by the bridge closure because there will be no	2-63	2011 EA/FONSI	SBCTA	During PS&E final design and construction							

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										YES	NO
pedestrian route across the BNSF rail yard while the bridge is out of service. The bus passes will provide alternative motorized means for pedestrians to travel across the rail yard during that time.											
TR-3: A Construction Management Program will be developed and implemented to maintain access to and from the project area through signage, detours, flagmen, etc.	2-63	2011 EA/FONSI	SBCTA	During PS&E final design and construction							
TR-4: During preparation of the TMP, coordination with Omnitrans shall occur to address issues along bus routes that could be affected during construction. Transit Route 1 is adjacent to the southern end of the project and traverses from Mount Vernon Avenue to 2nd Street via Viaduct, 3rd, and J Streets. Because the bridge closure would be on Mount Vernon Avenue between 2nd and 4th Streets, Transit Route 1 may be re-routed to 3rd Street via West King Street, North Giovanola Avenue, and 2nd Street, eliminating a small section of the route along Viaduct Street. To temporarily re-route Transit Route 1, coordination with Omnitrans for input on the TMP would occur	2-63	2018 Traffic Study 2018 Supplemental EA	SBCTA	During PS&E final design and construction							
Visual/Aesthetics											
VIS-1: Replace or Relocate Site Features and Landscaping Affected by the Project. Landscaping and related appurtenances (e.g., fencing, driveway gates, similar features) associated with private properties that are unaffected by relocations will be relocated or replaced where appropriate to the degree possible to reduce visual impacts.	2-67	2018 Supplemental Visual Impact Memorandum	SBCTA	Incorporate recommendations during PS&E final design and implement during construction							
VIS-2: Install Visual Barriers between Construction Work Areas and Residential Receptors. Residential receptors have high viewer sensitivity. Therefore, the contractor shall install and maintain temporary visual barriers to obstruct undesirable views of construction activities for residential viewers that are located directly adjacent to or abutting the construction site. The visual barrier may be chain link fencing with privacy slats, fencing with windscreen material, wood, or other similar barriers. The visual barrier shall be a minimum of six feet high to help maintain the privacy of residents and block ground-level views toward construction activities. Although this visual barrier would introduce a visual intrusion, it would greatly reduce visual effects associated with visible construction activities and screen construction staging areas where the protection of privacy is deemed desirable.	2-67	2018 Supplemental Visual Impact Memorandum	Resident Engineer and Contractor	During all grading and construction activities							
VIS-3: Limit Construction Directly Adjacent to Residences to Daylight Hours. Construction activities that are located directly adjacent to	2-67	2018 Supplemental Visual Impact Memorandum	Resident Engineer and Contractor	During all grading and construction activities							

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										YES	NO
residences will not take place before or past daylight hours (which vary according to season). This would reduce the amount of construction experienced by residential viewers, because most construction activities would occur during business hours (when most residents are at work), and eliminate the need to introduce high-wattage lighting sources to operate in the dark near residences during construction.											
VIS-4: Minimize Fugitive Light from Portable Sources Used for Construction. The construction contractor shall minimize project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights will be used. Portable lights will be operated at the lowest allowable wattage and height. For construction occurring on the ground, portable lights will be raised to a height no greater than 20 feet. All lights will be screened and directed downward, toward work activities, and away from the night sky and nearby residents to the maximum extent possible. The number of nighttime lights used will be minimized to the greatest extent possible.	2-67	2018 Supplemental Visual Impact Memorandum	Resident Engineer and Contractor	During all grading and construction activities							
VIS-5: Apply Aesthetic Design Treatments to Wall. Aesthetic design treatments shall be applied to the block wall located along Cabrera Avenue and Kingman Street. Design of the block wall shall evaluate similar, local structures with historic value or that are well-designed and be developed to match and transition to the Mt. Vernon Avenue Streetscape Design Guidelines, detailed within the City's *Paseo Las Placitas Specific Plan and EIR for the Mt. Vernon Corridor* plan document from 1992, to ensure that the wall does not create further visual discordance in the landscape. Following the Mt. Vernon Avenue Streetscape Design Guidelines, the wall shall implement aesthetic design features such as mimicking natural material (e.g., stone or rock surfacing) or architectural stylings (e.g., stucco or plaster over adobe brick) and integral color to reduce visibility and to better blend with the landscape. Wall color will be chosen from the *Paseo Las Placitas Specific Plan and EIR for the Mt. Vernon Corridor*. If the color selection is between two or three colors, then it is suggested that one of the darker shades be selected. Choosing a shade that is darker will allow the surface to recede and blend within the visual landscape whereas lighter colors advance and are more apparent within the visual landscape. Aesthetic treatments for the wall will be submitted to the Caltrans District 8, District Landscape Architect for review and approval. Regardless of the design treatment applied, SBCTA or its contractor will inspect the wall quarterly and perform graffiti abatement to avoid creating a visual nuisance. However, if notified	2-62	2018 Supplemental Visual Impact Memorandum	SBCTA	Incorporate recommendations during PS&E final design and implement during construction						

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										YES	NO
that graffiti is present, graffiti abatement will occur within one week of being notified.											
VIS-6: Apply Best Management Practices to the Landscaping Plan. Vegetative accents and screening will be installed to aid in a perceived reduction in the scale and mass of the block wall along Cabrera Avenue and Kingman Street, while accentuating the design treatment that will be applied to the wall surface (refer to Measure VIS-5). Plant selection will be based on its ability to screen the wall and provide aesthetic accents and will include evergreen and deciduous tree and shrub species that would provide multi layering, seasonal variety, and be visually pleasing to improve aesthetics. The design shall be developed to match and transition to the Mt. Vernon Avenue Streetscape Design Guidelines detailed within the City's *Paseo Las Placitas Specific Plan and EIR for the Mt. Vernon Corridor* plan document from 1992. Plant species will be selected from the plant palette identified within the *Landscape Materials* section of the *Paseo Las Placitas Specific Plan and EIR for the Mt. Vernon Corridor*. The landscaping plan will be submitted to the Caltrans District 8, District Landscape Architect for review and approval. Under no circumstances will any invasive plant species be used at any location. Vegetation shall be planted within the first six months following Project completion. An irrigation and maintenance program shall be implemented during the plant establishment period. The irrigation and maintenance program will be submitted to the Caltrans District 8, District Landscape Architect for review and approval.	2-68	2018 Supplemental Visual Impact Memorandum	SBCTA	Incorporate recommendations during PS&E final design and implement during construction						
VIS-7: The aesthetic treatment for the new wall and buffer area in the northwest quadrant of the project site will be developed through workshops and coordination with San Bernardino County Transportation Authority, Caltrans District 8, District Landscape Architect and the City of San Bernardino.	2-68	2018 Supplemental Visual Impact Memorandum	SBCTA	Incorporate recommendations during PS&E final design and implement during construction						
Also see measures **MOA CR-6** through **MOA CR-8** listed in Section 2.1.10, Cultural Resources and measure **N-1** in Section 2.2.6, Noise.											
Cultural Resources											
MOA CR-1: Prior to the start of any work that could adversely affect any characteristics that qualify the Mount Vernon Avenue Bridge as an historic property, Caltrans shall ensure that the recordation measures specified in Section A of the Memorandum of Agreement are completed.	2-79	2011 Memorandum of Agreement	SBCTA	Incorporate recommendations during PS&E final design and implement during construction						
MOA CR-2: San Bernardino County Transportation Authority shall take a large-format (4" by 5" or larger negative size) photographs showing the Mount Vernon Avenue Bridge in context as well as details of its historic engineering features. Photographs shall be	2-79	2011 Memorandum of Agreement	SBCTA	Incorporate recommendations during PS&E final design and implement during construction						

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										YES	NO
processed for archival permanence in accordance with the Historic American Engineering Record (HAER) photographic specifications. Views of the Mount Vernon Avenue Bridge shall include: (1) Contextual views showing the bridge in its setting; (2) Elevation views; (3) Views of the bridge's approaches and abutments; and (4) Detail views of significant engineering and design elements.											
MOA CR-3: San Bernardino County Transportation Authority (SBCTA) shall make a reasonable and good faith effort to locate historic construction drawings for the Mount Vernon Avenue Bridge. If these drawings are located, SBCTA shall photographically reproduce plans, elevations and selected details from these drawings in accordance with HAER photographic specifications. If they are legible in this format, reduced size 8 ½" by 11") copies of the construction drawings may be included as pages of the report cited in subsection A.3. of the MOA rather than photographed and included as photographic documentation. SBCTA shall promptly notify the Caltrans if historic construction drawings for Bridge #54C-0066 cannot be located. In that event, the requirements of this paragraph shall not apply.	2-79	2011 Memorandum of Agreement	SBCTA	Incorporate recommendations during PS&E final design and implement during construction						
MOA CR-4: A written historical and descriptive report for the Mount Vernon Avenue Bridge will be completed. This report will provide a physical description of the bridge, discuss its construction and its significance under applicable NRHP criteria, and address the historical context for its construction following the format and instructions in the September 1993 National Parks Service (NPS) HAER Guidelines for Preparing Written Historical and Descriptive Data guidelines for written documentation.	2-79	2011 Memorandum of Agreement	SBCTA	Incorporate recommendations during PS&E final design and implement during construction						
MOA CR-5: Upon completion, copies of the documentation prescribed in subsection A.3 of the MOA shall be retained by Caltrans, District 8, and offered to the California Room of the City's Feldhym Library	2-80	2011 Memorandum of Agreement	Resident Engineer and Contractor	During all ground-disturbing and construction activities						
MOA CR-6: Caltrans shall ensure that SBCTA constructs the replacement bridge in accordance with a design developed in consultation with the SHPO and submitted to the SHPO for comments, to minimize the indirect visual impact (profile, scale, color, and material) of the replacement bridge on the setting of the adjacent NRHP listed historic property, the Atchison, Topeka and Santa Fe Passenger and Freight Depot (Santa Fe Depot). The proposed bridge replacement design is depicted in Attachment A of the MOA and simulations for the replacement are included in Attachment B of the MOA. In addition, existing photographs of the Mount Vernon Avenue Bridge are located in	2-80	2011 Memorandum of Agreement	Resident Engineer, Contractor, the Department	During all ground-disturbing and construction activities						

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										YES	NO
Attachment C of the MOA.											
MOA CR-7: Caltrans, in consultation with the SHPO, shall ensure that the replacement bridge will be designed with architectural details (e.g., bridge railings, lights, concrete abutments, stairways) that convey the character-defining elements of the original historic structure and are visually compatible with the adjacent depot.	2-80	2011 Memorandum of Agreement	SBCTA and the Department	Incorporate recommendations during PS&E final design and implement during construction							
MOA CR-8: Caltrans shall ensure that SBCTA will replace any landscape elements (e.g., fan palm trees [*Washingtonia robusta*]) that were 50 years old or older and contributing to the historic setting of the bridge but removed as a result of the bridge replacement project. Appropriate replacement trees should be planted in planned landscaped areas northwest and southeast of the bridge alignment.	2-80	2011 Memorandum of Agreement	SBCTA and the Department	Incorporate recommendations during PS&E final design and implement during construction							
Standard **CR-A:** If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.	2-81	2018 Supplemental EA	Resident Engineer and Contractor	During all ground-disturbing and construction activities							
Standard **CR-B:** In the event that human remains are found, the county coroner shall be notified and ALL construction activities within 60 feet of the discovery shall stop. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). The person who discovered the remains will contact the District 8 Division of Environmental Planning; Andrew Walters, DEBC: (909)383-2647 and Gary Jones, DNAC: (909)383-7505. Further provisions of PRC 5097.98 are to be followed as applicable.	2-81	2018 Supplemental EA	Resident Engineer and Contractor	During all ground-disturbing and construction activities							
CRDMP-1: Archaeological monitoring will occur during any ground disturbing activity in the northwestern quadrant of the APE which is designated as the archaeological monitoring area. If any resources are encountered during earth-moving activities in this location, then the Project Archaeologist will assess and evaluate the find, as described in Caltrans SSP, Section 14. If the Project Archaeologist finds the deposit may be eligible for the NRHP, then the project will be operating on a presumption of NRHP eligibility for inadvertent discoveries, as determined by the Project Archaeologist. Under this presumption, any important discoveries will be removed during data recovery per PA Stipulation XI and PA Attachment 6. The project will also comply with additional requirements contained in the CRDMP, including the completion of daily monitoring logs,	2-80	2018 Supplemental EA	Project Archaeologist	During all ground-disturbing and construction activities							

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										YES	NO
requirements for site record documentation, monitoring report submittal, and data recovery report submittal if applicable.											
Water Quality and Stormwater Runoff											
WQ-1: During the PS&E final design phase of the project, a Geotechnical Report will be prepared to determine if groundwater will be impacted. If groundwater will be impacted, then it will be tested to determine if it is contaminated.	2-88	2011 EA/FONSI	SBCTA (during PS&E final design) / Resident Engineer and Contractor (during construction)	Incorporate recommendations during PS&E final design and implement during construction							
WQ-2: The project will have an addition of more than 5,000 square feet of impervious surface; therefore, in accordance with RWQCB Order Number R8-2010-0036, and San Bernardino County NPDES Permit No. CAS618036, a Water Quality Management Plan (WQMP) will be necessary to establish post construction Best Management Practices (BMPs)	2-88	2011 EA/FONSI	SBCTA (during PS&E final design) / Resident Engineer and Contractor (during construction)	Incorporate recommendations during PS&E final design and implement during construction							
WQ-3: A SWPPP, which will identify water quality BMPs, will be required to address short-term construction effects associated with soil erosion and discharge of other construction-related pollutants.	2-89	2011 EA/FONSI	SBCTA (during PS&E final design) / Resident Engineer and Contractor (during construction)	Incorporate recommendations during PS&E final design and implement during construction							
See also measures **HAZ-2** and **HAZ-4** related to groundwater contamination in Section 2.2.4, Hazardous Waste/Materials.											
Geology/Soils/Seismicity/Topography											
GEO-1: Detailed earthwork recommendations will be provided in the design geotechnical report, and these recommendations will be incorporated into the project specifications.	2-92	2011 EA/FONSI	SBCTA	Incorporate recommendations during PS&E final design and implement during construction							
GEO-2: The depth of the groundwater table below the site, and the potential for liquefaction, will be further evaluated in the geotechnical report prepared during the PS&E final design phase.	2-92	2011 EA/FONSI	SBCTA	Incorporate recommendations during PS&E final design and implement during construction							
GEO-3: Erosion control measures will include the use of berms to direct runoff away from exposed soils and slopes, and proper grading techniques will be utilized.	2-92	2011 EA/FONSI	SBCTA (during PS&E final design) / Resident Engineer and Contractor (during construction)	During all grading and construction activities							
GEO-4: For fill slopes, surface water runoff shall be directed to suitable outlets to reduce the likelihood of surficial erosion of the slopes.	2-92	2011 EA/FONSI	SBCTA (during PS&E final design) / Resident Engineer and Contractor (during construction)	During all grading and construction activities							
GEO-5: Slopes shall be planted with vegetation as soon as feasible after the completion of grading to reduce the amount of erosion on the slope face.	2-92	2011 EA/FONSI	Resident Engineer and Contractor	During all grading and construction activities							
GEO-6: Due to its proximity to the San Andreas Fault, the bridge would be seismically designed to consider a maximum credible earthquake of magnitude of 8.0 on the Richter scale	2-92	2011 EA/FONSI	SBCTA	Incorporate recommendations during PS&E final design and implement during construction							
Paleontology											

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										YES	NO
PALEO-1: Grading, excavation, and other surface and subsurface excavation in the defined proposed project have the potential to affect nonrenewable paleontological resources. A PMP will be prepared during final project design by a qualified paleontologist. The PMP will detail all the measures to be implemented in the event of paleontological discoveries. The PMP will include, at a minimum, the following elements. a) Required 1-hour preconstruction paleontological awareness training for earthmoving personnel, including documentation of training, such as sign-in sheets, and hardhat stickers, to establish communications protocols between construction personnel and the principal paleontologist. b) There will be a signed repository agreement with an appropriate repository that meets Caltrans requirements and is approved by Caltrans. c) A construction monitoring program by a qualified paleontological monitor during excavation activities within sediments of Pleistocene or older alluvium. d) Field and laboratory methods that meet the curation requirements of the appropriate repository will be implemented for monitoring, reporting, collection, and curation of collected specimens. Curation requirements are available for public review at the appropriate repository. e) All elements of the PMP will follow the PMP Format published in the Caltrans Standard Environmental Reference. f) A Paleontological Mitigation Report (PMR) discussing findings and analysis will be prepared by a principal paleontologist upon completion of project earthmoving. The report will be included in the environmental project file and also submitted to the curation facility.	2-94	2018 Supplemental EA	SBCTA (during PS&E final design) / Resident Engineer and Contractor (during construction)	Prior to and during construction						
Hazardous Waste/Materials											
HAZ-1: Work on BNSF property requires the completion and submittal of fees for an environmental access permit submitted to the Permit Department of BNSF.	2-110	2011 EA/FONSI	Resident Engineer and Contractor	During PS&E final design							
HAZ-2: If contaminated groundwater is encountered, based on the findings of the geotechnical report required under **WQ-1**, then a contaminated groundwater contingency plan should be implemented and should include procedures for segregation, sampling, and chemical analysis. Contaminated groundwater must be disposed of in accordance with dewatering requirements per the National Pollutant Discharge Elimination System (NPDES) process. In the event that disposal requirements are not required as part of the NPDES process, contaminated groundwater will be profiled for	2-110	2011 EA/FONSI	Resident Engineer and Contractor	Prior to demolition or grading activities, and during all excavation and construction activities							

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disposal and will be transported with appropriate hazardous or non-hazardous waste manifests by a state-certified hazardous material hauler to a state-certified disposal or recycling facility licensed to accept and treat the type of waste indicated by the profiling process.											
HAZ-3: If demolition construction activities will impact soil beneath the two former gasoline stations in the immediate vicinity of the bridge, current Arco station, or fueling area in the BNSF Intermodal Facility, soil samples should be collected and analyzed for petroleum hydrocarbons and VOCs during the PS&E final design phase. Refer to **HAZ-6** and **HAZ-7** if contaminated soil is found.	2-110	2018 Supplemental Initial Site Assessment	Resident Engineer and Contractor	During PS&E final design							
HAZ-4: For work in the immediate vicinity of Mount Vernon Avenue Bridge, soil (and groundwater if encountered) beneath the bridge within the proposed demolition and construction zones should be sampled and analyzed for chemicals of concern (COCs) including petroleum hydrocarbons, metals, volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), semi-volatile organic compounds (SVOCs), and chlorinated herbicides. Testing should be done during the PS&E final design phase to reduce the impact on BNSF operations. The testing should be done in one mobilization as requested by BNSF.	2-110	2011 EA/FONSI	Resident Engineer and Contractor	During PS&E final design							
HAZ-5: For work in the immediate vicinity of the shoofly track area, soil (and groundwater if encountered) beneath the proposed shoofly track area should be sampled and analyzed for petroleum hydrocarbons, metals, VOCs, PCBs, SVOCs, and chlorinated herbicides. All testing should be done during the PS&E final design phase to reduce the impact on BNSF operations. The testing should be done in one mobilization as requested by BNSF. Refer to **HAZ-6** and **HAZ-7** if contaminated soil is found.	2-110	2011 EA/FONSI	Resident Engineer and Contractor	During PS&E final design							
HAZ-6: A soil monitoring plan should be prepared prior to construction and should be implemented during all phases of construction. Disturbed soils should be monitored for visual evidence of contamination (e.g., staining or discoloration). If visual evidence of contamination is observed, the soil should be monitored for the presence of VOCs using appropriate field instruments such as organic vapor measurement with photoionization detectors (PIDs) or flame ionization detectors (FIDs).	2-110	2018 Supplemental Initial Site Assessment	Resident Engineer and Contractor	Prior to demolition or grading activities, and during all excavation and construction activities							
HAZ-7: If the monitoring procedures indicate the possible presence of contaminated soil, a contaminated soil contingency plan should be implemented and should include procedures for segregation, sampling, and chemical analysis of soil. Contaminated soil will be profiled for disposal and will be transported with appropriate	2-111	2018 Supplemental Initial Site Assessment	Resident Engineer and Contractor	Prior to demolition or grading activities, and during all excavation and construction activities							

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hazardous or non-hazardous waste manifests by a state-certified hazardous material hauler to a state-certified disposal or recycling facility licensed to accept and treat the type of waste indicated by the profiling process. The contaminated soil contingency plan should be developed and in place during all construction activities. In the event that these processes generate any contaminated groundwater that must be disposed of outside of the dewatering/NPDES process, the groundwater should be profiled, manifested, hauled, and disposed of in the same manner.											
HAZ-8: A hazardous materials contingency plan should be prepared to address the potential for discovery of unidentified USTs or other underground structures, creosote-treated railroad ties, septic systems, hazardous materials, petroleum hydrocarbons, or hazardous or solid wastes encountered during construction. This contingency plan should address UST decommissioning, field screening and materials testing methods, mitigation and contaminant management requirements, and health and safety requirements.	2-111	2018 Supplemental Initial Site Assessment	Resident Engineer and Contractor	Prior to demolition or grading activities, and during all excavation and construction activities							
HAZ-9: Appropriate pre-demolition surveys for asbestos containing materials (ACMs) of existing structures to be removed will be conducted. Prior to renovation or demolition work that will disturb identified asbestos containing materials (ACMs), a licensed Cal/OSHA-Certified Asbestos Consultant and abatement removal contractor should remove the ACMs. A Notification will be sent to South Coast Air Quality Management District (SCAQMD) 10 working days prior to any ACM removal or demolition activities as per Rule 1403. In addition the Notification will include applicable fees as per Rule 301.	2-111	2011 EA/FONSI	Resident Engineer and Contractor	Prior to demolition activities							
HAZ-10: Appropriate pre-demolition surveys for lead-based paint (LBP) of existing structures to be removed will be conducted. The identified LBPs will not be disturbed. Any LBPs in a non-intact condition will be abated and the component properly encapsulated. Prior to demolition work that will disturb identified LBPs, a licensed lead abatement removal contractor will remove the LBPs.	2-111	2011 EA/FONSI	Resident Engineer and Contractor	Prior to demolition activities							
HAZ-11: Applicable laws and regulations will be followed, including those provisions requiring notification to building occupants, renovation contractors, and workers of the presence of asbestos and LBP.	2-111	2011 EA/FONSI	Resident Engineer and Contractor	Prior to demolition or grading activities, and during all excavation and construction activities							
HAZ-12: Per Caltrans requirements, projects involving the removal of yellow traffic striping, thermoplastic paint, will be performed in accordance with Caltrans Department Standard Special Provision (SSP) XE 14-001.	2-111	2011 EA/FONSI	Resident Engineer and Contractor	Prior to demolition or grading activities, and during all excavation and construction activities							
HAZ-13: The OSHA regulations for construction found in Title 29 CFR part 1926 include	2-111	2011 EA/FONSI	Resident Engineer and	Prior to demolition or grading activities, and							

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										YES	NO
occupational exposure to lead under the standard number 1926.62. Additional requirements are found in the California standard 8 CCR Section 1532.1. Any employer covered by these standards is obligated to initially determine if any employee may be exposed to lead at or above the action level (29 CFR 1926.62(d)(1)(i) and 8 CCR 1532.1(d)). Additionally, the employer is obligated to prepare a project specific Lead Compliance Plan (LCP) in accordance with 29 CFR 1926.62 (e)(2). It is recommended that a LCP be developed and implemented for construction related activities associated with this project site.			Contractor	during all excavation and construction activities							
HAZ-14: Caltrans Standard Special Provisions and Non-Standard Special Provisions will be prepared that provide contractors with guidance on preparing submittals and handling affected materials.	2-112	2018 Supplemental Initial Site Assessment	Resident Engineer and Contractor	During demolition or grading activities, and during all excavation, deconstruction, and construction activities							
HAZ-15: Demolition or renovation of any structure requires notification and submittal of fees to the South Coast Air Quality Management District.	2-112	2018 Supplemental Initial Site Assessment	SBCTA	Prior to demolition or grading activities, or start of construction							
HAZ-16: The results of the 2013 LSI indicate the presence of TPH-impacted soil underneath the northern portion of the Mt. Vernon Ave Bridge and aerially deposited lead-impacted soil (as well as some TPH and PCE impacts) along much of the shoofly area, Mount Vernon Avenue, Cabrera Avenue, Kingman Street, 4th Street, and railroad tracks in the BNSF Intermodal Facility. The preparation of a hazardous materials contingency plan and soil management plan and pre-demolition construction surveys of the existing structure will be done during the project design/build phase in order to reduce potential risks.	2-112	2018 Supplemental Initial Site Assessment	SBCTA	During demolition or grading activities, and during all excavation, deconstruction, and construction activities							
Measure **WQ-1** included in Section 2.2.1.4, Water Quality also addresses groundwater contamination.											
Air Quality											
AQ-1: Prior to renovation or demolition work that will disturb identified ACMs, a licensed Cal/OSHA-Certified Asbestos Consultant and abatement removal contractor should remove the ACMs. A Notification will be sent to South Coast Air Quality Management District (SCAQMD) 10 working days prior to any ACM removal or demolition activities as per Rule 1403. In addition the Notification will include applicable fees as per Rule 301.	2-130	2011 EA/FONSI	Resident Engineer and Contractor	Prior to renovation or demolition activities							
AQ-2: The proposed project will comply with SCAQMD Rule 403 (Fugitive Dust). Per Rule 403 definitions, the proposed project would not be considered a “large operation.” As such, the “large operations” control measures identified in Rule 403 would not apply.	2-130	2018 Supplemental Air Quality Report	Resident Engineer and Contractor	During any ground disturbance, renovation, demolition or construction activities							
AQ-3: The project will conform to Caltrans construction requirements, as specified in Caltrans’ 2015 Standard Specifications, Section	2-130	2018 Supplemental Air Quality Report	Resident Engineer and Contractor	During any ground disturbance, renovation, demolition							

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										YES	NO
14-9.02 (Air Pollution Control) and Section 14-11.04 (Dust Control), for asphalt concrete emissions and all earthwork, clearing and grubbing, and roadbed activities involving heavy construction equipment. The contractor will comply with all air pollution control ordinances and statutes that apply to any work performed pursuant to the contract, including any air pollution control rules, regulations, ordinances, and statutes, specified in Section 11017 of the Government Code. Exhaust emissions control measures may include, but are not limited to, the following: 1. General contractors will maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues will have their engines turned off when not in use to reduce vehicle emissions. Construction emissions will be phased and scheduled to avoid emission peaks and discontinued during second-stage smog alerts. 2. All equipment will be properly tuned and maintained in accordance with manufacturers' specifications. 3. All on-road and off-road equipment will comply with ARB commercial vehicle idle regulations. 4. Use electricity from power poles, rather than temporary diesel- or gasoline-powered generators if or where feasible. 5. Use on-site mobile equipment powered by alternative fuel sources (i.e., methanol, natural gas, propane, or butane) as feasible. 6. Use solar-powered signal boards. 7. Develop a construction traffic management plan that includes, but is not limited to: (1) consolidating truck deliveries; (2) providing a rideshare or shuttle service for construction workers; and (3) providing dedicated turn lanes for movement of construction trucks and equipment on and off site.				or construction activities						
Noise											
N-1: Retaining walls will be landscaped, potentially with creeping fig, to attenuate any secondary noise reflection along both sides of the north bridge approach between Kingman Avenue and West 4th Street which accommodate an approximate 9.87 and 1.43 foot change in roadway elevation.	2-153	2011 EA/FONSI	SBCTA	Incorporate recommendations during PS&E final design and implement during construction							
N-2: To minimize potential construction noise effects, the construction contractor will adhere to BMPs to minimize construction noise levels, including the following BMPs: 1. Construction activities adjacent to residential units will be limited as necessary to prevent noise impacts. (14.8.1, City of San Bernardino General	2-153	2011 EA/FONSI	Resident Engineer and Contractor	During demolition or grading activities, and during all excavation, deconstruction, and construction activities							

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										YES	NO
Plan). 2. Construction activities will employ feasible and practical techniques that minimize the noise impacts on adjacent uses. (14.8.2, City of San Bernardino General Plan). 3. No person shall be engaged or employed, or cause any other person to be engaged or employed, in any work of construction, erection, alteration, repair, addition, movement, demolition, or improvement to any building or structure except within the hours of 7:00 a.m. and 8:00 p.m. (San Bernardino Municipal Code Section 8.54.070) (Ord. MC-1246, 5-21-07). 4. The operation or use between the hours of 10 p.m. and 7 a.m. of any pile driver, steam shovel, pneumatic hammers, derrick, steam or electric hoist, power driven saw, or any other tool or apparatus, the use of which is attended by loud and excessive noise, is prohibited, except with the approval of the Mayor and Common Council (San Bernardino Municipal Code Section 8.54.020(L)). 5. The creation of loud and excessive noise in connection with the loading or unloading of motor trucks and other vehicles is prohibited (San Bernardino Municipal Code Section 8.54.020(I)). 6. The unnecessary or excessive blowing of whistles, sounding of horns, ringing of bells or use of signaling devices by operators of railroad locomotives, motor trucks, and other transportation equipment is prohibited (San Bernardino Municipal Code Section 8.54.020(H)). • The shouting and crying of peddlers, hawkers and vendors which disturbs the peace and quiet of any considerable number of persons or neighborhood is prohibited (San Bernardino Municipal Code Section 8.54.020(J)). • All construction activities shall be conducted in accordance with Department provisions in 14-8.02 (Noise Control), of the Standard Specifications and Special Provisions (SSP) S5-310, in order to ensure that noise generated during construction activities is minimized. The SSP will be edited specifically for this project during the PS&E final design phase. This includes the provisions that the contractor shall ensure that all equipment shall have sound-control devices that are no less effective than those provided on the original equipment, and no equipment shall have an unmuffled exhaust. • Adherence to local ordinances and codes relating to construction equipment, sound levels, and hours of operation is required. • Installation and maintenance of effective mufflers on construction equipment is required.											
N-3: Sound control shall conform to the provisions in Section 14-8.02, “Noise Control,” of Caltrans’	2-153	2018 Supplemental Noise Study Report	Resident Engineer and Contractor	During demolition or grading activities, and							

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2015 Standard Specifications and Special Provisions. The contractor shall not exceed 86 dBA Lmax at 50 feet from the job site from 9:00 p.m. to 6:00 a.m. Internal combustion engines shall be equipped with the manufacturer-recommended muffler. Internal combustion engines shall not be operated on the job site without the appropriate muffler.				during all excavation, deconstruction, and construction activities						
Biological Resources											
BIO-1: Within 7 days prior to the commencement of construction activities (if between January 15 and September 1), a qualified biologist shall perform a nesting bird survey that will consist of one site visit to determine whether there are active songbird nests within 200 feet of the project footprint and raptor nests within 500 feet of the project footprint. This survey shall also identify the species, and to the degree feasible, nesting stage (e.g., incubation of young, feeding of young, near fledging). Nests shall be mapped (not by using GPS because close encroachment may cause nest abandonment). If active nests are found, construction shall not occur within 200 feet of the songbird's nest or within 500 feet of a raptor's nest, or within an appropriate buffer established by the qualified biologist, until the nesting attempt has been completed and/or abandoned because of non-project-related reasons. The qualified biologist can subsequently reduce this buffer based on professional experience related to observations of behavior and specific construction activities occurring near the nest.	2-184	2017 Natural Environment Study-Minimal Impacts (NES-MI)	SBCTA	Survey to be completed within 7 days prior to the commencement of construction						
BIO-2: To avoid impacts on any bats that may be roosting in palm trees within the project area, all direct impacts on palm trees shall be avoided during construction, and highly vibrative and/or noisy work shall be avoided near palm trees. If it is not possible to avoid direct impacts (e.g., tree removal, tree disturbance, tree trimming) or indirect impacts (e.g., noise, vibrations near trees) on palm trees, a qualified bat biologist shall survey the trees (e.g., conduct acoustic nighttime surveys) prior to disturbance to determine whether bats are roosting in the trees. If bats are found to be present, the bat biologist shall monitor construction activities to ensure that no bats are affected during construction. The qualified bat biologist may also provide other avoidance measures to ensure that all impacts on this species are avoided and minimized.	2-184	2017 NES-MI	SBCTA and Contractor	During construction activities						
BIO-3: A qualified bat biologist who is familiar with crevice-dwelling bat and bird species shall survey the project disturbance limits and Mount Vernon Avenue Bridge in June, prior to construction, to assess the potential for the bridge's use for bat roosting, bat maternity roosting, and bird roosting/nesting because maternity roosts and	2-184	2017 NES-MI	SBCTA	Prior to construction						

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										YES	NO
nests are generally formed in spring. The qualified bat biologist shall also perform pre-construction surveys within two weeks prior to construction because bat and bird roosts can change seasonally. These surveys will include a combination of structure inspections, exit counts, and acoustic surveys.											
BIO-4: If recommended by the qualified bat biologist, to avoid indirect disturbance of bats and birds while roosting in areas that would be subject to, or adjacent to, impacts from construction activities, any portion of the structure that is deemed by a qualified bat biologist to have the potential bat or bird roosting habitat and may be affected by the proposed project shall have temporary bat and bird eviction and exclusion devices installed under the supervision of a qualified and permitted bat biologist prior to the initiation of construction activities. Eviction and subsequent exclusion will be conducted during the fall (September or October) to avoid trapping flightless young bats inside during the summer months or hibernating/overwintering individuals during the winter. Such exclusion efforts are dependent on weather conditions, take a minimum of two weeks to implement, and must be continued to keep the structures free of bats and birds until the completion of construction. All eviction and/or exclusion techniques shall be coordinated between the qualified bat biologist and the appropriate resource agencies (e.g., CDFW).	2-184	2017 NES-MI	SBCTA, Resident Engineer and Contractor	Prior to and during construction activities						
BIO-5: Inspection and cleaning of construction equipment shall be performed to minimize the importation of nonnative plant material. Eradication strategies (i.e., weed control) shall be implemented should an invasion of nonnative plant species occur.	2-188	2017 NES-MI	Resident Engineer and Contractor	During all ground-disturbing or construction activities							
BIO-6: After construction, species that have been listed as having a high or moderate rating on the California Invasive Plant Council's California Invasive Plant Inventory shall not be planted in any revegetated areas (California Invasive Plant Council 2006).	2-188	2017 NES-MI	Resident Engineer and Contractor	Following construction activities							
BIO-7: Trucks with loads carrying vegetation shall be covered and vegetative materials removed from the site shall be disposed of in accordance with all applicable laws and regulations.	2-188	2017 NES-MI	Resident Engineer and Contractor	During all ground-disturbing or construction activities, and following construction							

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Appendix E. List of Acronyms

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Appendix E List of Acronyms

°F	degrees Fahrenheit
AASHTO	American Association of State Highway and Transportation Officials
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
AMP	Access Management Plan
APE	Area of Potential Effects
ARB	Air Resources Board
ASR	Archaeological Survey Report
ATSF	Atchison, Topeka and Santa Fe
bgs	below ground surface
BMPs	Best management practices
BNSF	Burlington Northern Santa Fe
bridge	Mount Vernon Avenue Bridge
BSA	biological study area
Caltrans	California Department of Transportation
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
CISS	cast-in-steel-shell
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society

CO	carbon monoxide
COC	chemicals of concern
County	County of San Bernardino
CPUC	California Public Utilities Commission
CRDMP	Cultural Review Discovery and Monitoring Plan
CWA	Clean Water Act
DAMP	Permit, Drainage Area Master Plan
dB	decibels
dBA	A-weighted decibel
Department	California Deparment of Transportation
DOI	Department of Interior
DSA	Disturbed Soil Area
DTSC	Department of Toxic Substances Control
EA	Environmental Assessment
EBL	Eligible Bridge List
EDR report	Environmental Data Resources® DataMap™ Environmental Atlas™ database report
EIS	Environmental Impact Statement
EO	Executive Order
FCAA	Federal Clean Air Act
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FID	flame ionization detector
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FIND	Facility Information Database
FO	functionally obsolete
FONSI	Finding of No Significant Impact
FTIP	Federal Transportation Improvement Program
GO	General Order
H_2S	hydrogen sulfide

HAER	Historic American Engineering Record
HBP	Highway Bridge Program
HOT	high-occupancy toll
HOV	high-occupancy vehicle
HPSR	Historic Property Survey Report
HREC	historical recognized environmental condition
HRER	Historic Resources Evaluation Report
HUD	Housing and Urban Development
I-10	Interstate 10
I-215	Interstate 215
IPaC	Information, Planning, and Conservation System
ISA	Initial Site Assessment
LBP	lead-based paint
LCP	Lead Compliance Plan
LEDPA	least environmentally damaging practicable alternative
L_{eq}	equivalent noise level
LIP	Local Implementation Plan
L_{max}	maximum noise level
LOS	Level of Service
LSI	Limited Subsurface Investigation
LUST	leaking underground storage tanks
MCL	maximum contaminant level
Metrolink	Southern California Regional Rail Authority
MOA	Memorandum of Agreement
MS4	Municipal Separate Storm Sewer Systems
MSAT	mobile-source air toxic
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act

NES/MI	Natural Environment Study/Minimal Impact
NFA	No Further Action
NHPA	National Historic Preservation Act
NO_2	nitrogen dioxide
NOA	Notice of Availability
NOAA Fisheries Service	National Oceanic and Atmospheric Administration's National Marine Fisheries Service
NO_X	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NPS	National Parks Service
NRHP	National Register of Historic Places
NSR	Noise Study Report
O_3	ozone
OCP	organochlorine pesticide
OEHHA	Office of Environmental Health Hazard Assessment
OHWM	ordinary high water mark
ONT	Ontario International Airport
OSHA	Occupational Safety and Health Act
PA	Programmatic Agreement
Pb	lead
PBQ&D	Parsons Brinckerhoff Quade & Douglas, Inc.
PCB	polychlorinated biphenyl
PCI	paint condition index
PDT	Project Development Team
PID	photoionization detector
PIR/PER	Project Paleontological Identification Report/Paleontological Evaluation Report
PM	particulate matter
PM_{10}	particles of 10 micrometers or smaller
$PM_{2.5}$	particles of 2.5 micrometers and smaller
PMP	Paleontological Mitigation Plan

PMR	Paleontological Mitigation Report
PS&E	Plans, Specifications, and Estimates
pVES	preliminary vapor encroachment screen
RCRA	Resource Conservation and Recovery Act
REC	recognized environmental condition
Region 8	RWQCB, Santa Ana Region
ROG	reactive organic gas
RSA	resource study area
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SBCFD	San Bernardino County Fire District
SBCTA	San Bernardino County Transportation Authority
SBTAM	San Bernardino Transportation Analysis Model
SBD	San Bernardino International Airport
SBPD	San Bernardino Police Department
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SD	structurally deficient
SDC	Seismic Design Criteria
SHPO	State Historic Preservation Officer
SHPSR	Supplemental Historic Property Survey Report
SHRER	Supplemental Historic Resources Evaluation Report
SHS	State Highway System
SIP	State Implementation Plan
SISA	Supplemental Initial Site Assessment
SLM	sound level meter
SNSR	Supplemental Noise Study Report
SO_2	sulfur dioxide
SR	State Route
SSP	Standard Special Provision

SVOC	semi-volatile organic compound
SWDR	Stormwater Data Report
SWMP	Statewide Storm Water Management Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCE	temporary construction easement
TeNS	Technical Noise Supplement
TMDL	Total Maximum Daily Loads
TMP	Traffic Management Plan
TNM	Traffic Noise Model
TOAR	Traffic Operations Analysis Report
TSCA	Toxic Substances Control Act
U.S.	United States
U.S. EPA	United States Environmental Protection Agency
USACE	U.S. Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank
VEC	vapor encroachment condition
VESM	Vapor Encroachment Screening Matrix
VES/VTS	Vapor Extraction/Vapor Treatment System
VIA	Visual Impact Assessment
VOC	volatile organic compound
WDID	Waste Discharge Identification Number
WDR	Waste Discharge Requirement
WPCP	Water Pollution Control Program
WQAR	Water Quality Assessment Report

Appendix F. List of Technical Studies

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Appendix F List of Technical Studies

The technical studies listed below were used as supporting documentation in the preparation of this Supplemental EA. All of the technical studies listed were prepared specifically for the proposed Mount Vernon Avenue Bridge Project.

- *Mount Vernon Avenue Bridge Project Supplemental Air Quality Report* (December 2017)
- *Mount Vernon Avenue Bridge Project Supplemental Archaeological Survey Report* (March 2018)
- *Mount Vernon Avenue Bridge Project Supplemental Community Impact Assessment* (November 2017)
- *Mount Vernon Avenue Bridge Project Supplemental Historic Property Survey Report* (March 2018)
- *Mount Vernon Avenue Bridge Project Supplemental Historic Resources Evaluation Report* (March 2018)
- *Mount Vernon Avenue Bridge Project Supplemental Initial Site Assessment Revalidation* (March 2018)
- *Mount Vernon Avenue Bridge Project Supplemental Natural Environment Study Minimal Impacts* (August 2017)
- *Mount Vernon Avenue Bridge Project Supplemental Noise Study Report* (January 2018)
- *Mount Vernon Avenue Overhead Replacement Project Traffic/Circulation Study* (January 2018)
- *Mount Vernon Avenue Overhead Replacement Project – Final Pedestrian and Vehicular Detour Analysis Report* (January 2018)
- *Mount Vernon Avenue Bridge Project Visual Impact Assessment Memorandum* (March 2018)
- *Mount Vernon Avenue Bridge Project Supplemental Relocation Impact Study* (August 2017)

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Appendix G. Memorandum of Agreement (Cultural Resources)

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AMENDMENT NO 1 TO

MEMORANDUM OF AGREEMENT

BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND

THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER

REGARDING THE REPLACEMENT OF THE MOUNT VERNON AVENUE BRIDGE, SAN BERNARDINO COUNTY, CALIFORNIA

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State of California
DEPARTMENT OF TRANSPORTATION
Memorandum

California State Transportation Agency

Make Conservation a California Way of Life

To: ANDREW WALTERS
Branch Chief
Environmental Support/Cultural Studies
California Department of Transportation, District 8
464 West 4th Street, 6th Floor, MS 825
San Bernardino, CA 92401

Date: March 9, 2018

From: EMILY CASTANO EC
Acting Section 106 Coordinator
Cultural Studies Office
1120 N Street, MS 27
Sacramento, CA 95814

Subject: **AMENDMENT TO THE MEMORANDUM OF AGREEMENT FOR THE MOUNT VERNON AVENUE BRIDGE PROEJCT IN SAN BERNARDINO COUNTY, CALIFORNIA**

The California Department of Transportation (Caltrans) Cultural Studies Office (CSO) is providing District 8 with the executed First Amendment to the *Memorandum of Agreement Between the California Department of Transportation and the California State Historic Preservation Officer Regarding the Replacement of the Mount Vernon Avenue Bridge, San Bernardino County, California* (MOA). The MOA, originally executed on February 8, 2011, has been amended to include the San Bernardino County Transportation Authority (SBCTA) as a concurring party to the MOA and to extend the duration of the MOA by five (5) calendar years.

Please have the concurring parties sign the MOA and provide the signature page to CSO. Per the MOA as amended, CSO will file the fully signed MOA Amendment with the Advisory Council on Historic Preservation (ACHP).

In addition to the reporting required under Stipulation II of the MOA, District 8, in coordination with the SBCTA, must file an Annual Report with CSO. The Annual Report should include any scheduling changes proposed, any problems encountered, failures to adopt proposed mitigation measures, and any disputes and objections received in the efforts to carry out the terms of the MOA. The Annual Report is due no later than December 31 of each year, beginning in December 31, 2018 and will continue annually thereafter throughout the duration of the MOA.

If you need any additional information or have comments, please contact me at Emily.Castano@dot.ca.gov or (916) 654-3567, or you can also contact Alexandra Bevk Neeb at Alexandra.Neeb@dot.ca.gov or (916) 654-3567.

Attachment:
Executed *Amendment to the Memorandum of Agreement Between the California Department of Transportation and the California State Historic Preservation Officer Regarding the Replacement of the Mount Vernon Avenue Bridge, San Bernardino County, California.*

c: Alexandra Bevk Neeb, Section 106 Coordinator, Cultural Studies Office

AMENDMENT NO 1 TO
MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING THE REPLACEMENT OF THE MOUNT VERNON AVENUE BRIDGE, SAN BERNARDINO COUNTY, CALIFORNIA
(AGREEMENT)

WHEREAS, the Agreement was executed on February 8, 2011;

WHEREAS, the Federal Highway Administration (FHWA) has assigned and the California Department of Transportation (Caltrans) has assumed FHWA responsibility for environmental review, consultation, and coordination as part of its National Environmental Policy Act (NEPA) assignment of federal responsibilities effective October 1, 2012 and pursuant to 23 USC 326 and 23 USC 327; and

WHEREAS, Caltrans has determined that the undertaking's construction schedule will extend into 2022; and

WHEREAS, San Bernardino County Transportation Authority (SBCTA) has replaced the City of San Bernardino (City) as lead agency for project administration and will assume the City's responsibilities pursuant to the Agreement. A universal change of "San Bernardino County Transportation Authority (SBCTA)" for "City of San Bernardino (City)" will be made throughout the original MOA; and

WHEREAS, The San Bernardino County Transportation Authority (SBCTA) has responsibilities pursuant to the Agreement, has participated in consultation, and is invited to concur in this Agreement; and

WHEREAS, Caltrans will send a copy of this executed agreement to the ACHP:

NOW, THEREFORE, in accordance with Stipulation IV.C and of the Agreement, Caltrans and the California State Historic Preservation Officer agree to amend the Agreement as follows:

Pursuant to Stipulation IV.2, the terms of the MOA shall be extended an additional five (5) calendar years from the date of execution of this amendment by the signatory parties.

AMENDMENT NO 1 TO
MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING THE REPLACEMENT OF THE MOUNT VERNON AVENUE BRIDGE, SAN BERNARDINO COUNTY, CALIFORNIA
(AGREEMENT)

SIGNATORY PARTIES:

By _____ 2/20/18
PHIL STOLARSKI, DIVISION CHIEF Date
DIVISION OF ENVIRONMENTAL ANALYSIS
CALIFORNIA DEPARTMENT OF TRANSPORTATION

By _____ 3/8/18
JULIANNE POLANCO. Date
STATE HISTORIC PRESERVATION OFFICER
CALIFORNIA OFFICE OF HISTORIC PRESERVATION

CONCURRING PARTIES:

By _____ 3/12/18
JOHN BULINSKI Date
DIRECTOR, DISTRICT 8
CALIFORNIA DEPARTMENT OF TRANSPORTATION

By _____ 3/20/18
RAYMOND WOLFE Date
EXECUTIVE DIRECTOR
SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY

APPROVED AS TO FORM:

Eileen Monaghan Teichert
SBCTA General Counsel
Date: 3/15/18

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MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING THE REPLACEMENT OF THE MOUNT VERNON AVENUE BRIDGE, SAN BERNARDINO COUNTY, CALIFORNIA

WHEREAS, the Federal Highway Administration (FHWA) has assigned and the California Department of Transportation (Caltrans) has assumed FHWA responsibility for the environmental review, consultation, and coordination under the provisions of the *Memorandum of Understanding (MOU) between the Federal Highway Administration and the California Department of Transportation Concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program*, which became effective on July 1, 2007 and applies to this project; and

WHEREAS, Caltrans has determined that the replacement of the Mount Vernon Avenue Bridge (#54C–0066) located on Mount Vernon Avenue between 2nd and 5th Street (Undertaking), in the City of San Bernardino, San Bernardino County, California, will have an adverse effect on the Mount Vernon Avenue Bridge, which Caltrans has determined, in conclusion with the State Historic Preservation Officer (SHPO), to be eligible for inclusion in the National Register of Historic Places (National Register) and therefore, a historic property as defined at 36 CFR§800.16 (l)(1);

WHEREAS, Caltrans has consulted with the SHPO pursuant to stipulation X.C and X.I of the January 2004 *Programmatic Agreement among the Federal Highway Administration, The Advisory Council on Historic Preservation, The California State Historic Preservation Officer, and the California Department of Transportation regarding compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California* (PA), and where the PA so directs, in accordance with 36 CFR Part 800, the regulation that implements Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. Section 470f), as amended, regarding the Undertaking's effect on the historic property, and has notified the Advisory Council on Historic Preservation (ACHP) of the adverse effect finding pursuant to 36 CFR§800.16(a)(1); and

WHEREAS, Caltrans has thoroughly considered alternatives to the undertaking, has determined that the statutory and regulatory constraints on the design of the Undertaking preclude the possibility of avoiding adverse effects to the Mount Vernon Avenue Bridge during the Undertaking's implementation, and has further determined that it will resolve the adverse effect of the Undertaking on the subject historic property through the execution and implementation of this MOA; and

WHEREAS, Caltrans District 8 (District 8) and the City of San Bernardino (City) have participated in the consultation and has been invited to concur in this MOA; and

NOW, THEREFORE, Caltrans and the SHPO agree that, upon Caltrans' decision to proceed

with the Undertaking, Caltrans shall ensure that the Undertaking is implemented in accordance with the following stipulations in order to take into account the effects of the Undertaking on historic properties, and that these stipulations shall govern the Undertaking and all of its parts until this MOA expires or is terminated.

STIPULATIONS

Caltrans shall ensure the following measures are implemented:

I. AREA OF POTENTIAL EFFECTS

A. The Area of Potential Effects (APE) for the Undertaking is depicted in Attachment A of the Finding of Effect (FOE). The APE was established to include all cultural resources that would be directly or indirectly affected by the Undertaking. The APE included the maximum existing and proposed right-of-way, project construction easements (temporary and permanent), staging areas, and temporary or permanent changes in access (ingress or egress).

B. If modifications to the Undertaking subsequent to the execution of this MOA necessitate the revision of the APE, Caltrans will consult with District 8 and the SHPO to facilitate mutual agreement on the subject revisions. If Caltrans, District 8 and the SHPO cannot reach such agreement, then the parties to this MOA shall resolve the dispute in accordance with Stipulation IV.D below. If Caltrans, District 8 and the SHPO reach mutual agreement on the proposed revisions, Caltrans will submit a final map of the revisions, consistent with the requirements of stipulation VII1.A and attachment XVI.A of the PA, no later than 30 days following such agreement.

II. TREATMENT OF HISTORIC PROPERTIES

A. Prior to the start of any work that could adversely affect any characteristics that qualify the Mt. Vernon Avenue Bridge as an historic property, Caltrans shall ensure that the recordation measures specified in section A of this stipulation are completed.

1. The City shall take large-format (4" by 5" or larger negative size) photographs showing the Mt. Vernon Avenue Bridge in context as well as details of its historic engineering features. Photographs shall be processed for archival permanence in accordance with the Historic American Engineering Record (HAER) photographic specifications. Views of the Mt. Vernon Avenue Bridge shall include:

    a. Contextual views showing the bridge in its setting;
    b. Elevation views;
    c. Views of the bridge's approaches and abutments;

d. Detail views of significant engineering and design elements.

2. The City shall make a reasonable and good faith effort to locate historic construction drawings for the Mt. Vernon Avenue Bridge. If these drawings are located, the City shall photographically reproduce plans, elevations and selected details from these drawing in accordance with HAER photographic specifications. If they are legible in this format, reduced size (8 1/2" by 11") copies of construction drawings may be included as pages of the report cited in subsection A.3 of this stipulation rather than photographed and included as photographic documentation. The City shall promptly notify Caltrans if historic construction drawings for Bridge #53-0739 cannot be located. In that event, the requirements of this paragraph shall not apply.

3. A written historical and descriptive report for the Mt. Vernon Avenue Bridge will be completed. This report will provide a physical description of the bridge, discuss its construction and its significance under applicable National Register criteria, and address the historical context for its construction following the format and instructions in the September 1993 National Parks Service (NPS) *HAER Guidelines for Preparing Written Historical and Descriptive Data* guidelines for written documentation.

4. Upon completion, copies of the documentation prescribed in subsection A.3 of this stipulation shall be retained by Caltrans District 8, and offered to the California Room of the City's Feldhym Library

B. Caltrans shall ensure that the City constructs the replacement bridge in accordance with a design developed in consultation with the SHPO and submitted to the SHPO for comments, to minimize its indirect visual impact (profile, scale, color, and material) on the setting of the adjacent National Register listed historic property, the Atchison, Topeka and Santa Fe Passenger and Freight Depot (Santa Fe Depot). The proposed bridge replacement design is depicted in Attachment B and simulations for the replacement are included in Attachment C. In addition, existing photographs of the Mt. Vernon Avenue Bridge are located in Attachment D.

C. Caltrans, in consultation with the SHPO, shall ensure that the replacement bridge will be designed to include architectural details (bridge railing, lighting, concrete abutments, stairways) in order to convey the character-defining elements of the original historic structure and to be visually compatible with the adjacent Santa Fe Depot.

D. Caltrans shall ensure that the City replace any landscape elements (fan palm trees – *Washington Filifera and Washingtonia robusta*), which are 50 years or older and contribute to the historic setting of the bridge, which were removed as a result of the bridge replacement project. Appropriate replacement trees should be planted in those planned landscaped areas northwest and southeast of the bridge alignment.

III. DISCOVERIES AND UNANTICIPATED EFFECTS

If Caltrans determines after the construction of the Undertaking has commenced, that the Undertaking will affect a previously unidentified property that may be eligible for listing in the National Register, or affect a known historic property in an unanticipated manner, Caltrans will address the discovery or unanticipated effect in accordance with 36 CFR §800.13(b)(3). Caltrans at its discretion may hereunder assume any discovered property to be eligible for inclusion in the National Register in accordance with 36 CFR § 800.13(c).

IV. ADMINISTRATIVE PROVISIONS

A. Standards

1. Professional Qualifications. All activities prescribed by Stipulations I.B, II., and III of this MOA shall be carried out under the authority of Caltrans or under the direct supervision of a person or persons meeting at a minimum the Secretary of Interior's Professional Qualifications Standards (PQS; 48 FR 44738-39, September 29, 1983) in the appropriate disciplines. However, nothing in this stipulation may be interpreted to preclude Caltrans or any agent or contractor thereof from using the properly supervised services of person who do not meet the PQS.

2. Historic Preservation Standards. Written documentation of activities prescribed by Stipulations I.B, II.A, and II.B of this MOA shall conform to the *Secretary of the Interior's Guidelines for Archaeology and Historic Preservation* (48 FR 44716-44740) as well as to applicable standards and guidelines established by the SHPO.

B. Resolving Objections

1. Should any party to this MOA object at any time in writing to the manner in which the terms of this MOA are implemented, to any action carried out or proposed with respect to implementation of the MOA, or to any document prepared in accordance with and subject to the terms of the MOA, Caltrans shall immediately notify the other parties of the objection, request their comments on the objection within 15 days following receipt of Caltrans' notification, and proceed to consult with the objecting party for no more than 30 days to resolve the objection. Caltrans will honor the request of any other parties to participate in the consultation and will take any comments provided by those parties into account.

2. If the objection is resolved during the 30 day consultation period, Caltrans may proceed with the disputed action in accordance with the terms of such resolution.

3. If at the end of the 30 day consultation period, Caltrans determines that the objection cannot be resolved through such consultation, then Caltrans shall forward all documentation relevant to the objection to the ACHP, including Caltrans' proposed

response to the objection, with the expectation that the ACHP will, within 30 days after receipt of such documentation:

a. Advise Caltrans that the ACHP concurs in Caltrans' proposed response to the objection, whereupon Caltrans will respond to the objection accordingly. The objection shall thereby be resolved; or

b. Provide Caltrans with recommendations, which Caltrans will take into account in reaching a final decision regarding its response to the objection. The objection shall thereby be resolved; or

c. Notify Caltrans that the objection will be referred for comment pursuant to 36 CFR Part 800.7(c) and proceed to refer the objection and comment. Caltrans shall take the resulting comments into account in accordance with 36 CFR 800.7(c)(4) and Section 110(1) of the NHPA. The objection shall thereby be resolved.

4. Should the ACHP not exercise one of the above options within 30 days after receipt of all pertinent documentation, Caltrans may assume the ACHP's concurrence in its proposed response to the objection and proceed to implement that response. The objection shall thereby be resolved.

5. Caltrans shall take into account any of the ACHP's recommendations or comments provided in accordance with this stipulation with reference only to the subject of the objection. Caltrans' responsibility to carry out all other actions under this MOA that are not the subject of the objection shall remain unchanged.

6. At any time during implementation of the measures stipulated in this MOA, should a member of the public raise an objection in writing pertaining to such implementation to any signatory party to this MOA, that signatory party shall immediately notify Caltrans. Caltrans shall immediately notify the other signatory parties in writing of the objection. Any signatory party may choose to comment in writing on the objection to Caltrans. Caltrans shall establish a reasonable time frame for this comment period. Caltrans shall consider the objection, and in reaching its decision, Caltrans will take all comments from the other signatory parties into account. Within 15 days following closure of the comment period, Caltrans will render a decision regarding the objection and respond to the objecting party. Caltrans will promptly notify the other signatory parties of its decision in writing, including a copy of the response to the objecting party. Caltrans' decision regarding resolution of the objection will be final. Following issuance of its final decision, Caltrans may authorize the action subject to dispute hereunder to proceed in accordance with the terms of that decision.

7. Caltrans shall provide all parties to this MOA, and the ACHP, if the ACHP has commented, and any parties that have objected pursuant to section B.6 of this stipulation, with a copy of its final written decision regarding any objection addressed pursuant to this stipulation.

8. Caltrans may authorize any action subject to objection under this stipulation to proceed after the objection has been resolved in accordance with the terms of this stipulation.

C. Amendments

Any MOA party may propose that this MOA be amended, whereupon all signatory parties shall consult for no more than 30 days to consider such amendment. Caltrans may extend this consultation period. The amendment will be effective on the date a copy signed by all of the original signatories is filed with the ACHP. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with section D of this stipulation, below.

D. Termination

1. If this MOA is not amended as provided for in section C of this stipulation, or if either signatory party proposes termination of this MOA for other reasons, the signatory party proposing termination shall, in writing, notify the other MOA parties, explain the reasons for proposing termination, and consult with the other parties for at least 30 days to seek alternatives to termination. Such consultation shall not be required if Caltrans proposes termination because the Undertaking no longer meets the definition set forth in 36 CFR Part 800.16(y).

2. Should such consultation result in an agreement on an alternative to termination, the signatory parties shall proceed in accordance with the terms of that agreement.

3. Should such consultation fail, the signatory party proposing termination may terminate this MOA by promptly notifying the other parties in writing. Termination hereunder shall render this MOA without further force or effect.

4. If this MOA is terminated hereunder, and if Caltrans determines that the Undertaking will nonetheless proceed, then Caltrans shall comply with the requirements of 36 CFR Part 800.3-800.6.

E. Duration of the MOA

1. Unless terminated pursuant to section D of this stipulation, or unless it is superseded by an amended MOA, this MOA will be in effect following execution by the signatory parties until Caltrans, in consultation with the other signatory parties, determines that all of its stipulations have been satisfactorily fulfilled.

2. The terms of this MOA shall be satisfactorily fulfilled within seven (7) years following the date of execution by the signatory parties. If Caltrans determines that this requirement cannot be met, the MOA parties will consult to reconsider its terms. Reconsideration may include continuation of the MOA as originally executed, amendment of the MOA or termination. In the event of termination, Caltrans will comply with section D.4 of this stipulation, if it determines that the Undertaking will proceed notwithstanding termination of this MOA.

3. If the Undertaking has not been implemented within seven (7) years following execution of this MOA, this MOA shall automatically terminate and have no further force or effect. In such event, Caltrans shall notify the other signatory

parties in writing and, if it chooses to continue with the Undertaking, shall reinitiate review of the Undertaking in accordance with 36 CFR Part 800.

F. Effective Date

This MOA will take effect on the date that it has been executed by Caltrans and the SHPO.

EXECUTION of this MOA by Caltrans and the SHPO, its filing with the ACHP in accordance with 36 CFR§800.6(b)(1)(iv), and subsequent implementation of its terms, shall evidence, pursuant to 36CFR§800.6(c), that Caltrans has afforded the ACHP an opportunity to comment on the Undertaking and its effects on historic properties, and that Caltrans has taken into account the effects of the Undertaking on historic properties.

SIGNATORY PARTIES:

CALIFORNIA DEPARTMENT OF TRANSPORTATION

By:_____ Date: 2/8/11
Jay Norvell
Chief, Division of Environmental Analysis

CALIFORNIA STATE HISTORIC PRESERVATION OFFICER:

By:_____ Date: 8 JUN 2009
Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

CONCURRING PARTIES:

CALIFORNIA DEPARTMENT OF TRANSPORTATION

By:_____ Date: 2/1/11
Raymond W. Wolfe, PhD
Director, District 8, San Bernardino

CITY OF SAN BERNARDINO

By:_____ Date: 1/26/11
Robert Eisenbeisz
City Engineer
City of San Bernardino

ATTACHMENT A:

Bridge Replacement Sheets (1-4)

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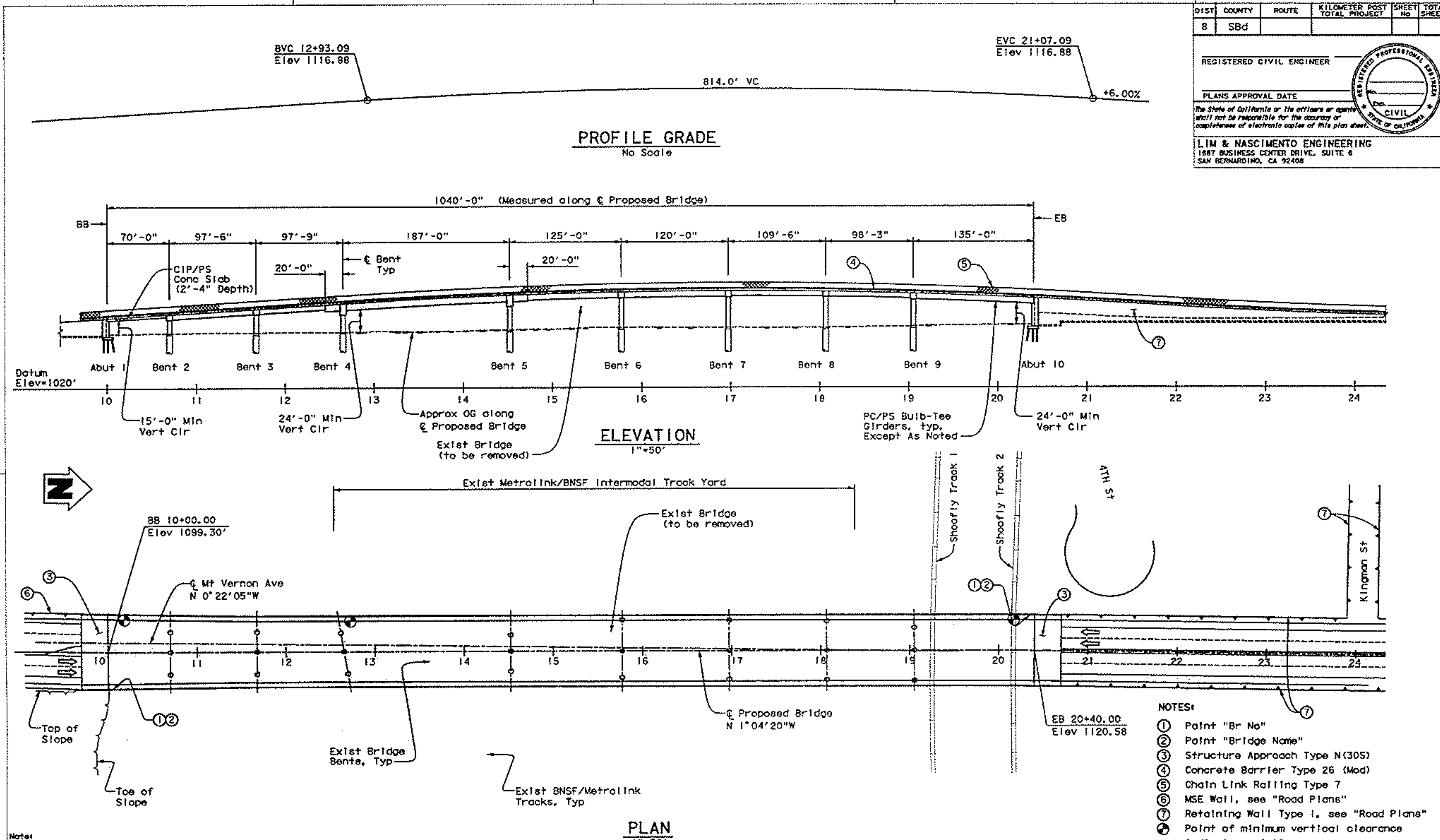

NOTES:

1. Paint "Br No"
2. Paint "Bridge Name"
3. Structure Approach Type N(30S)
4. Concrete Barrier Type 26 (Mod)
5. Chain Link Railing Type 7
6. MSE Wall, see "Road Plans"
7. Retaining Wall Type 1, see "Road Plans"

● Point of minimum vertical clearance indicates existing

Note:
The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET No	TOTAL SHEETS
8	SBd				

REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

LIM & NASCIMENTO ENGINEERING
1887 BUSINESS CENTER DRIVE, SUITE 6
SAN BERNARDINO, CA 92408

DESIGN OVERSIGHT | DESIGN BY | CHECKED
DETAILS BY R. ANDRASEK | CHECKED
QUANTITIES BY | CHECKED
SIGN OFF DATE

PREPARED FOR THE
CITY OF SAN BERNARDINO

PROJECT ENGINEER

BRIDGE NO. 54C-0066
KILOMETER POST

MT VERNON AVE VIADUCT
GENERAL PLAN

CU
EA

SHEET 1 OF 2

FILE => $REQUEST

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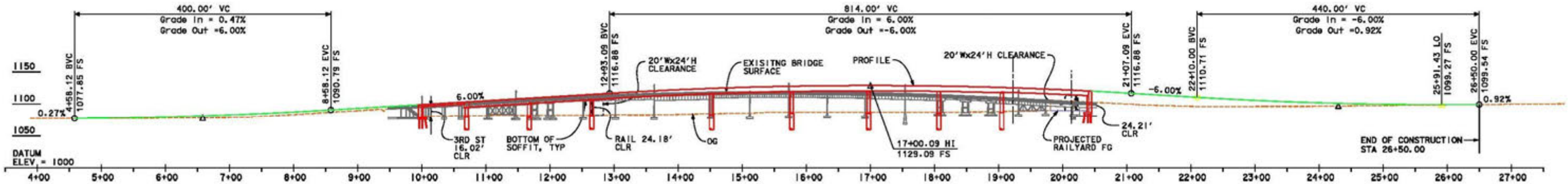
400.00' VC
Grade In = 0.47%
Grade Out =6.00%
814.00' VC
Grade In = 6.00%
Grade Out =-6.00%
440.00' VC
Grade In = -6.00%
Grade Out =0.92%
4+58.12 BVC
1077.85 FS
8+58.12 EVC
1090.79 FS
12+93.09 BVC
1116.88 FS
21+07.09 EVC
1116.88 FS
22+10.00 BVC
1110.71 FS
25+91.43 LO
1099.27 FS
26+50.00 EVC
1099.54 FS
20'Wx24'H CLEARANCE
EXISITNG BRIDGE SURFACE
PROFILE
20'Wx24'H CLEARANCE
6.00%
-6.00%
0.92%
0.27%
3RD ST 16.02' CLR
BOTTOM OF SOFFIT, TYP
RAIL 24.18' CLR
OG
17+00.09 HI
1129.09 FS
PROJECTED RAILYARD FG
24.21' CLR
END OF CONSTRUCTION STA 26+50.00
1150
1100
1050
DATUM ELEV = 1000
4+00
5+00
6+00
7+00
8+00
9+00
10+00
11+00
12+00
13+00
14+00
15+00
16+00
17+00
18+00
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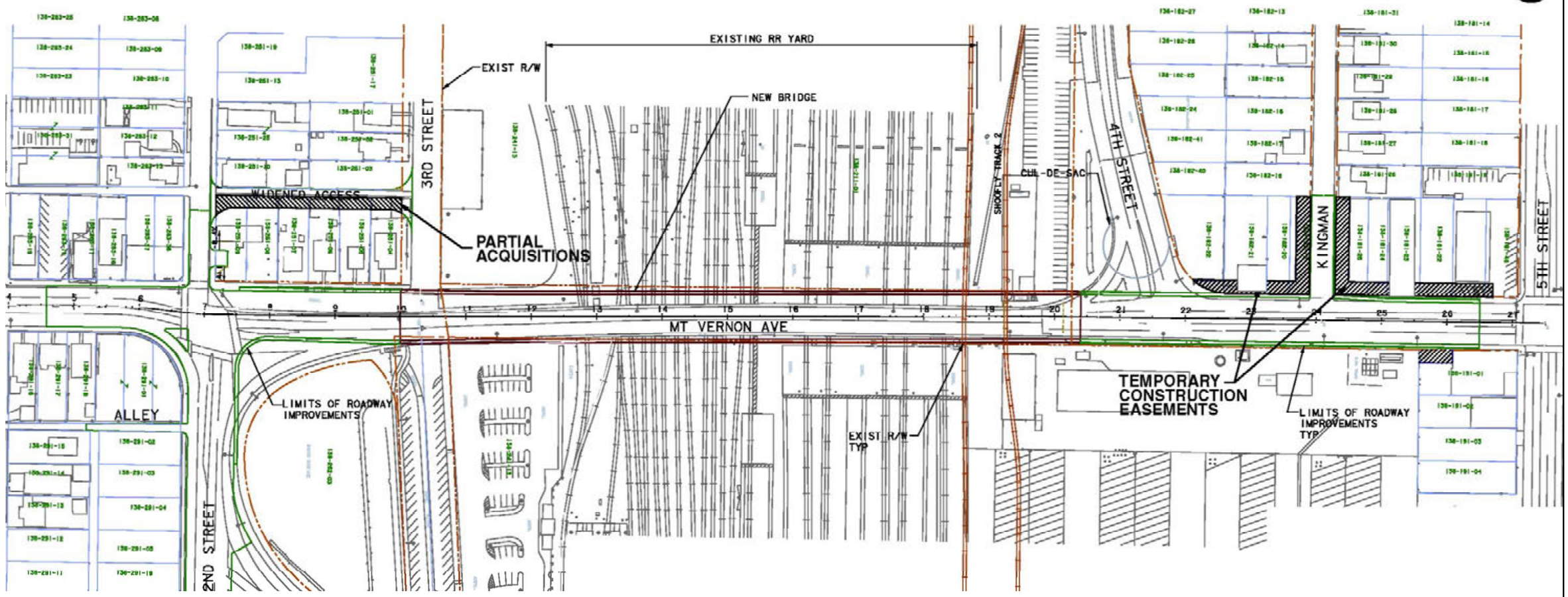
24+00
25+00
26+00
27+00

ELEVATION


EXISTING RR YARD
EXIST R/W
NEW BRIDGE
3RD STREET
WIDENED ACCESS
PARTIAL ACQUISITIONS
SHOOFLY TRACK 2
CUL-DE-SAC
4TH STREET
KINGMAN
5TH STREET
MT VERNON AVE
ALLEY
2ND STREET
LIMITS OF ROADWAY IMPROVEMENTS
EXIST R/W TYP
TEMPORARY CONSTRUCTION EASEMENTS
LIMITS OF ROADWAY IMPROVEMENTS TYP

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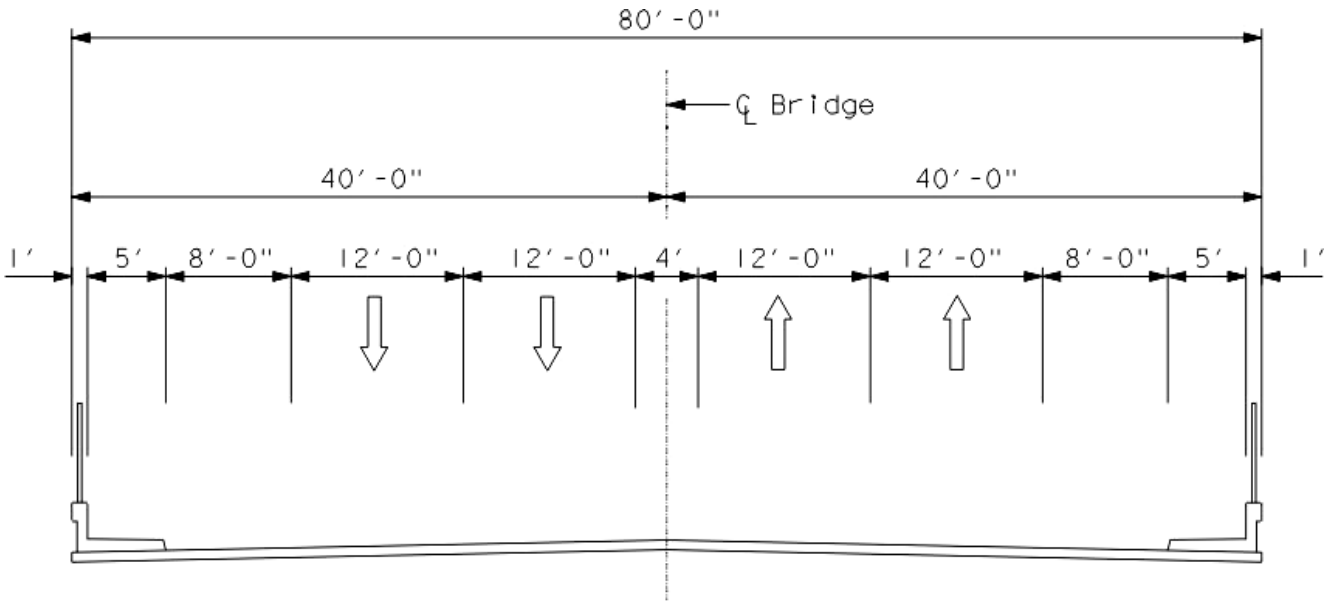

TYPICAL SECTION

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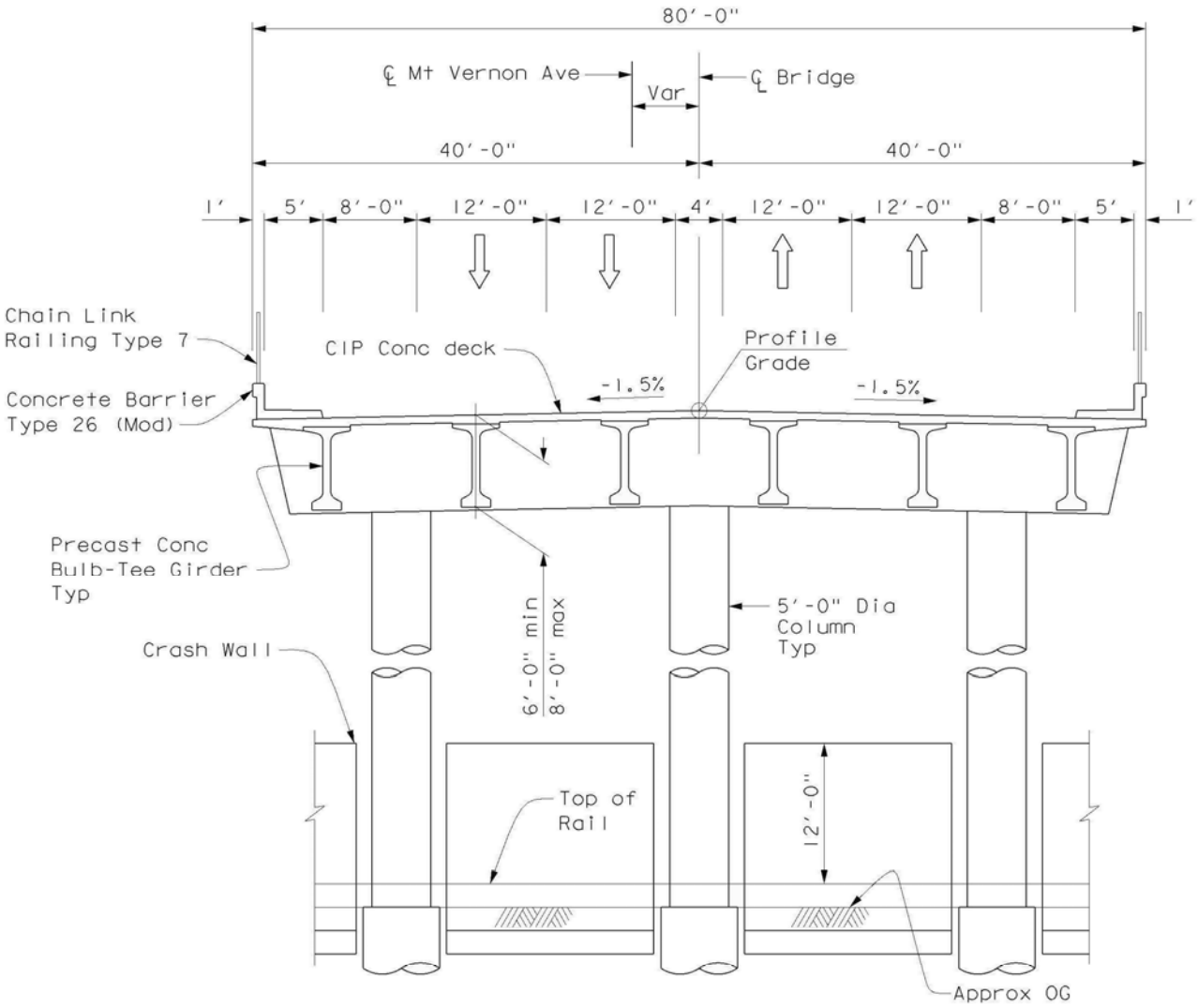

TYPICAL SECTION
BENT 2 THRU BENT 9

1/8" = 1'-0"

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ATTACHMENT B:

Photo Simulations for Alternative 3 (Replacement)

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Alternative 3 (Replacement)
Photo Simulation 1

Before: Looking north at the bridge from 2nd Street

After

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Alternative 3 (Replacement)
Photo Simulation 2

Before: looking west from the depot to the bridge

After

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Alternative 3 (Replacement)
Photo Simulation 3

Before: Looking southeast from 4th Street and Mount Vernon Ave

After

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ATTACHMENT C:

Additional Photographs

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Image 1

Looking directly west from the ATSF Depot, January 15, 2004.

Image 2

Looking south along the east side of the bridge, January 15, 2004. At the center of the image is the stairwell at the southeast corner of the bridge, a character-defining feature. To the far right are Abutment 1, and Bent 2 and 3, all character-defining features.

Image 3

An example of an original light pole, with a modern “cobra” lamp, January 15, 2004. The pole is part of a character-defining feature.

Image 4

Looking north along the bridge's east side, near the stairwell, taken January 15, 2004.

Image 5

This image was taken looking south/southeast along North Mount Vernon Ave, January 15, 2004. It shows some of the bridge railing and the over hanging sidewalk deck, which are both character-defining features.

Image 6

Looking east at the intersection of Mount Vernon Avenue Bridge and 2nd Street, taken on January 15, 2004. This image shows part of the bridge railing, a character-defining feature of the bridge.

Image 7

The bridge railing, which is a character-defining feature. This image was taken on January 15, 2004.

Image 8

Looking north from the west side of the bridge near the Abutment 1, taken on January 15, 2004. This shows part of the existing lot where staging and construction will occur. Piers 4-7, which are character-defining features, are visible at the far right of the image.

Image 9

Looking north on the bridge, from the intersection of Mount Vernon Avenue and 2nd Street, taken on January 15, 2004. Some of the bridge railing, a character-defining feature of the bridge, can be viewed in this image.

Image 10

Looking northwest at the steel arched brackets, which support the bridge deck and are character-defining features. Image taken on January 15, 2004.

Image 11

Looking south/southeast at the bridge, January 15, 2004.

MT. VERNON AVENUE BRIDGE ASSOCIATED LANDSCAPE FEATURES

Figure 1: View East Along Third Street Toward Viaduct Blvd (Depot on Left)

Figure 2: Grouping of Fan Palms Along Ditch, View Southeast

Figure 3: Concrete/Arroyo Stone Lined Ditch, View Southeast From Third St.

Figure 4: Ditch and Adjoining Rock Features, Looking East Toward Viaduct Blvd.

Figure 5: Bridge Staircase, Drinking Fountain, and Stone Retaining Wall

SECOND AMENDMENT TO
MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER REGARDING THE REPLACEMENT OF THE MOUNT VERNON AVENUE BRIDGE, SAN BERNARDINO COUNTY, CALIFORNIA

WHEREAS, the Agreement was executed on February 8, 2011;

WHEREAS, the Agreement was amended on March 8, 2018;

WHEREAS, the Federal Highway Administration (FHWA) has assigned and the California Department of Transportation (Caltrans) has assumed FHWA responsibility for environmental review, consultation, and coordination as part of its National Environmental Policy Act (NEPA) assignment of federal responsibilities effective October 1, 2012 and pursuant to 23 USC 326 and 23 USC 327; and

WHEREAS, Caltrans in consultation with SHPO determined that project scope changes subsequent to execution of the MOA resulted in the expansion of the APE resulting in the potential to effect subsurface historical archaeological deposits within the northwest quadrant of the APE; and

WHEREAS, Caltrans will send a copy of this executed agreement to the ACHP:

NOW, THEREFORE, in accordance with Stipulation IV.C and of the Agreement, Caltrans and the California State Historic Preservation Officer agree to amend the Agreement as follows:

1. Add to Stipulation II. Treatment of Historic Properties:

    E. Caltrans shall ensure that SBCTA implements the Cultural Resources Discovery and Monitoring Plan (CRDMP, March 2018), Attachment A, to address the potential for subsurface sensitivity for historical archaeological deposits.

SECOND AMENDMENT TO
MEMORANDUM OF AGREEMENT
BETWEEN THE CALIFORNIA DEPARTMENT OF TRANSPORTATION AND
THE CALIFORNIA STATE HISTORIC PRESERVATION OFFICER
REGARDING THE REPLACEMENT OF THE MOUNT VERNON AVENUE
BRIDGE, SAN BERNARDINO COUNTY, CALIFORNIA

SIGNATORY PARTIES:

CALIFORNIA DEPARTMENT OF TRANSPORTATION

By Philip J Stolarski 9-4-18
Philip J. Stolarski, Chief Date
Division of Environmental Analysis

CALIFORNIA OFFICE OF HISTORIC PRESERVATION

By 9/5/18
Julianne Polanco Date
State Historic Preservation Officer

CONCURRING PARTIES:

CALIFORNIA DEPARTMENT OF TRANSPORTATION

By John Bulinski 9/10/18
John Bulinski Date
Director, District 8

SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY

By 10/4/18
Raymond Wolfe Date
Executive Director

APPROVED AS TO FORM:
Eileen Monaghan Teichert
SBCTA General Counsel
Date: 10/2/18

Cultural Resources Discovery and Monitoring Plan for the Mount Vernon Avenue Bridge Replacement Project City of San Bernardino, San Bernardino County

Mount Vernon Avenue over the Burlington Northern Santa Fe Rail Yard

08-SBD-Mount Vernon Avenue

Federal Project Number BRLS-6507(003)

Coauthored by _____ August 23, 2018

Stephen Bryne — Date
Senior Archaeologist
ICF
601 West Fifth Street, Suite 900
Los Angeles, CA 90071

Coauthored by _____ August 23, 2018

Monica Corpuz — Date
Senior Archaeologist
ICF
601 West Fifth Street, Suite 900
Los Angeles, CA 90071

Reviewed for approval by _____ 27/Aug/18

Dicken Everson, Ph.D. — Date
PQS Principal Investigator, Prehistoric and Historical Archaeology
Environmental Support/Cultural Studies
California Department of Transportation, District 8
464 West Fourth Street, 6th Floor, MS 825
San Bernardino, CA 92401-1400

Approved by _____ 27/Aug/18

Andrew Walters — Date
Branch Chief
Environmental Support/Cultural Studies
California Department of Transportation, District 8
464 West Fourth Street, 6th Floor, MS 825
San Bernardino, California 92401-1400

U.S. Geological Survey (USGS) 7.5-minute quadrangle: San Bernardino South, Township 1 South, Range 4 West, Section 7
Resources: P-36-008695/CA-SBR-8695H; P-36-014221; P-36-014222
APE: approximately 186 acres

August 2018

Table of Contents

Figures

List of Abbreviated Terms

AMA	archaeological monitoring area
APE	area of potential effects
ATSF	Atchison, Topeka & Santa Fe
Caltrans	California Department of Transportation
CFR	Code of Federal Regulations
CRDMP	Cultural Resources Discovery and Monitoring Plan
CRHR	California Register of Historical Resources
CSO	Cultural Studies Office
DPR	California Department of Parks and Recreation
ESA	Environmentally Sensitive Areas
GPS	global positioning system
MNI	minimum number of individuals
NRHP	National Register of Historic Places
PA	Programmatic Agreement
PQS	Professionally Qualified Staff
RE	Resident Engineer
SBCTA	San Bernardino County Transportation Agency
SHPO	State Historic Preservation Officer
SSP	Specification and Plan
TBD	To be determined

Chapter 1 Introduction

1.1 Scope of Proposed Project

San Bernardino County Transportation Agency (SBCTA), in cooperation with the California Department of Transportation (Caltrans), District 8, is proposing to replace the existing Mount Vernon Avenue Bridge (Bridge Number 54C-066) over the BNSF rail yard. The project extends from just south of 5th Street to Rialto Avenue in the city of San Bernardino, San Bernardino County, California.

This document adheres to the Programmatic Agreement (PA) Stipulation XV.A, pursuant to 36 Code of Federal Regulations (CFR) 800.13, for creating a Post-Review Discovery and Monitoring Plan. The report format and content follows guidance set in the Caltrans Standard Environmental Reference, E.H. Vol. 2, Chapter 5, Exhibit 5.11 (Post Review Discovery Plan, 2015) and Caltrans Specifications and Plans (SSPs, 2015) Section 14-2.

The area of potential effects (APE) is depicted on the U.S. Geological Survey San Bernardino South 7.5-minute quadrangle map in Section 7, Township 1 South, and Range 4 West. Project Vicinity, Project Location, and APE maps are located in the 2nd Supplemental Historic Property Survey Report (2018), Attachment A.

1.2 Nature of the Archaeological Sensitivity

Overall sensitivity for archaeological resources in the APE is very low. Relatively large portions of the project's APE are heavily urbanized, with the vast majority of the APE covered with buildings, structures, roads, and the rail yard with other structures of related uses. These areas are fully developed and built over and will remain so; therefore, there is no chance for encountering archaeological deposits in these areas.

However, the Santa Fe Site (36-008695/CA-SBR-8695H), which was located in the northeastern quadrant of the APE, was identified during construction of the Atchison, Topeka & Santa Fe (ATSF) Intermodal Yard Project. It is mapped within the horizontal limits of the APE. This 50-acre project monitored by Swope et al. (1997) was a historical site, which consisted of 11 privy deposits and 2 refuse dumps associated with residences on the property between 1895 and 1916. It was originally located in the northeastern quadrant of the current project's APE under what is now the container storage yard. This area was intentionally excavated and graded by the railroad after archaeological data recovery had been completed. As such, all the information potential of

the archaeological deposits was recovered. Therefore, while the collection may further contribute to future research, the site itself cannot and it is unlikely to contain any intact remnant deposits.

The 1906 Sanborn fire insurance maps indicate a similar occupation in the northwestern quadrant west of Mount Vernon Avenue. The 1906 map (Sheet 33) shows the neighborhood in the northwestern quadrant (i.e., the area bounded on the north by 5th Street, on the east by Mount Vernon Avenue, and on the south by the railyard) as residential at the time. While not displaying the whole AMA, Sheet 33 shows many of the same parcels that exist within the AMA today, but is cut off before the western limits of the AMA terminate. It is possible that historical archaeological features similar to those found at CA-SBR-8695H, such as privies and trash pits, may be present.

The archaeological monitoring area (AMA) is bounded by 4th Street to the south, Cabrera Avenue on the west, and Mount Vernon Avenue on the east, and extends to the edge of the limits of disturbance at West Kingman Street (Figure 1). The potential remains to encounter buried cultural deposits during demolition and grading operations once the project moves into property acquisition and construction in the AMA.

1.3 Purpose for a Discovery and or Monitoring Plan

This document serves as the Cultural Resources Discovery and Monitoring Plan (CRDMP) for the Mount Vernon Bridge Replacement Project. This plan was prepared in accordance with the guidelines set out in the Caltrans Standard Environmental Reference Volume 2, Exhibit 5.11: Post-Review Discovery and Monitoring Plan Format and Content Guide. The CRDMP sets forth in detail the processes and procedures for treatment of unanticipated discoveries and human remains, and the procedures for archaeological resource monitoring during construction. Justification for the CRDMP rests upon the fact that buried archaeological deposits have a moderate potential to be in the AMA, even though surface evidence was lacking in the vacant lots where intensive pedestrian surveys were conducted.

Chapter 2 Project Location and Description

2.1 Scope of Proposed Project

SBCTA, in cooperation with Caltrans, District 8, is proposing to replace the existing Mount Vernon Avenue Bridge (Bridge Number 54C-066) over the BNSF rail yard in the city of San Bernardino, San Bernardino County, California. The Federal Project Number is BRLS-6507(003). The area is relatively flat and open, with minimal vegetation. Adjacent urban development and the BNSF Railroad Intermodal Facility buildings and tracks create an urban environment with mostly paved and disturbed surfaces. The project will also relocate the Eagle Building and associated buildings to the west side of Mount Vernon Avenue.

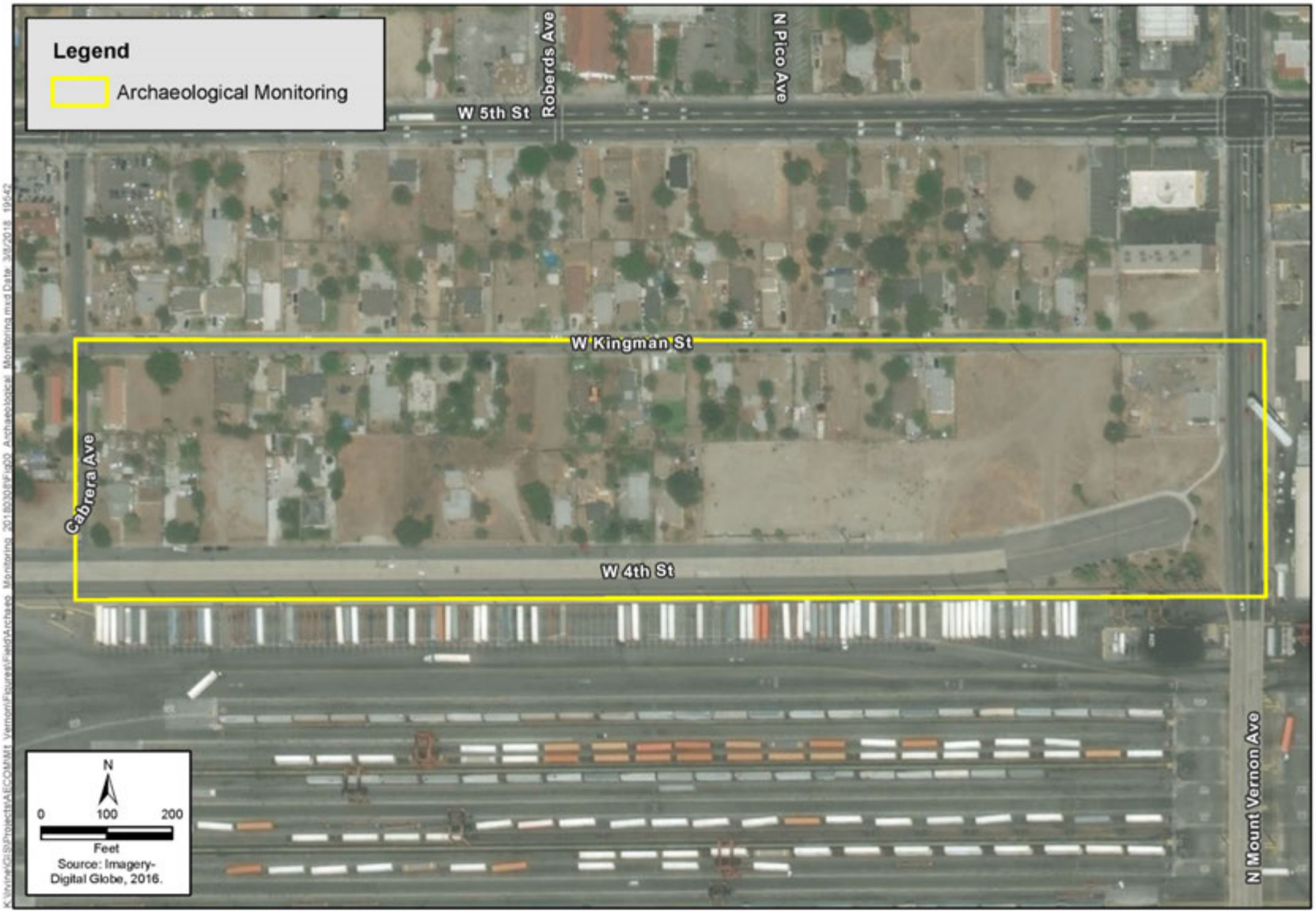
The Preferred Alternative (Alternative 3 – Bridge Replacement), adopted in 2011, extended from just south of 5th Street to just north of Kingman Street. Based on the identified project improvements/refinements, the project would now extend from just south of 5th Street to Rialto Avenue. A new paved area will be constructed between Kingman Street and West 4th Street. Existing railways will be realigned and a new track segment will be constructed.

2.2 Federal Regulations

Regulations and statutes governing the protection of cultural resources include the Antiquities Act of 1906, the Historic Sites Act of 1935, the National Historic Preservation Act, the National Environmental Policy Act, 36 CFR 800 and CFR 60, the Archaeological and Historical Preservation Act of 1974, the American Indian Religious Freedom Joint Resolution of 1978, the Native American Graves Protection and Repatriation Act of 1990, and the Archaeological Resources Protection Act of 1979. The Section 106 *Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, As It Pertains to the Administration of the Federal-Aid Highway Program in California* is the Federal Highway Administration's procedure for taking into account the effects of the Federal Aid Transportation Program on historic properties in California and for compliance with Section 106 of the National Historic Preservation Act (36 CFR 800). Pursuant to Stipulation XV of the PA, a monitoring plan is required for the project. The Mount Vernon Bridge Replacement Bridge Project will receive federal funding and is, therefore, subject to review under the Section 106 PA.

2.3 Maps and Figures

The APE, project location, and project vicinity maps can be found as Attachment A of the 2018 2nd Supplemental Historic Property Survey Report. Updated California Department of Parks and Recreation (DPR) forms can be found in Attachment B of the 2018 2nd Supplemental Archaeological Survey Report. The AMA map can be found as Figure 1 of this document, below.



Archaeological Monitoring
Mount Vernon Avenue Bridge Project

Chapter 3 Archaeological Sensitivity

3.1 Project Area Sensitivity

No new prehistoric or historical archaeological resources were identified during surveys within the project APE as a result of this study or the two previous archaeological studies completed for this project. Most of the APE is built out, paved over, or covered with active railway. There is little open space remaining in the APE. Overall sensitivity for archaeological resources in the APE is very low. However, some areas in the APE could not be fully surveyed. There are 101 parcels that were added to the APE for the 2nd Supplemental Historic Property Survey Report, mostly concentrated in the northwest and southwest quadrants. Forty-one vacant lots were intensively surveyed in 10-meter intervals, which amounted to approximately 34 acres. The remaining lots are currently occupied and were closed to entry. These parcels were surveyed for built environment resources but were not intensively surveyed for archaeological resources.

Relatively large portions of the project's APE are heavily urbanized, with the vast majority of the APE covered with buildings, structures, roads, and the rail yard with other structures of related uses. These areas are fully developed and built over and will remain so; therefore, there is no chance for encountering archaeological deposits in these areas.

The rail yard was not surveyed for archaeological resources. It was evaluated as a built resource within the APE that did not require direct entry into the rail yard.

The potential for encountering prehistoric deposits appears very low. This conclusion is based upon: (1) the results of the records search, which did not identify any prehistoric sites in or near the project; (2) statements from the San Manuel Band indicating that they have no knowledge of any sites or culturally sensitive locations in the project area; (3) the fact that no prehistoric deposits were identified during the sub-surface data recovery work at CA-SBR-8695H (Swope et al. 1997); and (4) the fact that there was no surface evidence of prehistoric sites found during past or current field surveys.

The potential for encountering historical archaeological deposits throughout the APE is low. The 50-acre area monitored by Swope et al. (1997), consisting of the archaeological site CA-SBR-8695H, was originally located in the northeastern quadrant under what is now the container storage yard. This area was intentionally excavated and graded by the railroad, and 11 privies and 2 refuse pits were excavated at this site as part of an archaeological data recovery program. The site is unlikely to contain any further intact remnant deposits.

Dating back to the 1880s, the area located in the northwestern quadrant of the APE was once part of a larger neighborhood that spanned the northern extent of the rail yard. This primarily working-class neighborhood was occupied by railway employees and their families. As stated above, historic archaeological materials were discovered in the northeastern quadrant of the APE (east of Mount Vernon Avenue) during grading operations of the Santa Fe Intermodal Yard Project in the 1990s, resulting in the recordation of P36-008695/CA-SBR-8695H, the Santa Fe Yard site (Lerch and Swope 1994). These subsurface deposits extended up to 76 inches below grade and were not visible as a surface expression. These resources were determined to be from the late 19th and early 20th centuries, and predate the railway acquisition of the land.

The 1906 Sanborn fire insurance maps indicate a similar occupation in the northwestern quadrant west of Mount Vernon Avenue. The 1906 map (Sheet 33) shows the neighborhood in the northwestern quadrant (i.e., the area bounded on the north by 5th Street, on the east by Mount Vernon Avenue, and on the south by the railyard) as residential at the time. While not displaying the whole AMA, Sheet 33 shows many of the same parcels that exist within the AMA today, but is cut off before the western limits of the AMA terminate. It is possible that historical archaeological features similar to those found at CA-SBR-8695H, such as privies and trash pits, may be present.

The neighborhood in the northwestern quadrant of the revised APE has evolved over its existence. There has been considerable alteration to the community over the last two to three generations and the housing styles have changed with times reflecting current trends and affordability. This has resulted in a community of mixed architectural periods and styles that reflects the working-class background of the residents. Many of the original homes have been renovated and/or modified, which has diminished the original context. In addition, many have suffered from disrepair, and some have been demolished. This community was not initially planned, with utilities, underground water lines, sewers, and gas lines being added as the city developed. The underground construction of the utilities would not likely have affected privies and trash pits in backyards of residences, but the possibility exists. This most likely would have led to the abandonment of privies, which would have, in turn, been backfilled or covered. Thus there is a greater potential to uncover historic archaeological deposits during ground-disturbing activities in this area.

Based on information obtained from the Sanborn maps and the data recovery from the Lerch and Swope studies at the Santa Fe Yard, it is anticipated that subsurface deposits from the late 19th and early 20th centuries are likely to be encountered during grading and ground-disturbing activities in the northwestern quadrant of the APE. These factors give the northwestern quadrant

moderate potential to encounter resources (see Figure 1), and it is therefore the location of the AMA.

This monitoring plan was created because: 1) of the large amount of occupied parcels that could not be intensively surveyed for archaeological resources, and 2) based on the results of data recovery in the APE and information garnered from the review of Sanborn maps, it is likely that archaeological deposits will be discovered during ground-disturbing activities in the northwestern quadrant.

3.1.1 Development of the Atchison, Topeka & Santa Fe Railway in San Bernardino

The founding of the railroad that would become known as the ATSF began with a vague proposal to build a railroad to transport large quantities of goods to the trappers and traders in the newly acquired Santa Fe territory. Construction of the ATSF started at Washington Street, between 4th and 5th Streets, in Topeka, Kansas, in 1868. By 1869, the line included just over 28 miles of track; three years later, it reached Dodge City, Kansas. By 1872, the ATSF had reached Colorado (Anonymous 1994).

Through an aggressive merger and acquisition program, ATSF management attempted to reach the lucrative California coast by buying into other rail lines. With their purchase of the Atlantic & Pacific line, ATSF acquired a critical Albuquerque-to-New Mexico route and later a Mojave-to-Needles route (Anonymous 1994).

ATSF's next planned merger was with the California Southern Railroad, whose route stretched from National City, located south of San Diego, to Colton, located south of San Bernardino. San Bernardino's position at the base of the Cajon Pass made it a strategic component for ATSF's ingress to California (Raup 1940). In 1885, ATSF acquired the California Southern Railroad, after which it was poised to compete more effectively with the Central Pacific and Southern Pacific Railroads (Anonymous 1994).

At Colton, a bitter war between two regional railroads took place when the Southern Pacific Railroad denied crossing rights to the California Southern Railroad for passage to San Bernardino. After months of conflict, the California Southern Railroad prevailed in court, and service was extended to San Bernardino in 1883.

By the late 1880s, through procurement of another rail line, ATSF's route encompassed several key Midwestern cities (e.g., Chicago, Cincinnati, St. Louis), resulting in overall holdings that included more than 7,000 miles of track. At the same time, the company's hardware, tracks, and

locomotives were upgraded to accommodate larger, heavier loads for longer distances. By the turn of the century, the ATSF line had more than 11,000 miles of track (Anonymous 1994).

Development of the ATSF rail yards in San Bernardino spurred more than a century of growth in a town that had been a sleepy Mormon settlement. By the late 1800s, the ATSF was established in San Bernardino. The presence of the railroad was responsible for a large amount of the community's economic and physical development for the next century (Raup 1940).

The parcel occupied by the former ATSF rail yards was originally part of Rancho San Bernardino, which had been subdivided into large individual parcels by the late 1870s. A map (Perris 1878–1887), which was part of the original surveyor's estate, identifies the rail yard area as the property of 13 separate landholders.

The first train entered San Bernardino by way of San Diego, amid much fanfare, in September of 1883. The ATSF facilities at San Bernardino were opened later that year when the California Southern Railroad was granted a right of way and depot grounds. The citizenry enthusiastically received the new industry, and by 1885, ATSF acquired the California Southern Railroad line and the 18-acre San Bernardino rail yards (Robinson 1958). In 1886, condemnation suits were necessary to secure the initial land assemblage required for the depot and shop grounds. However, by 1888, the parcel was graded and the roundhouse and outbuildings were built (Ingersoll 1904). In 1917, ATSF added more than eight acres to the rail yard and constructed additional car shop facilities (Anonymous 1994).

ATSF's San Bernardino rail yards were the largest in the west, and the company's regional, or Los Angeles divisional, offices were located in San Bernardino, not in Los Angeles. The nationwide employee magazine featured articles every few months on the San Bernardino rail yard's vast mechanical and personnel capabilities. In the early 20th century, the railroad served as the community's principal industry, employing as much as half of San Bernardino's work force at times, and a high proportion of the populace was employed in industries indirectly related to the railroad (Anonymous 1994).

By the turn of the century, San Bernardino was known as a "railroad town." The presence of the railroad was a prime factor in the development of the city. Historic development patterns in the community were directly related to the growth of the ATSF rail yard. South and east of the rail yard, a large amount of residential development occurred between 1880 and 1900. Residential construction was concentrated in areas southwest of the rail yard between 1900 and 1920. On the north side of the rail yard, homes were built between 1920 and 1935 (during the rail yard's most ambitious expansion program) (Raup 1940). Each of these periods of nearby residential

development can be linked to comparable expansion phases at the ATSF rail yards (Anonymous 1994).

The transport of fresh citrus was among the highest priorities for ATSF's San Bernardino division. At the turn of the century, a pre-cooling plant was built off site for the purpose of icing freight cars and the fruit shipments. Among trucking companies and other rail lines, ATSF handled the majority of the Southern California citrus crop (Shaw 1913). The location of the depot and rail yard were substantial influences in the evolution of the San Bernardino business center. Local events such as parades and the National Orange Show were underwritten in large part by ATSF, whose corporate sponsorship of the community did not end with the work week. Public speeches were peppered with proud references to the city as a "Santa Fe town" (Gore 1934).

The ATSF rail yards occupy a vast parcel of land, reaching from the Mount Vernon Avenue viaduct on the west side to I Street/Interstate 215 and between 3rd and 5th Streets on the north side of the tracks. The Mission Revival–style depot (rebuilt in 1918) is on the south side of the parcel at 3rd Street. With the conversion to truck trailers on flatcars (called TOFCs or "piggyback" units) during the 1960s and 1970s, the San Bernardino rail yard became increasingly obsolete. The rail yard's location in the center of older, densely settled residential districts made expansion for land-intensive truck trailers on flatcars difficult in San Bernardino. Other rail yards, such as Barstow, were located on the outskirts of town and had more room to build. After downsizing year by year, the San Bernardino rail yard transferred more than 350 employees to Topeka. The San Bernardino rail yard closed on November 13, 1992. In 1993, the tie depot was converted to Metrolink use, and most of the remaining operations were transferred to other rail yards (Anonymous 1994).

Chapter 4 Archaeological Context and Research Design

4.1 Environment

The project APE is within the urban environment of San Bernardino, which includes non-native grasses, concrete, asphalt, and gravels. It is flat with little or no slope. Most of the area has been disturbed by construction, demolition, or grading. The APE is a highly developed industrial and urbanized area with residential housing, commercial development, roads, a bridge, BNSF rail facilities, and a Metrolink station.

4.2 History

4.2.1 City of San Bernardino

The town site of San Bernardino was surveyed by Henry G. Sherwood in 1853, the same engineer who laid out Salt Lake City. The city was one mile square, with a grid of wide streets fanning the boundaries of eight-acre blocks. The east-west streets were numbered 1 to 10 from south to north, as they remain designated today, while the north-south streets received names, all of which were subsequently changed (City of San Bernardino 2005).

In 1854, San Bernardino was incorporated as a city, one year after the County of San Bernardino was split from the counties of San Diego and Los Angeles. At that time, the population consisted of approximately 1,200 inhabitants, 75 percent of whom were members of the Church of Latter-day Saints (Mormons). In 1857, Mormons from across the country were recalled to Utah. Approximately 75 percent of the Mormons in San Bernardino returned to Utah, with approximately 30 to 50 families deciding to remain (City of San Bernardino 2005).

During the 1860s and 1870s, the community grew slowly. The small nucleus of the town included two hotels and several large businesses. A stagecoach ran regularly between San Bernardino and Los Angeles with mule-drawn freight wagons that arrived from Salt Lake City and other eastern cities. San Bernardino's early status as a transportation and freight center began at this time and escalated with the arrival of the railroad. The mining trade served as a modest stimulus to the growth of the city as a supply center and staging area. The agricultural character of the valley, established during the Anglo-Mexican period, continued to dominate the local economy. However, with continued development of the timber and mineral resources of the

mountains and desert, the character of the city slowly emerged as a regional commercial center (City of San Bernardino 2005).

The connection of Southern California to the national railroad network in 1876 gave rise to a period of unprecedented regional growth and development in the late 19th century. The arrival of railroads provided better and faster access to markets for farmers and their crops. Packing houses and warehouses were built along the railroad corridors. The railroads also provided access to the county for tourists and immigrants alike. With the completion of rail connections between the desert and Los Angeles in 1887 by the ATSF Railway, San Bernardino soon developed into a railhead boom town. Commercial enterprises dominated the urban landscape, with an emphasis on service and retail establishments, while industrial enterprises supported agricultural development. In 1890, a horse-drawn streetcar was established to bring visitors to the health resort at the Arrowhead Springs Hotel where visitors partook of the hot mineral water and mud baths (City of San Bernardino 2005).

With the center of the city established near the location of Lugo's Agua Caliente rancho adobe, the commercial core of the city grew slowly to the east, west, and north. Downtown businesses included hotels, restaurants, saloons, retail shops, and small service-oriented businesses. Property to the south, closer to the Santa Ana River, remained primarily agricultural through the late 19th and early 20th centuries. To the west of the commercial core, transportation-related industries developed around the ATSF rail yard. To the north and east of the core, relatively small agricultural farms and ranches dominated the landscape. Service industries slowly intermingled with the eastern farms, while farms to the north developed into the primary residential district of the city. Between 1900 and 1910, with the growth of the railroad, businesses, and other economic development, the population doubled from 6,150 to 12,799. During this time, City Hall was constructed on the corner of 3rd and D Streets (in 1901), and a public library was built at 4th and D Streets (City of San Bernardino 2005).

San Bernardino's development is closely linked with that of the ATSF Railway and its important shops and yards, which were constructed in the city. By 1900, more than 85 percent of the city's population was directly employed by the railroad, despite increased industrial and agricultural development in the following decades. By the 1940s, one-quarter of the city's population was employed by the ATSF Railway. However, with the advent of World War II, development and expansion of an Army airfield on the grounds of San Bernardino Municipal Airport rapidly surpassed development associated with the railroad, which had been the city's leading economic contributor (City of San Bernardino 2005).

Although new construction slowed during the 1930s, San Bernardino continued to serve as a regional transportation center, from the early days of the wagon trains and railroads through the 20th century and the development of the automobile and truck corridors. Route 66 was built through the city as part of construction of the highway from Chicago to Santa Monica between 1926 and 1937. In the San Bernardino area, the route traveled over the Cajon Pass and down Mount Vernon Avenue to 5th Street where it then headed west. In the early 20th century, roads, such as Route 66, were developed because they followed routes that had been surveyed by the railroad companies (Roland et al. 2011). In Southern California, these routes ran through Needles, Barstow, San Bernardino, and Los Angeles (Roland et al. 2011). Today, most of Route 66 in the San Bernardino area has been replaced by Interstate 15. The completion of the interstate highway through San Bernardino, as well as the new state freeways, provided opportunities for development and enabled commuting to surrounding counties, particularly Riverside and Los Angeles, thereby transforming San Bernardino into a bedroom community (City of San Bernardino 2005).

Following the Second World War, the military presence in San Bernardino continued as the Army airfield became one of three major maintenance facilities for jet engines. The base was transferred to the U.S. Air Force in 1948 and renamed Norton Air Force Base in 1950. Operations expanded to provide maintenance, storage, and logistical support for various missile programs. In 1966, the base became home to the 63rd Military Airlift Wing and headquarters for Aerospace Audiovisual Services. From the 1940s to the 1960s, the base played a pivotal role in the economic development of the region (Edwards 2010). It also played an important role in creating employment opportunities for the residents of San Bernardino (Edwards 2010).

The population of San Bernardino reached nearly 100,000 in the 1960s as the city continued its expansion to the north and east. However, Norton Air Force Base was selected for closure in 1988. When it finally closed in 1994, 10,000 military jobs and 10,000 civilian jobs were lost (Edwards 2010). In economic terms, the San Bernardino region is still dealing with Norton's closure (City of San Bernardino 2005).

Another large company, Kaiser Steel, opened a plant in nearby Fontana in the early 1940s, employing more than 2,500 workers at its peak. Many of the plant workers lived in San Bernardino and commuted the 13 miles to Fontana. In the 1980s, however, Kaiser Steel declared bankruptcy, and the plant was closed and torn down. With the closure of the city's major industries, the community experienced further economic downturns, and many residents moved away from San Bernardino to surrounding areas. In August of 2012, the city filed for bankruptcy. However, more recently, San Bernardino has emerged from economic crises and is working to rebuild and restructure (Hagen 2017).

4.2.2 History of the APE

Historic development patterns in the community were directly related to the growth of the ATSF rail yard—to the south and east of the rail yard, a large amount of residential development occurred between ca. 1883 and 1900; to the southwest of the rail yard, residential construction was concentrated between 1900 and 1920 (this is the time consisted with development of residences in the Santa Fe Site/CA-SBR-8695H); and on the north side of the rail yard, most of the homes were built between 1920 and 1935, as can be seen in the county tax assessor records (during the rail yard's most ambitious expansion program) (Raup 1940). Each of these periods of nearby residential development can be linked to comparable expansion phases at the ATSF rail yards (Anonymous 1994).

The properties just to the west of Mount Vernon Avenue were developed in this area as a result of the expansion that occurred during the late 19th and early 20th centuries. Review of Sanborn maps and historical aerials reveal that this development was hit or miss: there are no common setbacks, or sidewalks on some streets, and a number of lots remained vacant even through the 1950s. With few exceptions, most residences are modest, one-story, single-family homes. Historical research did not indicate that the ATSF had specific or direct involvement with the development of this neighborhood; the physical development of the neighborhood and the types and styles of the buildings were not dictated by the company.

An example of this development is Kingman Street, which was created when the Santa Fe Tract was subdivided in 1902, named presumably because of its close proximity to the ATSF Railway facilities. The Santa Fe Site/CA-SBR-8695H in the northeastern quadrant of the APE was also being developed at this time. The proximity to the rail yard and Route 66 also encouraged development of small commercial properties such as restaurants and bars, car washes, and liquor stores, as well as small-scale industrial properties. This development primarily occurred on the remaining vacant lots that faced the local thoroughfares: Mount Vernon Avenue, and its intersection with 2nd, 4th, and 5th Streets. It is not surprising, therefore, that the Santa Fe Tract during this period was populated predominantly with blue-collar workers of the ATSF Railway, the majority of whom had Hispanic last names, as revealed by local directories. Historic aerial maps from 1938 confirm that the majority of the properties along West Kingman and West 4th Streets were already developed (NETR 1938; Love and Tang 1999). Full build-out of the neighborhood was not achieved until the 1950s, the development of which came in waves, resulting in a neighborhood of mixed architectural styles. Many of the community's original homes have been renovated and modified, and some have been demolished as the community has developed over time.

Today the area in San Bernardino west of Mount Vernon Avenue remains a working-class neighborhood that experienced another population boom in the 1950s as people came for jobs in the ATSF rail yard, the citrus industry, and later the Kaiser steel mill in Fontana. This altered the neighborhoods further with the introduction of residential and industrial infill of the remaining vacant lots. The neighborhood has been in decline since the closing of the steel mill and the reduction in staff and services at the rail yard, resulting in demolition of residential, commercial, and industrial buildings. Although some agricultural fields remained in the area in the 1930s and 1940s, by 1959 these fields were obsolete, rapidly being given over to residential uses (NETR 1959). Generations of families have lived there, some still residing in the homes in which they grew up (Love and Tang 1999; Rokos 2012).

4.3 Historic Research Themes

The following section includes research themes that identify important issues that could potentially be addressed if historic-period archaeological resources are encountered during Project construction.

4.3.1 Socioeconomic Variability

A wealth of material culture was available to residents of San Bernardino in the early and mid-twentieth century from sources all over the country. Just as artifacts can be used to reinforce the boundaries between ethnic groups, they can also be used to distinguish status within a particular cultural group. It has been suggested that communities that display a wide range of wealth in material culture contain internal divisions by social statue (Praetzellis 1991). The range of artifact types, and the relative quality and quantity of these types, map provide a glimpse of early to mid-20th century society.

4.3.2 Social and Economic Stratification

It can be expected that social differentiation would be reflected in artifact assemblages associated with different classes occupying the project area. Assuming there was variation and transition in these resident groups, differences can be discerned by comparing artifact deposits in one site to those of other sites in the vicinity, providing a small glimpse of the internal dynamics of the area during the early to mid-20th century.

4.3.3 Neighborhoods

Urban neighborhoods were busy areas where residential, commercial, and industrial activities often overlapped. Residential areas typically consisted of single-family residences, boarding houses, and apartments often inhabited by a wide range of individuals and families from

different economic classes and ethnic groups. By stepping back from looking at the archaeological remains of the household only, archaeologists can study the differentiation of neighborhoods and communities by comparing archaeological assemblages from different lots and/or blocks. Separating the influences of ethnicity and economics on a neighborhood level has proven difficult but must be overcome to look at the archaeology of the region and discuss social and economic variations between neighborhoods and communities (Costello and Marvin 1999).

4.3.4 Railroads

Development of railroads, and other linear transportation resources, such as highways and roads, can be directly correlated to the American out west expansion and the rise and development of town sites, communities, and industries associated with the expansion. Paradoxically, roads and highways were built following the railroads from 1865 to 1900 in the United States (Caltrans 2016). Artifacts and site types discovered could reveal the relationship of the neighborhood, the railroad, and the rise and development of Route 66 in the area, as well.

4.4 Historic Research Questions

This section covers potential research questions that, if significant resources are encountered, would be used for the Data Recovery Report that would be developed after completion of the data recovery phase of the project. The sources for this section come from Caltrans Historical Contexts and Methodologies found on the Standard Environmental Reference website (Caltrans 2010, 2016). A number of standard research questions may be applied. Research themes commonly include, but are not necessarily limited to:

- **Land Use and Settlement Patterns:** Relationships between local industries and land use developments in the near proximity of them. What is the relationship between the archaeological and documentary evidence of initial town layout? To what degree did preexisting conditions influence town layout? Can stages in the development of California towns be discerned through the archaeological evidence of townsite creation?
- **Relationship between Townsite Design and Ideology:** To what extent does the physical layout of the town reflect the vision proposed by townsite boosters? Where there is lack of conformance, what causal factors might be responsible?
- **Infrastructure Development – Waste Disposal Facilities:** How does the structure of this feature relate to municipal ordinances regarding infrastructure improvements? How can this feature contribute to our understanding of the scope of community acceptance and participation in municipal improvements (e.g., the rate at which individual property owners comply with requirements to tie into municipal sewer lines)?

- **Infrastructure Development – Transportation Facilities:** How do the materials, techniques, and designs used to create this property compare with official codes and standards? In what ways does the property show innovation in design or construction? In what ways does the property reflect popular/conventional design and/or construction techniques or regional, ethnic, or vernacular tradition? What evidence is there of extemporized construction that used whatever materials were at hand?
- **Roads and Highways as Symbols of Commerce and Trade:** How was moving people, goods, and services as the primary motivation for the development of trails, roads, and, later, highways throughout the nation reflected with the assemblage? What evidence is available by the construction materials used?

If data recovery is implemented, cultural material that may be recovered shall have the potential to address one or more of these questions.

4.5 Archaeological Site Types

Archaeological discoveries can include:

- Isolated artifacts, such historic period bottles
- Isolated features, such as wells or foundations
- Historic period refuse deposits, such as pits or privies

There are other classes of discoveries, but the site types described above are most likely to occur within the project archaeological APE.

4.5.1 Isolated Historic Artifacts

Isolated artifacts are defined as fewer than three items (tools, ornamental items, refuse, detritus) in a location that lack context and association. In most cases the only procedure for isolated artifacts, those consisting of three or fewer artifacts, will be immediate documentation in the field. This will include a description of the find, including type, quantity, material and measurements, a photograph, and global positioning system (GPS) location recording. These artifacts will not be collected and will not require future curation, unless the artifacts are of an unusual artifact type that can provide diagnostic information. Field monitoring personnel will have forms on hand to document isolated artifacts, and will be equipped with cameras and GPS units to accomplish the above tasks.

4.5.2 Isolated Features

Isolated features could include processing stations, fire or cooking hearths, and single episode refuse dumps. In most cases isolated features are not eligible for listing in the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR). Isolated features would most likely be recorded in the field and treated in the same manner as isolated artifacts. However, any of these features may be significant in and of themselves whether found in association with an archaeological sites or as isolated occurrences. For the purposes of this project and this plan, the project will be operating on a presumption of NRHP eligibility for inadvertent discoveries of historic sites or features.

4.5.3 Historic Period Trash Deposits, Dumps, Pits, Privies

Historic period artifacts are generally those over 50 years of age, but whether they require further analysis depends on their research potential. A first priority will be to define the nature of the discovery and to determine if it is an amorphous scatter of historic artifacts without a defined area of distribution, or a well-defined feature, such as a trash pit, privy or well. The significance of an isolated historic artifact deposit requires determining context and integrity before determining its research potential. If a deposit is highly disturbed and out of its original context, or has no known association with its surroundings, its value to archaeological research is minimized. The extent to which this kind of deposit requires further evaluation depends entirely on its context. If the deposit can be associated with previous occupation of the property in which it is discovered, then it may be worthy of further evaluation. If further evaluation is warranted, then some form of excavation will likely take place in order to gather additional data sufficient to allow significance evaluation. For the purposes of this project and this plan, the project will be operating on a presumption of NRHP eligibility for inadvertent discoveries of historic sites or features.

4.5.4 Cultural Deposits with Intact Artifacts, Features, and Ecofacts

Intact cultural deposits contain any combination of undisturbed artifacts, features and ecofacts. In almost all cases, the discovery of intact cultural deposits will require significance evaluation. The evaluation will be designed to determine the nature and significance of the find within the archaeological APE. This may require a minimal testing effort for smaller sites or a more extensive testing program for larger, more complex sites, as discussed in Chapter 5, *Methods*.

4.6 Thresholds for Determining Eligibility of Archaeological Finds

The NRHP describes thresholds for determining the eligibility of an archaeological find. These thresholds are in the form of significance criteria against which an archaeological discovery is evaluated.

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

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

b. That are associated with the lives of significant persons in or past; or

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

To be eligible for listing in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity. Integrity is the ability of a property to convey its significance. The evaluation of integrity is based on an understanding of a property's physical features and how they relate to the property's significance. There are seven aspects of integrity: location, setting, design, materials, workmanship, feeling and association.

An archaeological find would be considered significant if it met one or more of the four significance criteria and if it met enough of the integrity considerations to convey its significance. Important integrity aspects for archaeological sites are integrity of location and integrity of association.

If any resources are encountered during earth-moving activities, then the Project Archaeologist in consultation with Caltrans Professionally Qualified Staff (PQS) will assess and evaluate the find, as described in Chapter 6 (as per Caltrans SSP, Section 14). If the Project Archaeologist finds the deposit may be eligible, then, for the purposes of this project and this plan, the project will be operating on a presumption of NRHP eligibility for inadvertent discoveries, as determined by the Project Archaeologist and in consultation with the Caltrans PQS assigned to the project. The preferred method of treatment will be avoidance through the establishment and enforcement of Environmentally Sensitive Areas (ESAs) in accordance with Chapter 6 and the process outlined in Section 106 PA Attachment 5. Under this presumption of eligibility, any

important discoveries which cannot be avoided by project construction will be removed during data recovery in accordance with Chapter 5 and in accordance with Section 106 PA Stipulation XI and Attachment 6.

For disagreements regarding the significance of a post-review discovery, Caltrans will follow the procedures in MOA Stipulation IV.B and/or the process for resolving disagreements regarding consultant-prepared findings, as appropriate, as outlined in SER Volume 2, Chapter 2, Section 2.11.

In this way, if there are any inadvertent discoveries of historic sites or isolates that the Project Archaeologist deems potentially significant, the project can immediately move into recovery, documentation, mitigation and curation.

Chapter 5 Methods

5.1 Data Recovery Process

The following steps summarize the manual excavation process that would be used in the Mount Vernon Bridge Replacement Project APE. The project is operating under an assumption of NRHP eligibility for inadvertent discoveries of historic features and sites, including privies, as determined by the Project Archaeologist. The project will move straight to data recovery as per the Caltrans SSP, Section 14 (see Section 4.5 above) and adhere to PA Stipulations XI and PA Attachment 6.

1. If archaeological deposits are located, units would be placed within the site as to determine the extent, nature, and potential for the presence of additional archaeological materials.

2. Decisions regarding the integrity, data potential, and interpretive value of the deposit may be made in the field, or soon thereafter, based on the artifacts/features discovered or the data that have initially resulted from artifacts, and on site constituents examined during preliminary laboratory analysis, which is conducted concurrently with the field work. If artifacts were found in sterile soil and were broken and disturbed, efforts would be made to test the area within 10 feet for any signs of additional site constituents. If there were a lack of additional evidence for an associated historic-period refuse deposit, additional site constituents such as faunal remains, or structural foundations or hollow-filled features (for historic-period resources), it would be assumed that the area is disturbed and lacks sufficient integrity for additional units in the area.

3. If diagnostic artifacts such as historic-period artifacts with maker's marks or other diagnostic manufacturing techniques were located, particularly in conjunction with each other, it would be assumed that the site has high interpretive value and is eligible for listing in the NRHP. At that point, unless the site can be protected in place with an ESA, data recovery would commence in all areas of the site within the AMA; both mechanical and manual excavation methods would be employed wherever feasible.

4. Archaeologists would make every effort to identify archaeological deposits, including the use of mechanical excavation, screening for small site constituents, and hand excavation.

5.1.1 Excavation Units

Manual test excavation would have 2 main objectives: (1) to retrieve samples of archaeological matrix for laboratory analysis, and (2) to determine the vertical and horizontal boundaries of

cultural deposits. If archaeological deposits are encountered at reasonable depths of up to 6.5 feet below ground surface, it may be feasible to remove non-cultural overburden in limited horizontal exposures using mechanical equipment. Units in 3- by 3-foot or 3- by 6-foot units would be excavated in arbitrary 4-inch levels, unless obvious stratigraphic breaks were detected in trench profiles. Data from units would determine whether the deposits exhibit research potential, integrity, and predicted significant site constituents. In addition, use of 3- by 3-foot or 3- by 6-foot units would help locate the densest parts of the deposit and identify the most important areas of focus the data recovery because the site/resource will be treated as eligible or presumed eligible for listing in the NRHP. Trenches would continue for the purpose of identifying archaeological deposits subject to additional manual excavation.

5.1.2 Screening Methods

Screening methods during the initial excavations would primarily involve the use of 1/8-inch mesh. The use of 1/8-inch mesh screening may result in the identification of important site constituents. Such constituents can indicate a higher level of significance and research potential, which can be recovered using screening.

Excavated matrices may be wet or high in clay content, requiring that wet screening be employed. Portable water tanks on trailers, fitted with gas pumps and hose bibs, are readily available from equipment rental companies and provide efficient means of wet screening archaeological materials with clean water. Inundation of excavation units and trenches may necessitate extensive pumping of water.

5.1.3 Field Recording

All subsurface investigations will be recorded on Test Unit forms and completed at the end of each unit/level excavated. Other data recovery forms which will be incorporated as needed will include: Unit Summary forms, Feature Forms, Archaeological Context forms and photographic logs. The sediments encountered during excavation will be described by composition, color and origin (alluvial, colluvial, fill, etc.). Sketch maps will be drawn for each unit level containing materials or artifacts to document the excavations and photographs will be taken of each completed unit level. Stratigraphic profiles of two adjacent unit walls will be hand drawn and photographed at the completion of each test unit excavation. A site overview photograph and a scaled site excavation map will be drawn to illustrate the location and association of all test unit locations and pertinent site geographic features.

Artifacts recovered during test unit excavations will be collected, bagged and given unique field catalog numbers by unit/level excavation. Artifacts will be bagged in appropriate material

receptacles (paper bags and polyethylene bags) and each bag will be marked with Unit and Level number, date, provenience – level depth or piece plotted depths below datum, company name and project name. A field artifact catalog form will be used to record all artifacts collected for each unit/level excavated.

5.1.4 Historical and Archival Research

Additional historical and archival research will be conducted to identify specific and contextual background as needed for each discovery location to supplement the existing background research for the project.

Chapter 6 Monitoring

6.1 Monitoring Areas

The intensity of cultural resources monitoring during project construction is based on two factors. The first is the presence of a known cultural resources within the project APE; the second is an assessment of the potential for unknown buried cultural deposits to be present in the AMA.

6.1.1 Historic-era Neighborhood

The neighborhood in the northwest quadrant of the project APE (i.e., the area bounded on the north by 5th Street, on the east by Mount Vernon Avenue, and on the south by West Kingman Street and the railroad) was residential at the turn of the 20th century and it is possible that historical archaeological features similar to those found at CA-SBR-8695H, such as privies and trash pits, may be present. See Figure 1 for a map of the area to be archaeologically monitored.

6.2 Monitoring Procedures

6.2.1 Personnel and Organization

A qualified archaeologist who meets the Caltrans PQS Standards as a Principal Investigator (Section 106 PA Stipulation III and Attachment 1) will fill the role of Project Archaeologist. This individual and a designated alternate will coordinate cultural resources monitoring activities. SBCTA, or the Construction Contractor, will communicate schedule and other information to the Caltrans PQS and Project Archaeologist, who will then provide this information to the project archaeological monitors. Adequate advanced notice is required to allow the presence of required monitors at correct locations and times. The Project Archaeologist will coordinate activities and schedule with the monitors and sub consultants (if any) as required. The number of monitors to be scheduled will be based on the construction schedule and levels of effort proposed for ground disturbance in areas designated for monitoring.

Monitoring for historic archaeological materials will be conducted by SBCTA archaeological consultants during ground-disturbing activities in the designated monitoring area for the project. Archaeological monitors will have training in and be knowledgeable of artifact identification for materials such as faunal bone and historic artifacts to a sufficient level to avoid repeated halts of construction for false identification. Archaeological monitors must meet the Caltrans PQS standards as a Co-Principal Investigator for Historical Archaeology (Section 106 PA Stipulation III and Attachment 1.)

The qualifications of the Project Archaeologist and monitors will be reviewed by Caltrans to ensure that the PQS Standards are met.

6.2.2 Safety Protocols

The safety and well-being of personnel working in an active construction site and on the railroad right-of-way is the top priority of the project. All monitors will complete railroad safety training, which specifies the protocols and procedures to follow while working in the right-of-way. Additionally, all monitors will complete the construction contractor's safety training. Adherence to the safety requirements of the railroad safety training and the construction contractor safety training, plus additional specific safety instructions at the project site, will help to ensure an injury-free project. No monitor will be allowed onto the right-of-way or construction areas until all required safety training is completed.

6.2.3 Archaeological Construction Worker Training

Prior to, and for the duration of, ground disturbances, SBCTA will provide archaeological resources training to key personnel or supervisors. The training will describe appropriate measures for and treatment and protection of cultural resources in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties, and will include a discussion of applicable laws and penalties under the law, and samples or visual representations of artifacts that might be found in the project vicinity. The training will outline the steps that must be taken if cultural resources are encountered during project construction, including the authority of archaeological monitors to halt construction in the area of a discovery to an extent sufficient to ensure that the resources is protected from further impacts.

The cultural resources awareness training will be conducted by a qualified archaeologist. A hard copy summary of cultural resources laws, discovery procedures, and contact information will be provided to all construction workers. It may be necessary to conduct the training in English and another language, particularly Spanish. If so, an individual proficient in both languages will be present to translate the training.

6.2.4 Monitoring Methods

Monitors will report each morning to a designated staff person or construction foreman. Monitors will also participate in regularly scheduled project safety meetings, for example daily tailgate meetings and weekly safety briefings.

Construction activities within the AMA associated with demolition and removal of existing structures, grading, and utility or other trenching shall be monitored. Construction activities conducted on ground previously disturbed by the current project's demolition, grading, or trenching activities do not require monitoring, unless they are in the vicinity of an ESA/AMA.

Standard methods of excavation, such as grading and trenching, will be monitored by observation of the excavations as they occur. Monitors will carefully inspect graded areas, spoils piles, and vertical cuts (as safety conditions permit) for archaeological evidence, such as fire-altered rock, faunal remains, lithic

debitage, flaked and ground stone tools, ceramics, glass, metal, burned earth, charcoal, ash, and exotic rocks and minerals, as well as for cultural stratigraphy, pits, canals, hearths, and architectural remains. If potentially significant resources are encountered, the monitor may temporarily halt or redirect construction activities.

The monitor will prepare a daily written monitoring log and photo log of activities and observations. Daily monitoring forms will be submitted by each monitor to the Project Archaeologist on a weekly basis.

6.3 Procedures for Discoveries during Construction

6.3.1 Halt of Construction

Monitors will be empowered to briefly halt construction to more closely inspect an area of potential discovery or examine soil conditions. Construction will be halted in the immediate area and a reasonable buffer established to ensure the safety of the monitor. The monitor will inspect the location as efficiently and quickly as possible so as not to hinder the progress of construction. If the monitor determines that no cultural resources were observed in the location of work stoppage, construction may resume. However, if the monitor confirms the identification of an unanticipated discovery, Caltrans SSP 14-2.03A General applies:

> If archaeological resources are discovered within or near construction limits, do not disturb the resources and immediately:
>
> 1. Stop all work within a 60-foot radius of the discovery
>
> 2. Secure the area
>
> 3. Notify the Resident Engineer (RE)
>
> The Department investigates the discovery. Do not move archaeological resources or take them from the job site. . Do not resume work within the radius of discovery until authorized. If ordered, furnish resources to assist in the investigation or recovery of archaeological resources. If discovery resources are determined to be NRHP-eligible, then the process outlined in Section 5.1 will be followed. This work is change order work.

In the event of an unanticipated archaeological discovery, the archaeological monitor must immediately inform the onsite SBCTA Project Construction Manager or resident engineer, and the Project Archaeologist. One of the above parties will immediately contact the Caltrans PQS assigned to the project or the District 8 Cultural Studies Branch Chief.

Within 24 hours of notification of a discovery, the Caltrans District 8 PQS will notify Caltrans CSO, State Historic Preservation Officer (SHPO) and all parties to the PA. The notification will be completed via telephone or digital communication (email) and include the date of the discovery, a brief description of the discovery resource type, and that the resource(s) is/are assumed NRHP-Eligible and being treated in accordance with the Plan.

The preferred method of treatment for unanticipated discoveries will be avoidance through the establishment and enforcement of Environmentally Sensitive Areas (ESAs) in accordance with the process outlined in Section 106 PA Attachment 5. The ESA will be delineated on project plans. Archaeological monitors will be present to monitor project activities within an Archaeological Monitoring Area (AMA) established around the ESA.

If the establishment of an ESA is not practical to protect the significant discovery, assumption of eligibility followed by date recovery is the preferred approach.

6.4 Chain of Command and Responsible Parties

Responsible Party Table

Task	Responsible Parties	Task	Date Task Completed
Pre-Construction	Caltrans Archaeologist (PQS) SBCTA Project Construction Manager(PCM)	The PCM shall ensure that the AMA is clearly defined on project plans, discussed in contract provisions, included in the Environmental Commitment Record, and included in the Resident Engineer's Pending File (or equivalent). The PCM will consult with the Caltrans Archaeologist, who will verify these actions are completed prior to beginning of construction or construction related activities.	To be determined (TBD)
	Caltrans Archaeologist (PQS) Consultant Archaeologist SBCTA Project Construction Manager SBCTA Resident Engineer	The PCM, Resident Engineer, and Consultant Archaeologist shall ensure that cultural resources concerns including archaeological sensitivity, archaeological monitoring and reporting requirements, and historic preservation laws are discussed during pre-construction meetings. The PCM will consult with the Caltrans Archaeologist, who will verify these actions are completed prior to beginning of construction or construction related activities.	TBD
During Construction	Caltrans Archaeologist (PQS) Consultant Archaeologist SBCTA Project Construction Manager SBCTA Resident Engineer	At least five (5) days prior to the start of construction, the Resident Engineer must contact the Caltrans Project Archaeologist and set a schedule for an AMA location field review. The Caltrans Project Archaeologist and Consultant Archaeologist shall be on site with the PCM and/or Resident Engineer to clearly define the AMA before construction activity starts.	TBD
	Consultant Archaeologist SBCTA Project Construction Manager BNSF Construction Manager* Resident Engineer Contractor	The Consultant Archaeologist will be present to monitor all initial construction activities within the AMA (e.g. ground disturbance, grading, trenching). Following initial ground disturbance, the need for monitoring of activities within the AMA will be determined in consultation with the Caltrans Archaeologist and Consultant Archaeologist.	TBD

Task	Responsible Parties	Task	Date Task Completed
Post Construction	Caltrans Archaeologist (PQS) Consultant Archaeologist SBCTA Project Construction Manager	The PCM or Consultant Archaeologist will inform the Caltrans Archaeologist when construction has finished. Consultant Archaeologist will prepare the required Monitoring Report within 60 days of completion of monitoring activities within the AMA.	TBD
Responsible Parties as of TBD	Caltrans Archaeologist: Dicken Everson / dicken.everson@dot.ca.gov / (909) 383-1010 Caltrans Environmental Branch Chief: Andrew Walters / andrew.walters@dot.ca.gov (909) 383-2647 Caltrans Native American Coordinator: Gary Jones / gary.jones@dot.ca.gov / (909) 383-7505 Caltrans Environmental Construction Liaison: TBD Contractor Environmental Construction Liaison: TBD Contractor Construction Manager: TBD SBCTA Project Construction Resident Engineer Contractor: TBD Consultant Project Manager: TBD BNSF Construction Manager: TBD Consultant Archaeologist: TBD San Bernardino County Coroner: TBD / TBD / (909) 387-2542		
*BNSF Construction Manager- BNSF Construction Manager, Project Manager, Resident Engineer, etc.			

Note: Table to be updated as key personnel are identified. Once key personnel are identified and finalized, the table will be sent to Parties via email or under separate cover.

6.5 Special Procedures for Human Remains

If human remains are discovered, California State Health and Safety Code Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area that is suspected to overlie remains, and the County Coroner shall be contacted. Work will stay halted until the coroner gives the direction to resume work. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission, who pursuant to Public Resources Code Section 5097.98 will then notify the Most Likely Descendant. At that time, the person who discovered the remains will contact Gary Jones, District Native American Coordinator, Caltrans District 8, Division of Environmental Planning, (909) 383-7505. Further provisions of Public Resources Code 5097.98 are to be followed as applicable.

6.6 Laboratory Analysis and Curation

A curation agreement is currently being negotiated with the Western Science Center in Hemet, California.

Cultural materials that are recovered from sites or features presumed eligible for nomination to the NRHP will be processed using standard archaeological techniques, and will be curated at a federally approved facility.

If significant cultural materials are found, a field laboratory will be established on site for use in the initial cleaning and sorting of the collection. Final processing of the collection, including cataloging and analyses, will take place at an offsite laboratory.

All cultural materials will be cleaned before they are cataloged, with the possible exception of delicate or perishable materials. Artifacts will then be sorted by provenience and functional type. Because selected artifacts from trench profiles and artifacts from samples will be collected in the field, some nondiagnostic and fragmentary materials may be discarded during laboratory processing, guided by a curation agreement.

A Microsoft Access artifact catalog will be used. The catalog will consist of a catalog number that is tied to the artifact's provenience and will include numerous functional categories and information necessary for the analysis of the feature and the larger archaeological site. The result will be a relational database that will permit queries to sort artifacts by materials, features, blocks, or other properties as needed.

Artifact tags (computer-printed) developed from the catalog will be placed in archival quality plastic bags with the lots or specimen numbers recorded. The tabs will include the Project name, artifact number, artifact description, minimum number of individuals (MNI), and date. Some cultural materials with limited research value (e.g., nails, nondiagnostic glass shards, and amorphous sheet metal) may be cataloged and curated in bulk.

All artifacts will be analyzed to determine if they are temporally diagnostic. Artifacts will be quantified in a standard manner to facilitate comparison and analysis. In addition to weights and counts of the whole and fragmentary specimens, the MNI will be calculated. The MNI count quantifies the minimum number of whole specimens. Analysis will focus on determining which of the excavated features or layers have the potential to address research questions identified in the CRDMP, or questions that arose during fieldwork.

Once cataloging is complete, each MNI-associated group of artifacts (sometimes including multiple catalog numbers) will be stored in 4-millimeter-thick polyethylene plastic bags. Paper

tags with provenience information, catalog number, and artifact description will be printed on acid-free paper and placed in each bag.

Artifact bags will be stored in larger plastic bags that will be grouped by material type, then grouped by layer and/or feature and appropriately labeled. Artifact bags will be stored in standard curation boxes (15 x 12 x 10 inch) that are permanently labeled with site and feature numbers.

All retained archaeological materials prepared for curation will be catalogued according to standards mandated by 36 CFR § 79 and a copy of the catalog will be included as an Appendix to the Data Recovery Report.

6.7 Reporting

6.7.1 Daily Monitoring Logs

The archaeological monitor will complete a daily monitoring form to document the location of monitoring activities throughout the day as well as the types of actions taken regarding any identified cultural resources (e.g., temporary halt work). The monitoring forms will also document any incidents of non-compliance.

A brief description of any identified cultural resources will be included on the monitoring form, as well as a description of contacts made and the actions taken. Photographs of activities and resources will be taken where appropriate and noted on the monitoring form. The monitoring forms will be submitted to the Project Archaeologist at the end of each week. The paper documents and Adobe PDF scans will be maintained in secure project files. The daily monitoring logs will serve as the basis of the cultural resources monitoring report.

6.7.2 Site Records

Cultural resources discovered during monitoring shall be documented, at a minimum, using DPR Forms 523A and 523J. Additional forms within the DPR 523 series shall be completed as necessary. Photographic documentation of the cultural resources discovered as well as their context shall take place. Documentation will strive to combine discoveries as much as possible and to place discovered materials into the context of previously recorded nearby site if appropriate. These DPR 523 forms will be completed and submitted to the South Central Coastal Information Center to assign a site number.

6.7.3 Monitoring Report

When construction is completed a Cultural Resources Monitoring Report will be prepared by the Project Archaeologist for submittal to Caltrans for review within 60 days after construction completion. The Project Archaeologist will provide a revised Monitoring Report addressing Caltrans comments within 1 month of receipt of comments from Caltrans. This report will be based on the daily monitoring forms and will include a description of all monitoring efforts, provide a complete list of any cultural resources identified and recovered, and reference the documentation completed to document, evaluate, and treat each discovery. Cultural materials and archaeological features discovered during monitoring will be analyzed and described to the level of current best practices for modern archaeology. The final monitoring report will include the following elements.

- Executive Summary
- Statement of scope, including project location and setting
- Background contexts or summaries
- Summary of previous historical and archaeological research
- Research goals and themes
- Rational for requiring monitoring
- Monitoring methods
- Table specifying date of monitoring activities, and results
- Description of recovered materials
- Conclusions or results
- References cited

6.7.4 Data Recovery Report

If a resource is encountered, and data recovery is required, then a Data Recovery Report will be submitted under separate cover. The Draft Data Recovery Report will fully document the results of the archaeological data recovery excavations and analysis and will meet the Secretary of the Interior's Standards for Archaeological Documentation. The Draft Data Recovery Report will include the following elements.

- Executive Summary or Management Summary
- Statement of scope, including project location and setting

- Background contexts or summaries
- Summary of previous historical and archaeological research
- Research goals and themes
- Data Recovery and Analysis methods
- Description of recovered materials
- Findings and Interpretations, referencing research goals
- Conclusions
- References cited
- Appendices

The Draft Data Recovery Report will be submitted by the Project Archaeologist within a period of three to five months (90 to 150 days) following the completion of data recovery excavations and sufficiently prior to the expiration of the project MOA to allow for review and approval. The Draft Data Recovery Report will be submitted to Caltrans PQS for review and distribution to SHPO and PA consulting parties for a 30 day review period.

The Final Data Recovery Report will address any comments and concerns in response to the Draft report review. The Final Data Recovery Report will be submitted by the Project Archaeologist to the Caltrans PQS within 30 days of receipt of all draft review comments. Once Caltrans has approved the Data Recovery Report, Caltrans will distribute the Final Data Recovery Report to CSO and SHPO. The Project Archaeologist will distribute the Final Data Recovery Report to the South Central Coastal Information Center (SCCIC).

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