MARK PESTRELLA, Director

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone (626) 458-5100
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE

June 30, 2026

The Honorable Board of Supervisors
County of Los Angeles
383 Kenneth Hahn Hall of Administration
500 West Temple Street
Los Angeles, California 90012

Dear Supervisors:

TRANSPORTATION CORE SERVICE AREA
APPROVAL OF AGREEMENT
BETWEEN THE METROPOLITAN TRANSPORTATION AUTHORITY,
THE SAN GABRIEL VALLEY COUNCIL OF GOVERNMENTS,
THE COUNTY OF LOS ANGELES, AND
THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT FOR
THE INTERSTATE 605/VALLEY BOULEVARD INTERCHANGE
IMPROVEMENT PROJECT
(SUPERVISORIAL DISTRICT 1)
(3-VOTES)

SUBJECT

Public Works is seeking Board approval to authorize the Director of Public Works or his designee to execute an agreement and any amendments to the agreement between the Metropolitan Transportation Authority, the San Gabriel Valley Council of Governments, the County of Los Angeles, and the Los Angeles County Flood Control District for the Interstate 605/Valley Boulevard Interchange Improvement project in the unincorporated community of Avocado Heights.

IT IS RECOMMENDED THAT THE BOARD ACTING AS THE GOVERNING BODY OF THE COUNTY OF LOS ANGELES AND AS THE GOVERNING BODY OF THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT:

1. Acting as responsible agencies for the Interstate 605/Valley Boulevard Interchange Improvement project, consider the Negative Declaration/Environmental Assessment with Finding of No Significant Impact prepared and adopted by the State of California Department of Transportation as lead Agency; certify that the Board of Supervisors has independently reviewed and considered and reached its own conclusions regarding the environmental effects of the County of Los Angeles' and

the Los Angeles County Flood Control District's approvals related to the project as shown in the Negative Declaration; adopt the environmental commitments applicable to the County of Los Angeles and the Los Angeles County Flood Control District, as applicable, finding that the commitments are adequately designed to ensure compliance with the environmental commitments approved by Caltrans during project implementation.

2. Authorize the Director of Public Works or his designee acting as the Road Commissioner and the Chief Engineer of the Los Angeles County Flood Control District to enter into the funding, design, and construction agreement and any necessary amendments to the agreement for the Interstate 605/Valley Boulevard Interchange Improvement project and approve funding in the amount of $2,901,243 for the County of Los Angeles' share of the project.

3. Authorize the Director of Public Works or his designee acting as the Road Commissioner and Chief Engineer of the Los Angeles County Flood Control District to approve an additional amount up to $666,007 (representing 25 percent of the Project's construction cost estimate) should the low bid amount exceed the County of Los Angeles' initial deposit of $2,901,243.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the recommended actions is to comply with the California Environmental Quality Act (CEQA) by making responsible agency findings for both the County of Los Angeles (County) and the Los Angeles County Flood Control District (District) and authorize the Director of Public Works or his designee acting as the Road Commissioner and the Chief Engineer of the District to enter into the funding, design, and construction agreement, enclosed hereto as Exhibit A and any necessary amendments between the Metropolitan Transportation Authority, the San Gabriel Valley Council of Governments (SGVCOG), the County, and the District.

The Metro, SGVCOG, the County, and the District propose to enter into the agreement to delineate each agency's roles and responsibilities. The project will feature street safety improvements, including improving the signalized intersection of Valley Boulevard at Interstate 605 (I-605) Freeway/Temple Avenue and the at-grade railroad crossings which will benefit the Avocado Heights residents and community.

Implementation of Strategic Plan Goals

These recommendations support the County Strategic Plan: North Star 2, Foster Vibrant and Resilient Communities; Focus Area Goal D, Sustainability, Strategy i, Climate Health. The project will mitigate climate change and build climate resilient communities by supporting multimodal transportation investments that improve safety and mobility, reduce traffic congestion, and reduce greenhouse gas emissions. The project will enhance traffic flow, increase safety, and foster economic vitality for County residents, thereby improving the quality of life.

FISCAL IMPACT/FINANCING

There will be no impact to the County General Fund.

The estimated total project cost, including engineering and construction costs, is $48,000,000. The proposed agreement provides for Metro to prepare the preliminary engineering work and remit payment of construction funds to SGVCOG for the administration and the construction of the project.

The County's maximum proposed share of the total project cost is $3,567,250, which includes an initial deposit of $2,901,243 and up to an additional $666,007 if the low bid amount to construct the project exceeds the initial deposit.

The County's proposed share of the total project cost would be funded with the California Road Maintenance and Rehabilitation Account funds allocated to the County under the Road Repair and Accountability Act of 2017 (Senate Bill 1). Funding for the County's initial deposit is included in the Road Fund (B03 – Capital Assets-Infrastructure and Services and Supplies) Fiscal Year 2025-26 Budget. Any additional funding that may be needed for the project would be requested through the annual budget process.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

The project will address traffic safety issues at Temple Avenue at-grade crossing near Valley Boulevard and provide approximately 1,700 feet of street improvement along Valley Boulevard south of the southbound I-605 off-ramp and on Temple Avenue and include minor incidental storm drains and utility work. Historically, there have been chronic traffic congestion issues at the nearby on-ramp to the I-605 that have caused significant queuing over the Union Pacific and Metrolink railroad tracks, which is compounded by a three-track crossing.

Initially, this project overlapped the Avocado Heights, the San Jose Hills Valley Boulevard pavement preservation project. After thorough review, it was determined that there would be significant cost saving to incorporate the County's proposed project as part of Metro's sponsored project. According to Metro, the project is primarily funded by the State's Trade Corridor Enhancement Program grant. The project includes reconstruction and rehabilitation of Valley Boulevard roadway infrastructure, relocation of utilities, drainage system upgrades, installation of roadway signs, pavement markings/striping, installation or relocation of overhead sign structure, and modification of street lighting. Metro administered preliminary engineering and right-of-way phases, including environmental, design, and right-of-way work. The SGVCOG will advertise, award, and manage construction of the project.

Under the terms of the proposed agreement, the County would deposit funds in the amount of $2,901,243 with Metro following execution of the agreement and upon receiving a Metro invoice. The County agrees to deposit additional funds up to 25 percent of the project's estimated construction cost, which is $666,007 should the low bid amount exceed the initial deposit of $2,901,243. Metro would coordinate with the County to facilitate the approval and payment of the project's construction invoices submitted to Metro by SGVCOG.

The proposed agreement and any amendments will be approved as to form by County Counsel prior to execution by the Director of Public Works or his designee.

ENVIRONMENTAL DOCUMENTATION

The County and the District are acting as responsible agencies for the I-605/Valley Boulevard Interchange Improvement project. As lead agency under CEQA, Caltrans has prepared an Initial Study, consulted with the County, and on April 7, 2021, it adopted an enclosed Negative Declaration/Environmental Assessment with Finding of No Significant Impact for this project (Exhibit B). The County is acting as the agency responsible for this project because it must approve the design, construction, operation, and maintenance for the project, as well as issue permits for construction. The District is also acting as a responsible agency because it must review and approve the project plans related to facilities owned and/or operated by the District and issue flood permits needed for construction. In their independent judgment, the Board of Supervisors, on behalf of the County and the District, concluded that the project will not have a significant effect on the environment. Environmental commitments in the Negative Declaration recommended for adoption by the County relate to traffic monitoring by the parties. Public Works has determined that the County and the District actions are within the scope of the Negative Declaration and there have been no changes to the project or to the circumstances under which it will be undertaken that require further findings under the State CEQA Guidelines, Section 15162.

The location of the documents and other materials constituting the record of the proceedings upon which the Board's decision is based in this matter can be viewed online at https://content.pw.lacounty.gov/wp-content/uploads/2024/12/I-605_ValleyBl_Final_ND.pdf or in person at Public Works, 900 South Fremont Avenue, 11th Floor, Alhambra, California 91803. The custodian of such documents at Public Works is the Transportation Planning and Programs Division, Environmental Planning and Assessments Section, Section Head, 11th Floor.

Upon the Board's approval of the recommended actions, Public Works will file a Notice of Determination for the County and another for the District with the Los Angeles County Registrar-Recorder/County Clerk and with the State Clearinghouse in the Office of Land Use and Climate Innovation in accordance with Section 21152 of the California Public Resources Code and will post the notices on its website in accordance with Section 21092.2.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

The recommended actions will improve the quality of life for County residents traveling in Avocado Heights through enhanced safety and increased mobility by facilitating the construction, operation, and maintenance of the streets and at-grade improvements.

CONCLUSION

Please return one adopted copy of this Board letter to Public Works, Transportation Planning and Programs Division.

Respectfully submitted,

MARK PESTRELLA, PE
Director

MP:MER:pr

Enclosures

c: Chief Executive Office (Christine Frias)
County Counsel
Executive Office, Board of Supervisors

ENCLOSURE

TRANSPORTATION CORE SERVICE AREA
APPROVAL OF AGREEMENT
BETWEEN THE METROPOLITAN TRANSPORTATION AUTHORITY,
THE SAN GABRIEL VALLEY COUNCIL OF GOVERNMENTS,
THE COUNTY OF LOS ANGELES, AND
THE LOS ANGELES COUNTY FLOOD CONTROL DISTRICT FOR
THE INTERSTATE 605/VALLEY BOULEVARD INTERCHANGE
IMPROVEMENT PROJECT
(SUPERVISORIAL DISTRICT 1)
(3-VOTES)

This Board letter has large enclosures.
Click on the link below to access:

Interstate 605/Valley Boulevard Interchange Improvement Project (Enc.-FTP Link)

AGREEMENT

THIS AGREEMENT (hereinafter referred to as "AGREEMENT") is made and entered into by and between the COUNTY OF LOS ANGELES (hereinafter referred to as "COUNTY"), the LOS ANGELES COUNTY FLOOD CONTROL DISTRICT (hereinafter referred to as "DISTRICT"), the LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY (hereinafter referred to as "LACMTA"), and the San Gabriel Valley Council of Governments (hereinafter referred to as "SGVCOG") for the Valley Boulevard Improvements described below, each individually referred to as a "PARTY" or collectively as the "PARTIES".

WITNESSETH

WHEREAS LACMTA desires to implement the Interstate 605/Valley Boulevard Interchange Improvements project in cooperation with COUNTY, DISTRICT, SGVCOG, City of Industry, the California Department of Transportation, Metrolink, Union Pacific Railroad, and California Public Utilities Commission to improve mobility and enhance safety within the project area (the "INTERCHANGE PROJECT").

WHEREAS, LACMTA is the regional transportation planning agency that owns and operates transit and transportation services in Los Angeles County and is involved in the planning, funding and construction of transit and highway projects.

WHEREAS, LACMTA is responsible for clearing the INTERCHANGE PROJECT environmentally, and preparing the plans, specifications, and estimates ("PS&E") package for construction of the INTERCHANGE PROJECT, with oversight provided by Caltrans.

WHEREAS, the construction cost for the INTERCHANGE PROJECT is currently estimated to be $48,000,000 ("ESTIMATED INTERCHANGE PROJECT COST"). LACMTA is responsible for securing the construction funding for the INTERCHANGE PROJECT. The SGVCOG will advertise, award, and manage the construction of the INTERCHANGE PROJECT.

WHEREAS, COUNTY, DISTRICT, and LACMTA propose to improve Valley Boulevard, which overlaps with the work included in the INTERCHANGE PROJECT and will improve mobility and provide better and safer access for all roadway users. The Valley Boulevard improvements portion of the INTERCHANGE PROJECT are hereinafter referred to as the "VALLEY PROJECT" as shown in Attachment A.

WHEREAS, the VALLEY PROJECT is of general interest to the PARTIES.

WHEREAS, the Scope of Work for the VALLEY PROJECT includes pavement reconstruction and rehabilitation, upgraded drainage, American with Disabilities Act (ADA) infrastructure, and related engineering services described in Attachment B.

DRAFT

WHEREAS, LACMTA has performed PRELIMINARY ENGINEERING work, including environmental, design and right of way phases for the VALLEY PROJECT.

WHEREAS, COUNTY have agreed to reimburse LACMTA for the VALLEY PROJECT which includes LACMTA'S PRELIMINARY ENGINEERING work and the SGVCOG's CONSTRUCTION work. The total budget for the VALLEY PROJECT is estimated to be $2,901,243 as outlined in Attachment C.

WHEREAS, LACMTA will coordinate with COUNTY to facilitate the transfer of the VALLEY PROJECT construction funds to SGVCOG which will advertise, award and manage construction of the VALLEY PROJECT.

WHEREAS, such a proposal is authorized and provided for by the provisions of Sections 6500 and 23004, et seq., of the Government Code.

NOW, THEREFORE, in consideration of the mutual benefits to be derived by the PARTIES and of the promises herein contained, it is hereby agreed as follows:

1) DEFINITIONS:

   a. PRELIMINARY ENGINEERING as referred to in this AGREEMENT shall consist of environmental findings and approvals/permits; design survey; soils report; traffic index and geotechnical investigation; preparation of plans, specifications, and cost estimates; right-of-way engineering; utility engineering; and all other necessary work prior to the advertising of the VALLEY PROJECT for construction bids.

   b. COST OF CONSTRUCTION as referred to in this AGREEMENT shall consist of the total cost to the COUNTY of (1) the construction of the VALLEY PROJECT, (2) the relocation of COUNTY facilities necessary for the construction of the VALLEY PROJECT, and (3) any additional unforeseen work, supplies, or other expenses necessary for the construction of the VALLEY PROJECT. COST OF CONSTRUCTION shall not include the cost of relocation of any DISTRICT facilities necessary for the construction of the VALLEY PROJECT.

   c. CONSTRUCTION ADMINISTRATION as referred to in this AGREEMENT shall consist of construction contract administration, construction inspection, materials testing, construction survey, traffic detour, signing and striping, construction engineering, utility relocation and coordination matters, changes and modifications of plans and specifications for the VALLEY PROJECT necessitated by unforeseen or unforeseeable field conditions encountered during construction of PROJECT, construction contingencies, and all other necessary work after advertising of INTERCHANGE PROJECT for construction bids to cause the VALLEY PROJECT to be constructed in accordance with said plans and specifications approved by COUNTY, DISTRICT, and LACMTA.

DRAFT

d. COST OF THE VALLEY PROJECT as referred to in this AGREEMENT shall consist of the COST OF CONSTRUCTION and costs of PRELIMINARY ENGINEERING, CONSTRUCTION ADMINISTRATION, right-of-way acquisition and clearance matters, and all other work necessary to complete the VALLEY PROJECT in accordance with the approved plans and specifications.

e. COMPLETION OF THE VALLEY PROJECT as referred to in this AGREEMENT shall be defined as the field acceptance of construction of the VALLEY PROJECT by the COUNTY and DISTRICT, by way of issuance of a Notice of Field Acceptance to SGVCOG by each agency, and an electronic notification to COUNTY'S Director of Public Works/COUNTY Engineer that the improvements within COUNTY'S jurisdiction are completed and transferred to COUNTY and DISTRICT for purposes of operation and maintenance or transfer to other entities as may be applicable, such as Caltrans.

f. SGVCOG shall not release its Contractor prior to COMPLETION OF THE VALLEY PROJECT, which will not occur until SGVCOG receives a Notice of Field Acceptance from both the COUNTY and DISTRICT.

2) COUNTY AGREES:

a. To review and approve PRELIMINARY ENGINEERING prepared by LACMTA for the VALLEY PROJECT.

b. To finance the VALLEY PROJECT, the actual amount of which is to be determined by a final accounting, pursuant to paragraph 4) b., below.

c. To deposit with LACMTA, following execution of this AGREEMENT and upon receiving a LACMTA invoice, COUNTY funds in the amount of Two Million, Nine Hundred One Thousand, Two Hundred and Forty-Three 00/100 Dollars ($2,901,243.00) which is COUNTY'S estimated COST OF THE VALLEY PROJECT. This will consist of a billing invoice prepared by LACMTA and delivered to COUNTY. Two Hundred Thirty-Seven Thousand, Two Hundred and Sixteen 00/100 Dollars ($237,216.00) will be utilized by LACMTA for its PRELIMINARY ENGINEERING work that has already been completed at the time of execution of this AGREEMENT. The remaining Two Million, Six Hundred Sixty-Four Thousand, and Twenty-Seven 00/100 Dollars ($2,664,027.00) will be held by LACMTA on behalf of the SGVCOG, until such time as the SGVCOG procures and receives invoices from a construction contractor that will complete the CONSTRUCTION of the VALLEY PROJECT. LACMTA will enter into a separate agreement with the SGVCOG to allocate funding to the SGVCOG for its CONSTRUCTION services.

DRAFT

d. To deposit with the LACMTA following the bid opening and pre-approval of the responsible low bidder by SGVCOG, additional funds up to a maximum of twenty five percent (25%) of the COUNTY'S estimated COST OF CONSTRUCTION if the low bid amount provided by the responsible low bidder exceeds the COST OF CONSTRUCTION. The COUNTY's estimated COST OF CONSTRUCTION is Two Million, Six Hundred Sixty-Four Thousand, and Twenty-Seven 00/100 Dollars ($2,664,027.00), twenty five percent (25%) of which is Six Hundred Sixty-Six Thousand and Seven 00/100 Dollars ($666,007.00).

e. To the extent it is authorized to do so, grant to SGVCOG, at no cost to SGVCOG, access to any property owned, operated, or maintained by the COUNTY to the extent such access is necessary for the construction of the VALLEY PROJECT.

f. To issue conditional road encroachment, excavation, and construction permits for bidding purposes after SGVCOG submits approved plans if SGVCOG seeks to obtain permit(s) prior to hiring a contractor. Then SGVCOG and/or its VALLEY PROJECT contractor shall submit contractor's insurance documents to the COUNTY before work begins.

g. Upon approval of construction plans and specifications for the VALLEY PROJECT and receipt of permit application from SGVCOG for its VALLEY PROJECT contractor, to issue SGVCOG and/or its VALLEY PROJECT contractors no cost permit(s) authorizing SGVCOG to construct the VALLEY PROJECT within COUNTY'S jurisdiction.

h. To cooperate with SGVCOG in conducting negotiations with and, where appropriate, to issue notices to utilities, organizations and owners of substructure and overhead facilities regarding the relocation, removal, operation, and maintenance of all surface and underground utilities and facilities, structures, and transportation services, which conflict with construction of the VALLEY PROJECT. Where utilities have previously been installed in COUNTY rights of way or on other COUNTY property and must be relocated, where feasible COUNTY will provide the necessary right of way for the relocation of those utilities and facilities at no cost to SGVCOG.

i. Notwithstanding any other provisions of this AGREEMENT to the contrary, to be financially responsible for disposal and/or mitigation measures, if necessary, should any hazardous materials, chemicals, contaminants, or archaeological resources be encountered during construction of the VALLEY PROJECT within COUNTY'S jurisdiction.

DRAFT

j. Upon COMPLETION OF THE VALLEY PROJECT to accept full and complete ownership of it within COUNTY'S jurisdiction, and to operate and maintain in good condition and at COUNTY'S expense all improvements constructed as part of the VALLEY PROJECT within COUNTY'S jurisdiction.

COUNTY agrees to accept road, sewer, and storm drain maintenance responsibilities of those facilities within the COUNTY's and LACFCD's jurisdictional area, upon completion of all work for a PROJECT performed in accordance with this LOA, and after concurrence by COUNTY and DISTRICT and issuance of a Notice of Field Acceptance to LACMTA. COUNTY shall perform a final inspection, any COUNTY or DISTRICT concerns shall be satisfactorily addressed by LACMTA, and once both COUNTY and DISTRICT agree that all issues are resolved, a Notice of Field Acceptance shall be issued to LACMTA.

k. COUNTY and DISTRICT jointly, or as may be determined between them, shall be responsible for entering into a Construction and Maintenance Agreement(s) with Caltrans for the PROJECT as it relates to the responsibilities of, rights of way, and other facilities owned by the Caltrans. LACMTA will be responsible for preparing any required agreement(s).

3) DISTRICT AGREES:

a. That COUNTY will represent DISTRICT and DISTRICT'S interests in all matters relating to the PROJECT and DISTRICT'S involvement and serve as its agent except as stated in this AGREEMENT.

b. To issue conditional flood construction permit(s) after SGVCOG submits a permit application with all required documents except a contractor's insurance documents if SGVCOG plans to obtain the permit(s) prior to hiring a contractor. SGVCOG and/or its VALLEY PROJECT contractor shall later submit contractor's insurance documents to the DISTRICT before work begins.

c. Upon approval of construction plans and specifications for the VALLEY PROJECT and receipt of a permit application from SGVCOG for its VALLEY PROJECT contractor, to issue SGVCOG and/or its VALLEY PROJECT contractor and subcontractors necessary flood permit(s) authorizing SGVCOG to construct the VALLEY PROJECT within DISTRICT'S jurisdiction.

DRAFT

4) LACMTA AGREES:

a. To perform or cause to be performed the PRELIMINARY ENGINEERING, right-of-way acquisition and clearance matters, and all other work necessary to complete the VALLEY PROJECT.

b. To prepare a billing invoice should the bid price for the VALLEY PROJECT exceed the estimated COST OF CONSTRUCTION, following approval of said exceedance amount by the COUNTY's Board of Supervisors as may be needed, as described in 5) c. below, and deliver it to COUNTY for payment.

5) SGVCOG AGREES:

a. To obtain COUNTY'S, DISTRICT'S, and LACMTA's approval of plans and specifications for the VALLEY PROJECT prior to solicitation for construction bids.

b. To award and administer the construction contract and otherwise do all things necessary and proper within the course of its administration to complete the VALLEY PROJECT.

c. To provide to COUNTY, following the bid opening and pre-approval of the responsible low bidder, the responsible low bidder's price for the INTERCHANGE PROJECT and the VALLEY PROJECT's pro rata share via electronic mail notification. Said pro rata share shall be the responsible low bidder's price multiplied by the ratio of the COUNTY'S estimated COST OF CONSTRUCTION divided by the ESTIMATED INTERCHANGE PROJECT COST. If the responsible low bidder's amount for the VALLEY PROJECT exceeds the COUNTY'S estimated COST OF CONSTRUCTION of Two Million, Six Hundred Sixty-Four Thousand, and Twenty-Seven Dollars ($2,664,027) by more than twenty five percent (25%), the amount of the exceedance will require approval by a formal action of the Board of Supervisors. If said exceedance amount is not approved, or if the SGVCOG determines that there is insufficient time for COUNTY staff to seek such approval, the SGVCOG may reject the responsive bidder's bid for the VALLEY PROJECT.

d. To require construction contractor to name COUNTY, its special districts, including the DISTRICT, LACMTA, and their respective officials, officers, employees, and agents, as additional insureds for the INTERCHANGE PROJECT and the VALLEY PROJECT.

DRAFT

e. To provide copies of all requests for change orders submitted to it for the VALLEY PROJECT to COUNTY in a timely manner via electronic mail notification to the COUNTY inspector/office engineer assigned to the VALLEY PROJECT. If COUNTY does not respond within thirty (30) calendar days, SGVCOG may proceed with said change orders.

f. To furnish COUNTY within one hundred eighty (180) calendar days after acceptance of the INTERCHANGE PROJECT by SGVCOG, a final accounting of the actual COUNTY COST OF THE VALLEY PROJECT, as well as the entire COST OF INTERCHANGE PROJECT, including an itemization of actual unit costs and actual quantities for the INTERCHANGE PROJECT.

g. Upon completion of the VALLEY PROJECT, to maintain in good condition and at COUNTY'S expense, all improvements constructed as part of INTERCHANGE PROJECT within COUNTY'S jurisdiction.

6) IT IS MUTUALLY UNDERSTOOD AND AGREED AS FOLLOWS:

a. The final accounting of the actual total COST OF THE VALLEY PROJECT shall allocate said total cost between COUNTY and LACMTA, as described in this AGREEMENT.

b. That if at final accounting COUNTY'S share of COST OF THE VALLEY PROJECT exceeds the amount the COUNTY has paid under this AGREEMENT, COUNTY shall pay to LACMTA the additional amount upon receipt of a billing invoice prepared by LACMTA. Conversely, if the COUNTY'S share is less than COUNTY'S payment, LACMTA shall refund the difference to COUNTY without need for further action by COUNTY.

c. COUNTY shall review the final accounting invoice prepared by LACMTA and report in writing any discrepancies to LACMTA within sixty (60) calendar days after the date of said invoice. Undisputed charges shall be paid by COUNTY to LACMTA within sixty (60) calendar days after the date of said invoice. LACMTA shall review all disputed charges and submit a written justification detailing the basis for those charges within sixty (60) calendar days of receipt of COUNTY'S written report. COUNTY shall then make payment of the previously disputed charges or submit justification for nonpayment within sixty (60) calendar days after the date of LACMTA'S written justification.

d. LACMTA at any time may, at its sole discretion, designate an alternative payment mailing address and an alternative schedule for payment of COUNTY funds if applicable. COUNTY shall be notified of such changes by invoice prepared by LACMTA and delivered to COUNTY.

DRAFT

e. During construction of INTERCHANGE PROJECT, SGVCOG shall furnish a Resident Engineer for construction management and inspection purposes or other representative to perform the functions of an inspector (SGVCOG Resident Engineer). COUNTY and DISTRICT may also furnish, at no cost to SGVCOG or LACMTA, an inspector or other representative to inspect construction of the VALLEY PROJECT (COUNTY Inspector). Said inspectors shall cooperate and consult with each other, but the orders of the SGVCOG Resident Engineer to the contractors or any other person in charge of construction shall prevail and be final, subject to the following: the VALLEY PROJECT will not be considered complete until the COUNTY Inspector determines that construction within COUNTY's and DISTRICT's jurisdiction has been completed in accordance with the plans approved by the COUNTY and DISTRICT in accordance with Section 5a above and COUNTY and DISTRICT approved change orders, if any, which approval shall not be unreasonably withheld.

f. This AGREEMENT may be amended or modified only by mutual written consent of COUNTY, DISTRICT, LACMTA and SGVCOG. Amendments to and modifications of a nonmaterial nature may be made by the mutual written consent of the PARTIES or their delegates.

g. Each PARTY shall have no financial obligation to the other PARTIES under this AGREEMENT, except as herein expressly provided.

h. Except as specifically stated to the contrary, any correspondence, communication, notices or contact concerning this AGREEMENT shall be directed to the following:

COUNTY or DISTRICT:

Mr. Mark Pestrella, Director, PE
Los Angeles County Department of Public Works
P.O. Box 1460
Alhambra, CA 91802-1460
mpestrella@pw.lacounty.gov
(626) 476-6792

LACMTA: Mr. Adam Paranial, AICP
Manager, Countywide Planning and Development
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, Mail Stop 99-18-2
Los Angeles, CA 90012
ParanialA@metro.net
(213) 922-4273

DRAFT

SGVCOG: Ms. Marisa Creter
Executive Director
San Gabriel Valley Council of Governments
1000 South Fremont Avenue, Suite 10-210
Alhambra, CA 91803
mcreter@sgvcog.org
(626) 457-1800

i. Other than as provided below, no PARTY nor any of their special\districts, member agencies, elected or appointed officials, officers, employees, or agents (hereinafter referred to as INDEMNITEES) shall be responsible for any damage or liability occurring by reason of any acts or omissions by one or more of the other PARTIES under or in connection with any work, authority, or jurisdiction delegated to or determined to be the responsibility of said other PARTY or PARTIES under this AGREEMENT (hereinafter referred to as the INDEMNITOR[S]). It is also understood and agreed that, pursuant to Government Code Section 895.4, the INDEMNITOR(S) shall fully indemnify, defend, and hold harmless the INDEMNITEE(S) from any liability imposed for injury (as defined by Government Code Section 810.8) occurring by reason of any acts or omissions on the part of the INDEMNITOR(S) under or in connection with any work, authority, or jurisdiction delegated to or determined to be the responsibility of the INDEMNITOR(S) under this AGREEMENT.

j. Neither LACMTA nor the SGVCOG nor any of their member agencies, or their respective elected or appointed officers, employees, or agents shall be responsible, directly or indirectly, for damage or liability arising from or attributable to the presence or alleged presence, transport, arrangement, or release of any hazardous materials, chemicals, or contaminants present at or stemming from the VALLEY PROJECT within the COUNTY'S and DISTRICT's jurisdiction or arising from acts or omissions on the part of the COUNTY and DISTRICT under or in connection with any work, authority, or jurisdiction delegated to or determined to be the responsibility of the COUNTY and DISTRICT under this AGREEMENT, including liability under the Comprehensive Environmental, Response, Compensation and Liability Act of 1980 (CERCLA) and under the California Health and Safety Code. It is understood and agreed pursuant to Government Code Section 895.4, COUNTY and DISTRICT shall fully indemnify, defend, and hold LACMTA, SGVCOG, and their member agencies, elected and appointed officers, employees, and agents harmless from any such damage, liability or claim. In addition to being an agreement enforceable under the laws of the State of California, the foregoing indemnity is intended by the PARTIES to be an agreement pursuant to 42 U.S.C. Section 9607(e), Section 107(e), of the amended CERCLA, and California Health and Safety Code Section 25364. Such indemnity shall not apply to hazardous materials, chemicals, or

DRAFT

contaminants brought onto the VALLEY PROJECT site by LACMTA, the SGVCOG, or the construction contractor.

k. In contemplation of the provisions of Section 895.2 of the California Government Code imposing certain tort liability jointly upon public entities solely by reason of such entities being parties to an agreement (as defined in Section 895 of said Code), each of the PARTIES hereto, pursuant to the authorization contained in Sections 895.4 and 895.6 of said Code, will assume the full liability imposed upon it or any of its officers, agents, or employees by law for injury caused by any act or omission occurring in the performance of this AGREEMENT to the same extent that such liability would be imposed in the absence of Section 895.2 of said Code. To achieve the above-stated purpose and except as specifically provided in Section 6.j above, each of the PARTIES indemnifies and holds harmless the other PARTY or PARTIES for any liability, cost, or expense that may be imposed upon such other PARTY solely by virtue of Section 895.2. The provisions of Section 2778 of the California Civil Code are made a part hereof as if incorporated herein.

l. That LACMTA authorizes the Director of LACMTA's Department of Public Works and the SGVCOG authorizes its Executive Director to assign to the COUNTY and DISTRICT all of their rights, titles, and interest in any warranties provided by the VALLEY PROJECT construction contractor under the CONSTRUCTION CONTRACT. This assignment shall be effective upon execution of such assignment and is intended to be given upon COUNTY's and DISTRICT's acceptance of the VALLEY PROJECT.

//
//
//
//
//
//
//
//
//
//
//
//
//
//
//
//
//
//
//
//

DRAFT

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed by their duly authorized representatives as of the dates indicated below:

COUNTY OF LOS ANGELES

By _____ Date _____
Deputy Director

APPROVED AS TO FORM:

DAWYN R. HARRISON
COUNTY COUNSEL

By _____ Date _____
Grace V. Chang
Principal Deputy County Counsel

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
A body corporate and politic

By _____ Date _____
Chief Engineer

APPROVED AS TO FORM:

DAWYN R. HARRISON
COUNTY COUNSEL

By _____ Date _____
Tiffani Shin
Senior Deputy County Counsel

APPROVED AS TO FORM:

DAWYN R. HARRISON
COUNTY COUNSEL

By _____ Date _____
Grace V. Chang
Principal Deputy County Counsel

DRAFT

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

By _____ Date _____
Stephanie Wiggins
Chief Executive Officer

APPROVED AS TO FORM:

DAWYN R. HARRISON
COUNTY COUNSEL

By _____ Date _____
Gregory S. Levine
Senior Deputy County Counsel

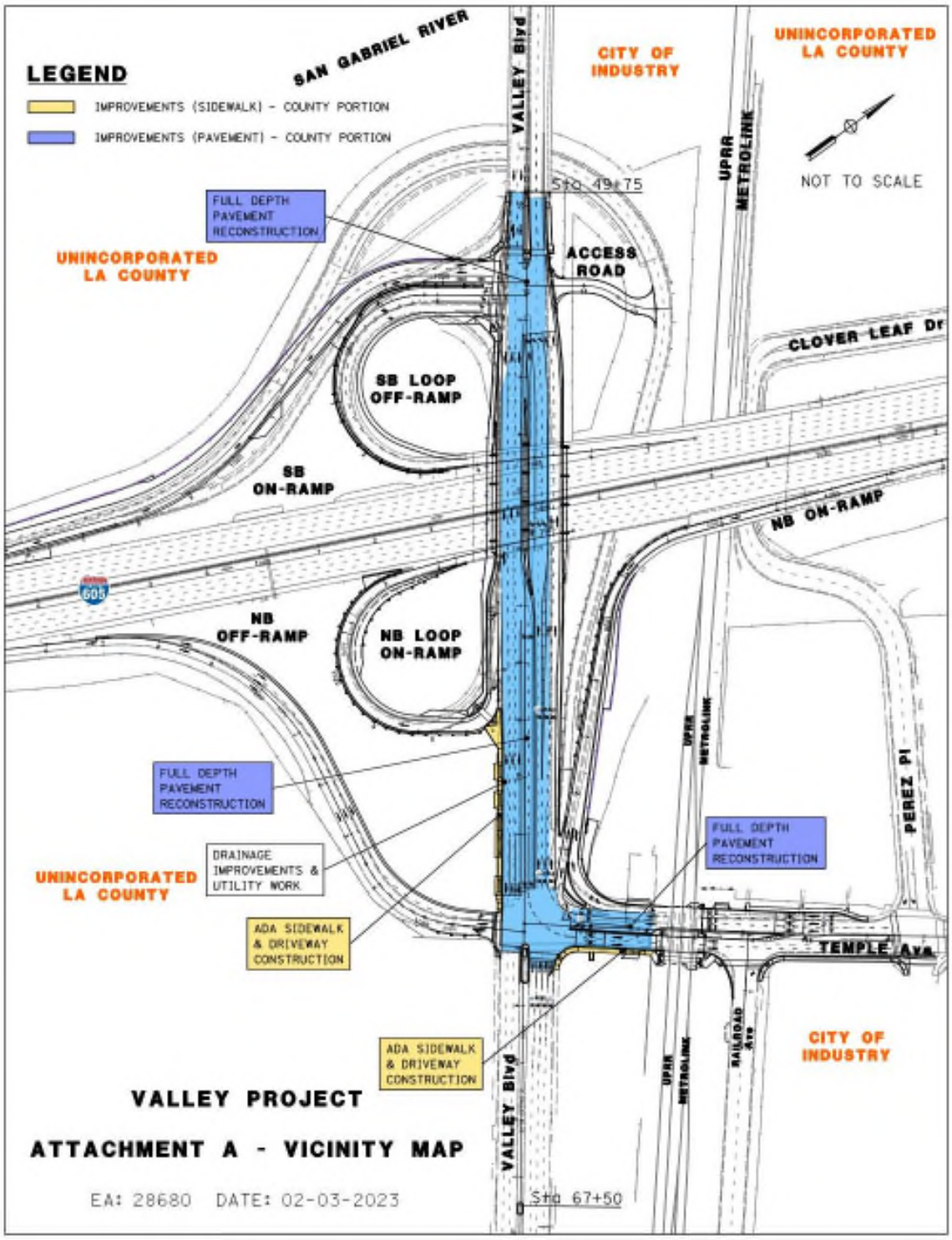
SAN GABRIEL VALLEY COUNCIL OF GOVERNMENTS

By _____ Date _____
Marisa Creter
Executive Director

APPROVED AS TO FORM:
By _____ Date _____
Cassie Trapesonian
General Counsel

DRAFT

ATTACHMENT A



ATTACHMENT B

SCOPE OF WORK

PROJECT TITLE: VALLEY PROJECT

PROJECT LOCATION: Valley Boulevard in Los Angeles County, near City of Industry

PROJECT LIMITS: Valley Boulevard (Station 49+75 to Station 67+50), adjacent to the Interstate 605/Valley Boulevard Freeway Interchange.

PROJECT BACKGROUND: The I-605/Valley Boulevard Interchange Improvements Project (INTERCHANGE PROJECT) will improve mobility, reduce congestion, and provide better and safer access for all roadway users traversing to and through the freeway interchange. The planned improvements for VALLEY PROJECT will be included in the plans, specifications, and estimate (PS&E) for construction of the INTERCHANGE PROJECT.

Incorporating VALLEY PROJECT into the INTERCHANGE PROJECT's PS&E package will minimize community impacts (e.g., planned street/road and ramp closures, detours and construction-related noise, dust, etc.) and facilitate delivery of the proposed improvements within the project area in a more efficient, cost effective and timely manner.

TOTAL PROJECT BUDGET: $2,664,027

SCOPE OF WORK: Clear VALLEY PROJECT environmentally and conduct the related engineering services and tasks needed to complete the right-of-way and design phases for inclusion in the INTERCHANGE PROJECT's PS&E construction package.

Reconstruct and rehabilitate Valley Boulevard roadway infrastructure (pavement and structural section, median island, curb ramp, curb and gutter, sidewalk, driveway, etc.); relocate utilities; upgrade drainage system; install roadway signs, pavement markings/striping and overhead sign structure; and modify street lighting.

Prepare contract plans/drawings, specifications and estimates for VALLEY PROJECT in accordance with the County's standard plans and specifications. Contract plans/drawings should include, but are not limited to, typical cross sections; roadway profile and superelevation plans; layout plan sheets; construction details; grading plans; drainage plan and profiles; utility plans; construction area signs; traffic management and stage construction plans; pavement delineation plans; sign plans and electrical plans.

SCHEDULE: The construction schedule for VALLEY PROJECT will follow the construction schedule for the INTERCHANGE PROJECT construction contract. The schedule is as follows:

- Target Begin Construction Date: 10/28/2026
- Target End Construction Date: 7/10/2029

DRAFT

ATTACHMENT C

PROJECT BUDGET

The Engineer's Estimate and total project construction cost estimate for VALLEY PROJECT is shown below.

CONSTRUCTION COSTS	
BID ITEMS OF WORK	COST ESTIMATE
1. Earthwork	$ 438,620
2. Pavement Structural Section	$ 1,111,767
3. Drainage	$ 79,608
4. Specialty Items (DRB, JSM, SPPP)	$ 9,022
5. Traffic Items	$ 44,851
6. Signs, Striping, Lighting	$ 389,850
7. Time Related Overhead (0-10 percent)	$ 18,720
8. Roadway Mobilization (10 percent of 1-6)	$ 232,493
9. Supplemental Work	$ 15,392
10. Dept and Local Agency Furnished Material	$ 81,520
Total Capital Cost	$ 2,421,843
11. Construction Contingency (10 percent of Capital Cost or Items 1-10)	$ 242,184
12. LACDPW Construction Engineering or Support (WAIVED)	$ 0
TOTAL CONSTRUCTION COSTS	$ 2,664,027

PRELIMINARY ENGINEERING COSTS (UPDATED)	
PHASE OF WORK	COST ESTIMATE
1. PAED (Updated)	$ 46,768
2. PS&E (Updated)	$ 163,689
3. RIGHT-OF-WAY (Updated)	$ 26,759
Subtotal Preliminary Engineering Costs	$ 237,216
TOTAL PRELIMINARY ENGINEERING COSTS	$ 237,216
TOTAL PROJECT COST ESTIMATE (PE + Construction Costs)	**$ 2,901,243**

NOTES:

1. Engineer's Estimate based on 2025 $s (backup provided under separate cover).
2. Total preliminary engineering costs ($237,216) reflect costs incurred by Metro's contractor to be collected from the County.
3. Total project cost estimate ($2,901,243) equals the total amount to be collected from the County for all preliminary engineering and construction costs related to the VALLEY PROJECT.

EXHIBIT B

Interstate 605/Valley Boulevard Interchange Improvements Project

LOS ANGELES COUNTY, CALIFORNIA
DISTRICT 7-LA-605 (PM R18.9/R19.5)
EA 07-28680; EFIS 0700020881

Initial Study with Negative Declaration/Environmental Assessment with Finding of No Significant Impact

Prepared by the
State of California, Department of Transportation and
Los Angeles County Metropolitan Transportation Authority

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

April 2021

EXHIBIT B

SCH # 2020060275
7-LA-605-PM R18.9/R19.5
EA 07-28680
EFIS 0700020881

Improve the I-605/Valley Boulevard Interchange from post mile R18.9 to R19.5.

INITIAL STUDY WITH NEGATIVE DECLARATION/ENVIRONMENTAL ASSESSMENT WITH FINDING OF NO SIGNIFICANT IMPACT

Submitted Pursuant to:
(State) Division 13 Public Resources Code
(Federal) 42 USC 4332(2)(C), 49 USC 303 and/or USC 138

THE STATE OF CALIFORNIA
Department of Transportation (CEQA Lead Agency)
Responsible Agency: Los Angeles County Metropolitan Transportation Authority, Southern California Association of Governments, County of Los Angeles, City of Industry

May 15, 2020
Date

Ron Kosinski
Deputy District Director
District 7, Division of Environmental Planning
California Department of Transportation
CEQA/NEPA Lead Agency

The following person may be contacted for more information about this document:

Jason Roach, Senior Environmental Planner
Caltrans District 7
100 S. Main Street, MS 16A
Los Angeles, CA 90012
Jason.Roach@dot.ca.gov
(213) 897-0357

EXHIBIT B

SCH # 2020060275

NEGATIVE DECLARATION

Pursuant to: Division 13, State of California Public Resources Code

Project Description:

The California Department of Transportation (Caltrans), in cooperation with Los Angeles County Metropolitan Transportation Authority (LA Metro), San Gabriel Valley Council of Governments (SGVCOG), Gateway Cities Council of Governments (GCCOG), Los Angeles County Department of Public Works (LACDPW), and City of Industry propose to improve mobility and relieve congestion, capacity constraints, and other related deficiencies on Interstate 605 (I-605) at the Valley Boulevard interchange. The I-605/Valley Boulevard Interchange Improvements Project (project) is an Early Action Project (EAP) of the I-605 Corridor Improvement Project.

The proposed project is located approximately two miles north of State Route 60 (SR-60) and 0.8 of a mile south of Interstate 10 (I-10) within portions of the City of Industry and unincorporated Los Angeles County (see Figure 1.2-1 Regional Location and Figure 1.2-2 Project Location). Caltrans is the lead agency under the California Environmental Quality Act (CEQA).

Determination:

The Department has prepared an Initial Study (IS) for this project, and following public review, has determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no **effect** on aesthetics, agriculture and forest resources, energy, land use and planning, mineral resources, population and housing, recreation, and wildfire.

The proposed project would have **less than significant effects** on air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazardous waste and materials, hydrology and water quality, noise, public services, transportation, tribal cultural resources, and utilities and service systems.

Ron Kosinski
Deputy District Director
District 7, Division of Environmental Planning
California Department of Transportation

April 7, 2021
Date

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

FOR

INTERSTATE 605/VALLEY BOULEVARD
INTERCHANGE IMPROVEMENTS PROJECT

The California Department of Transportation (Caltrans) has determined that Alternative 2 (Build Alternative) will have no significant impact on the human environment. This FONSI is based on the attached Environmental Assessment (EA) which has 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 an Environmental Impact Statement is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached 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 FHWA and Caltrans.

Ron Kosinski
Deputy District Director
District 7, Division of Environmental Planning
California Department of Transportation

April 7, 2021
Date

Table of Contents

1.0 Proposed Project....1
1.1 NEPA Assignment....1
1.2 Introduction....1
1.3 Existing Facility....7
1.4 Purpose and Need....8
1.4.1 Project Purpose....8
1.4.2 Project Need....8
1.4.3 Independent Utility and Logical Termini....15
1.5 Project Description....15
1.6 Alternatives....16
1.6.1 Alternative 1 (No Build Alternative)....16
1.6.2 Alternative 2 (Build Alternative)....16
1.6.3 Transportation System Management (TSM) and Transportation Demand Management (TDM) Alternatives....20
1.7 Comparison of Alternatives....20
1.8 Identification of a Preferred Alternative....23
1.9 Alternatives Considered but Eliminated from Further Discussion Prior to the Draft Initial Study/Environmental Assessment....23
1.10 Permits and Approvals Needed....24
2.0 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures....26
2.1 Topics Considered but Determined Not to be Relevant....26
2.2 Human Environment....26
2.2.1 Existing and Future Land Use....26
2.2.2 Consistency with State, Regional, and Local Plans and Programs....33
2.2.3 Parks and Recreation Facilities....40
2.2.4 Growth....42
2.2.5 Community Character and Cohesion....45
2.2.6 Relocations and Real Property Acquisition....58
2.2.7 Environmental Justice....60
2.2.8 Utilities/Emergency Services....64
2.2.9 Traffic and Transportation/Pedestrian and Bicycle Facilities....69
2.2.10 Visual/Aesthetics....77
2.2.11 Cultural Resources....79
2.3 Physical Environment....88
2.3.1 Water Quality and Storm Water Runoff....88
2.3.2 Geology/Soils/Seismic/Topography....102
2.3.3 Paleontology....106
2.3.4 Hazardous Waste/Materials....115
2.3.5 Air Quality....126

2.3.6 Noise 164
2.3.7 Energy 185
2.4 Biological Environment 195
2.4.1 Natural Communities 195
2.4.2 Wetlands and Other Waters 197
2.4.3 Plant Species 200
2.4.4 Animal Species 201
2.4.5 Threatened or Endangered Species 211
2.4.6 Invasive Species 214
2.5 Cumulative Impacts 215
2.5.1 Regulatory Setting 215
2.5.2 Resources Excluded from Cumulative Impacts Analysis 215
3.0 California Environmental Quality Act (CEQA) Evaluation 220
3.1 Determining Significance Under CEQA 220
3.2 CEQA Environmental Checklist 220
3.2.1 Aesthetics 221
3.2.2 Agriculture and Forest Resources 222
3.2.3 Air Quality 223
3.2.4 Biological Resources 226
3.2.5 Cultural Resources 228
3.2.6 Energy 229
3.2.7 Geology and Soils 229
3.2.8 Greenhouse Gas Emissions 231
3.2.9 Hazards and Hazardous Materials 232
3.2.10 Hydrology and Water Quality 235
3.2.11 Land Use and Planning 237
3.2.12 Mineral Resources 238
3.2.13 Noise 238
3.2.14 Population and Housing 240
3.2.15 Public Services 241
3.2.16 Recreation 242
3.2.17 Transportation 243
3.2.18 Tribal Cultural Resources 244
3.2.19 Utilities and Service Systems 247
3.2.20 Wildfire 249
3.2.21 Mandatory Findings of Significance 250
3.3 Wildfire 251
3.3.1 Regulatory Setting 251
3.3.2 Affected Environment 251
3.4 Climate Change 251
3.4.1 Regulatory Setting 252

3.4.2 Environmental Setting 255
3.4.3 Project Analysis 258
3.4.4 CEQA Conclusions 263
3.4.5 Greenhouse Gas Reduction Strategies 263
3.4.6 Adaptation 267
4.0 Comments and Coordination 272
4.1 Agency Coordination and Consultation 272
4.1.1 Native American Consultation 272
4.1.2 Historic Consultation 274
4.1.3 Caltrans Cultural Studies Office and State Historic Preservation Office 275
4.1.4 Transportation Conformity Working Group 275
4.1.5 Union Pacific Railroad 275
4.1.6 Hazardous Waste Consultation 276
4.1.7 Air Quality Project Level Conformity Determination 277
4.1.8 Species Lists 277
4.2 Public Circulation of Draft Initial Study/Environmental Assessment 277
4.3 Comments Received on the Draft Initial Study/Environmental Assessment 278
5.0 List of Preparers 279
5.1 California Department of Transportation, District 7 279
5.2 NCM Engineering 279
5.3 Ambient 279
5.4 Duke CRM 279
5.5 GPA Consulting 279
5.6 Group Delta 280
6.0 Distribution List 281
6.1 Federal Agencies 281
6.2 State Agencies 282
6.3 Regional/County Agencies 283
6.4 Native American Representatives 284
6.5 Elected Officials – Federal 285
6.6 Elected Officials – State 285
6.7 Elected Officials – County 285
6.8 Elected Officials – City 285
6.9 Libraries 285
6.10 Schools 286
6.11 Interested Groups and Organizations 286
7.0 References 288

List of Tables

Table 1.4-1. Forecasted Growth in the Project Area and Region 9

Table 1.4-2. Level of Service for On-/Off-Ramps and Freeway Segments for Existing and Forecast Conditions 11
Table 1.4-3. Intersection Level of Service for Existing and Forecast Conditions 12
Table 1.4-4. Summary of Accident Rates within Project Area (January 1, 2016 through December 31, 2018) 13
Table 1.10-1. Permits and Approvals Required for Project Construction 24
Table 2.2-1. Projects Under Construction in the City of Industry 28
Table 2.2-2. Consistency with State, Regional, and Local Plans 35
Table 2.2-3. Forecasted Growth in the Project Area and Region 43
Table 2.2-4. Summary of First Cut Screening Analysis 44
Table 2.2-5. Age Indicators (Years) 50
Table 2.2-6. Income Levels 50
Table 2.2-7. Race and Ethnicity 51
Table 2.2-8. Easements and Right of Way Acquisitions 59
Table 2.2-9. Summary of Minority and Low-Income Population by Block Group 61
Table 2.2-10. Potential Utility Owner List 64
Table 2.2-11. Existing Local Distribution Facilities 65
Table 2.2-12. Existing Regional Transmission Facilities 66
Table 2.2-13. Construction Staging 72
Table 2.3-1. Surface Water Beneficial Uses 96
Table 2.3-2. List of 303(d) Waterbody Pollutants Requiring TMDLs 98
Table 2.3-3. Impervious Surface Area Impact (acres) 100
Table 2.3-4. Paleontological Productivities and Scientific Importance of Rock Units 112
Table 2.3-5. Parcel Acquisition 116
Table 2.3-6. Parcel Acquisition Observed Concerns 117
Table 2.3-7. Air Quality Concentrations for the Past 5 Years Measured at Pico Rivera-4144 San Gabriel and Anaheim-1630 Pampas Lane Monitoring Stations 135
Table 2.3-8. State and Federal Criteria Air Pollutant Standards, Effects, and Sources 137
Table 2.3-9. Construction Emissions of Criteria Air Pollutants and Precursors 157
Table 2.3-10. Summary of Comparative Operational Emissions Analysis 159
Table 2.3-11. Noise Abatement Criteria 164
Table 2.3-12. Short-Term Noise Measurement Results 173
Table 2.3-13. Long-Term Noise Measurement Results 175
Table 2.3-14. Representative Construction Equipment Noise 177
Table 2.3-15. Predicted Future Noise and Barrier Analysis 179
Table 2.3-16. Summary of Preliminary Noise Abatement Decision 184
Table 2.3-17. Existing Freeway Mainline and Ramp Volumes 187
Table 2.3-18. Operational Vehicle Miles Traveled by Alternative 190
Table 2.3-19. Annual Direct Energy Consumption (Mobile Sources by Alternative and Study Year 191
Table 2.3-20. Indirect Energy Consumption in the Project Area by Alternative 192
Table 2.3-21. Direct Energy Consumption (Construction) for Build Alternative During 12-Month

Construction Period 193
Table 3.4-1. Regional and Local Plans and Relevant Policies or Goals 257
Table 3.4-2. Summary of Comparative GHG Emissions & Traffic Conditions 261
Table 3.4-3. Construction-Generated GHG Emissions 262
Table 4.1-1. Summary of Native American Consultation 272
Table 4.1-2. Summary of Historic Consultation 274
Table 4.1-3. Summary of Hazardous Waste Consultation 276
Table 4.3-1. Comment Letters Received on Draft Initial Study/Environmental Assessment 278
Table A6.11-1: Section 4(f) Resources Not Protected Under Section 4(f) 14
Table A6.11-2: Section 4(f) Resources with a No Use Determination 15

List of Figures

Figure 1.2-1. Regional Location 3
Figure 1.2-2. Project Location 5
Figure 1.6-1. Project Limits 17
Figure 1.7-1. Project Footprint 21
Figure 2.2-1. Existing and Future Land Use 31
Figure 2.2-2. Jurisdictional Boundaries and Census Tracts 47
Figure 2.2-3. Community Facilities 55
Figure 2.3-1. Surrounding Geology 109
Figure 2.3-2. Properties with Known or Suspected Contamination 119
Figure 2.3-3. Predominant Wind Patterns Near the Project Area 131
Figure 2.3-4. Map of Air Quality Monitoring Stations Located Near the Project Area 133
Figure 2.3-5. Federal 8-Hour Ozone Nonattainment Areas in the SCAG Region 143
Figure 2.3-6. Federal $PM_{2.5}$ Nonattainment Areas in the SCAG Region 143
Figure 2.3-7. Federal PM_{10} Maintenance Areas in the SCAG Region 144
Figure 2.3-8. Sensitive Land Uses 145
Figure 2.3-9. CO Hot Spot Screening Flow Chart 149
Figure 2.3-10. Noise Levels of Common Activities 166
Figure 2.3-11. Noise Measurement, Modeled Receiver, Noise Barrier, and Noise Analysis Area Locations 169
Figure 3.4-1. U.S. Greenhouse Gas Emission in 2016 256
Figure 3.4-2. California 2017 Greenhouse Gas Emissions 256
Figure 3.4-3. Change in California GDP, Population, and GHG Emissions Since 2000 257
Figure 3.4-4. Possible Use of Traffic Operation Strategies in Reducing On-Road CO_2 Emissions 259
Figure A6.11-1: Section 4(f) Resources 3
Figure A6.11-2: Union Pacific Railroad 7
Figure A6.11-3: Gabrielino Trade Route 13

List of Appendices

Appendix A. Section 4(f) De Minimis Determination
Appendix B. Title VI Policy Statement
Appendix C. Avoidance, Minimization, and/or Mitigation Summary
Appendix D. List of Acronyms and Abbreviations
Appendix E. Air Quality Conformity
Appendix F. SHPO Concurrence
Appendix G. Species Lists
Appendix H. List of Technical Studies
Appendix I. Comments on Draft Environmental Document

1.0 Proposed Project

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 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.

1.2 Introduction

The California Department of Transportation (Caltrans), in cooperation with Los Angeles County Metropolitan Transportation Authority (LA Metro), San Gabriel Valley Council of Governments (SGVCOG), Gateway Cities Council of Governments (GCCOG), Los Angeles County Department of Public Works (LACDPW), and City of Industry propose to improve mobility and relieve congestion, capacity constraints, and other related deficiencies on Interstate 605 (I-605) at the Valley Boulevard interchange including high accident rate locations, inadequate truck turn paths, nonstandard lane and shoulder widths along loop ramps, and noncompliant Americans with Disabilities Act (ADA) facilities.. The I-605/Valley Boulevard Interchange Improvements Project (project) is an Early Action Project (EAP) of the I-605 Corridor Improvement Project (CIP). An EAP has been identified as a project that can be implemented quickly and easily to ease congestion as soon as possible. Caltrans is the lead agency under the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA).

The project is located adjacent to the I-605 approximately two miles north of State Route 60 (SR-60) and 0.8 of a mile south of Interstate 10 (I-10) within portions of the City of Industry and unincorporated Los Angeles County (see **Figure 1.2-1** and **Figure 1.2-2**). The project would include reconfiguring, widening, and/or modifying I-605 freeway on-/off-ramps as well as improvements to Valley Boulevard (additional through lane and turn lanes) and widening Temple Avenue to improve traffic flow.

The project is included in the Southern California Association of Governments (SCAG) *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* as amended by Final Amendment #3 (RTP identification 1163S009) (Southern California Association of Governments, 2018) and the *2019 Federal Transportation Improvement Program* (FTIP identification LA0G1457) (Southern California Association of Governments, 2019a).

This page is intentionally left blank.

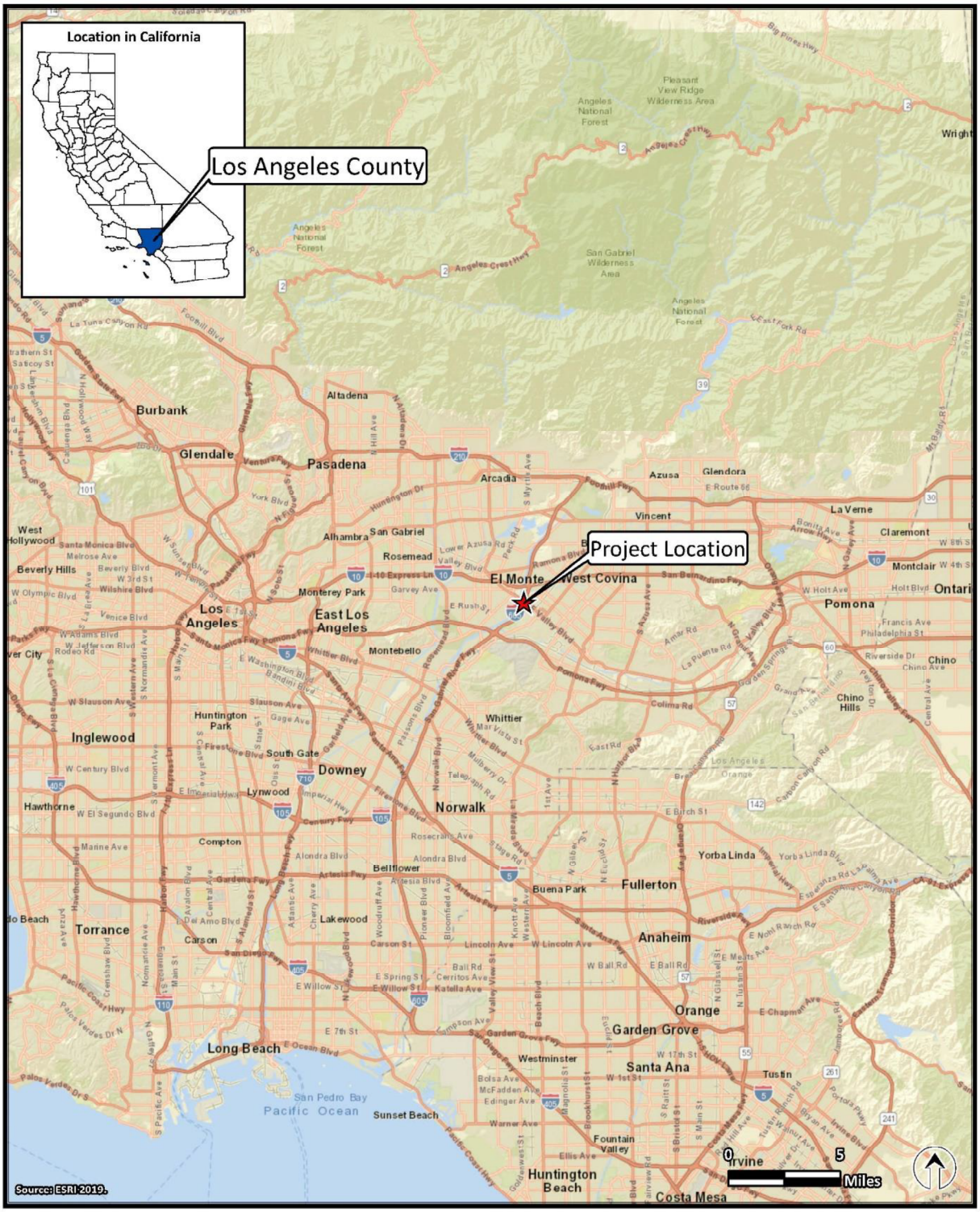


Figure 1.2-1. Regional Location

This page is intentionally left blank.

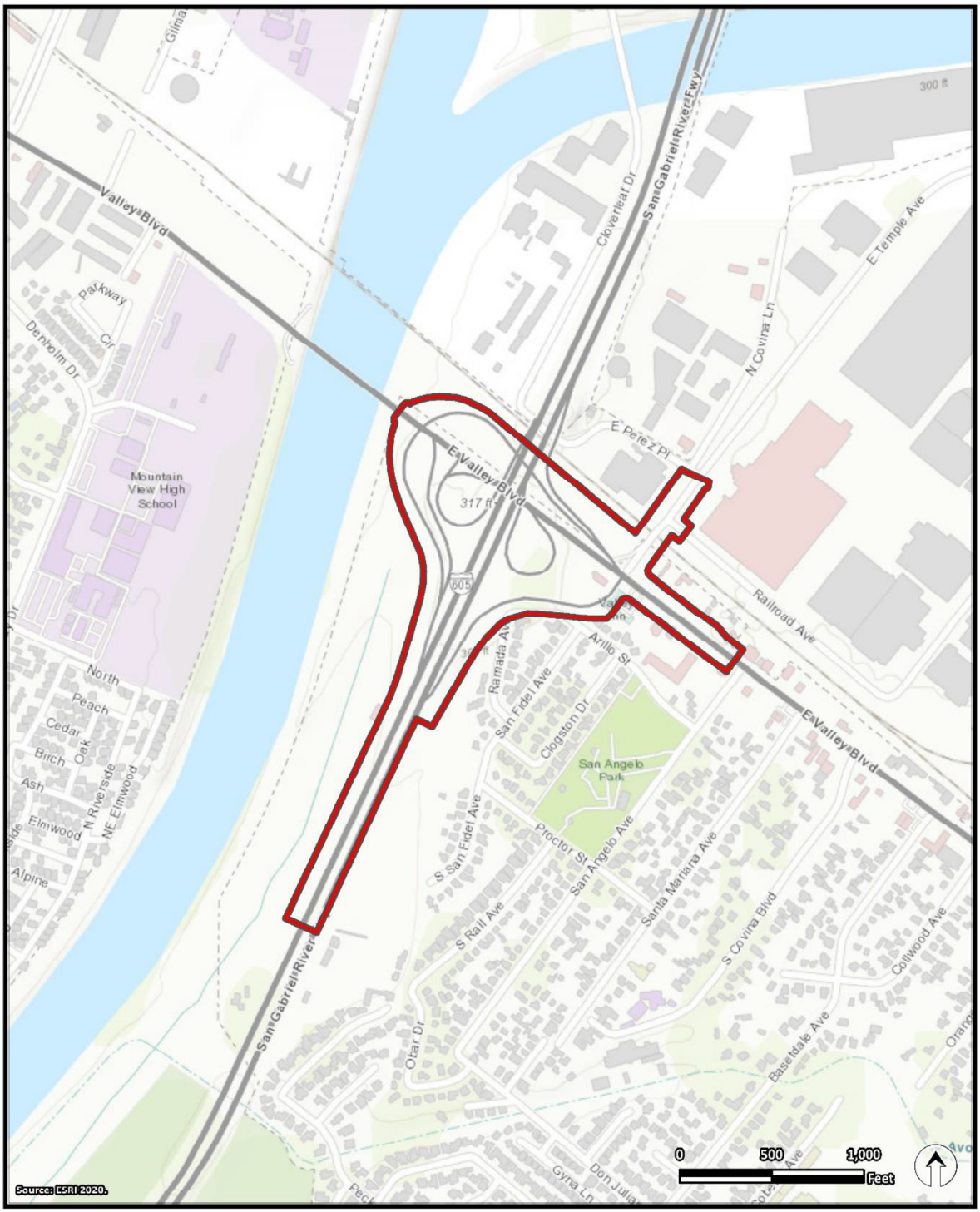


Figure 1.2-2. Project Location

This page is intentionally left blank.

1.3 Existing Facility

The I-605/Valley Boulevard interchange is located two miles north of the I-605/SR-60 interchange and 0.8 of a mile south of the I-605/I-10 Interchange. The existing I-605/Valley Boulevard interchange consists of a partial cloverleaf configuration. Valley Boulevard and Temple Avenue are both classified as arterial highways within the City of Industry.

Valley Boulevard generally runs east-west within the project area, crosses under the I-605 freeway, traverses the San Gabriel River via a bridge west of the project area, and crosses Temple Avenue in the eastern portion of the project area. Valley Boulevard, west of the I-605 freeway consists of two lanes in both directions. A third eastbound lane starts where the southbound I-605 loop off-ramp connects at Valley Boulevard.

The loop off-ramp also provides for westbound Valley Boulevard movement as a stop-controlled intersection. The travel lane widths range between 10-feet and 12-feet wide. East of the I-605 Freeway, Valley Boulevard consists of two westbound lanes and three eastbound lanes with dual left-turn lanes to northbound Temple Avenue. In addition, the third eastbound lane provides for an optional diverge exit onto the northbound I-605 loop on-ramp.

The posted speed limit along Valley Boulevard is 35 mph. Sidewalks are provided on both sides of Valley Boulevard. However, under the I-605 Freeway, a concrete sidewalk is provided on the eastbound side of Valley Boulevard, in place of concrete sidewalks in both directions. The land uses within and surrounding the I-605/Valley Boulevard Interchange consist of mostly heavy industrial and commercial properties. The existing pavement on Valley Boulevard has excessive transverse, longitudinal block, and "alligator"[1] cracking, indicative of subgrade failure.

Temple Avenue runs north-south and terminates at Valley Boulevard forming an intersection with the northbound I-605/Valley Boulevard off-ramp. Temple Avenue consists of two southbound lanes and two northbound lanes. The southbound lanes split as left-turn and right-turn lanes at the intersection with Valley Boulevard. In addition, prior to the intersection, the second southbound lane provides for an optional diverge exit onto the northbound I-605 on-ramp. A short weave currently exists that provides access to the southbound I-605 horseshoe-configured on-ramp. Approximately 190 feet north of the intersection is an at-grade crossing consisting of three railroad tracks. The rail lines serve Union Pacific Railroad (UPRR)[2], Metrolink, and Amtrak. The posted speed limit along Temple Avenue is 40 mph. The existing pavement on Temple Avenue appears distressed and in mostly fair to locally poor condition. Cracking is mostly longitudinal and transverse block cracking with relatively wide (5' to 10'+) spacing and "alligator" cracking.

[1] "Alligator" cracking refers to asphalt pavement cracking that resemble a reptile's scales. As the cracking spreads, the scale pattern appears connected, with both horizontal and vertical lines throughout the surface that create three- or four-sided geometric shapes.

[2] The segment of railroad within the project area was historically part of the Southern Pacific Railroad's Los Angeles Division. The tracks are currently part of the UPRR Alhambra Subdivision, which UPRR shares with Metrolink.

1.4 Purpose and Need

1.4.1 Project Purpose

The purpose of the project is to accomplish the following objectives:

- Reduce congestion on Valley Boulevard;
- Improve traffic operation at the I-605/Valley Boulevard interchange;
- Alleviate mobility constraints; and
- Enhance overall safety.

1.4.2 Project Need

The I-605/Valley Boulevard interchange currently experiences significant congestion, heavy truck traffic, and operational deficiencies which are forecasted to increase and exacerbate existing traffic conditions without any planned improvements. Operational deficiencies include inadequate vehicle queueing space on the existing off-ramps, and nonstandard roadway geometrics. The interchange currently operates at unacceptable levels of service with accident rates that exceed the statewide average. Additionally, the interchange does not have sufficient capacity to support the existing and planned traffic volumes.

Currently, the walkway under the I-605 freeway along westbound Valley Boulevard is a dirt path, and curb ramps are not in compliance with the Americans with Disabilities Act (ADA).

Transportation Demand, Capacity, and Safety

The need for the project is based on an assessment of current and future transportation demands compared to current capacity within the project area.

Transportation Demand

According to SCAG regional growth forecasts, regional population and employment are expected to continue increasing (see **Table 1.4-1**). As population and employment rates continue to increase, the I-605 Valley Boulevard interchange is expected to remain an important interchange.

Capacity

Level of service (LOS) provides a qualitative measure of capacity based on density of passenger cars per mile per lane (LOS decreases as density increases) for freeway on- and off-ramps and delay values of approaching vehicles for intersections. LOS is expressed as a letter ranging from A (free flow traffic with low volume and high speeds) to F (breakdown in traffic flow, queues forming behind breakdown points).

Existing conditions for the freeway mainline, ramps, and weaving segments evaluated within the project area show several segments currently operate at LOS D or lower during one or both peak hour periods (see **Table 1.4-2**). LOS would continue to deteriorate under the No Build Alternative and all segments except one (Valley Boulevard loop on-ramp) are projected to operate at a LOS of D or lower by opening year (2024). By design year (2044) seven segments are projected to operate at a LOS E or F during one or both peak hour periods.

Table 1.4-1. Forecasted Growth in the Project Area and Region

Growth Parameter	Location	2012	2019	2040	Annual Growth Rate[a]
Population	City of Industry	500	437	500	0.00%
	Unincorporated Los Angeles County[b]	1,040,700	1,057,162	1,273,700	0.72%
	Los Angeles County	10,105,722	10,283,729	11,514,800	0.47%
	SCAG Region	18,322,300	19,145,421	22,138,800	0.68%
Employment	City of Industry	67,700	80,388	74,700	0.35%
	Unincorporated Los Angeles County[b]	222,900	269,902	288,400	0.92%
	Los Angeles County	5,215,695	4,767,204	5,225,800	0.01%
	SCAG Region	7,440,400	8,465,304	9,871,500	1.01%

Sources: (Southern California Association of Governments, 2016; Southern California Association of Governments, 2019b)

[a] Annual growth rate is calculated using 2012 population and employment data from the 2016-2040 SCAG RTP/SCS

[b] SCAG does not provide/create predictions for separate communities, such as Avocado Heights; therefore, the projections for unincorporated County of Los Angeles have been used to represent the community of Avocado Heights.

SCAG = Southern California Association of Governments

Four intersections were evaluated within the project area. The evaluation of existing conditions shows three of the intersections operating at a LOS F during one or both peak hour periods. By Design Year 2044 the same three intersections will operate at LOS E or F during both peak hour periods (**Table 1.4-3**).

Traffic Safety

According to data collected by Caltrans over a three-year period (January 1, 2016 to December 31, 2018), total accident rates within the project area are higher than the statewide average for the four freeway mainline segments and six of the eight ramp segments evaluated within the project area (see **Table 1.4-4**). The results show actual total accident rates ranging from approximately 30 to 74 percent higher than the total statewide average accident rate for the freeway mainline segments. Additionally, four of the eight freeway ramp segments analyzed have actual accident rates greater than the statewide average for similar facilities. The predominant types of accidents reported for both the mainline and freeway ramps were rear-end collisions and sideswipes. Congestion due to stop-and-go traffic and formation of vehicular queues are considered the primary factors for accidents along the mainline as well as on the freeway ramps within the project area (Intueor Consulting, Inc., 2019). For additional analysis please see the *Traffic Operations Analysis Report* prepared for the project.

This page is intentionally left blank.

Table 1.4-2. Level of Service for On-/Off-Ramps and Freeway Segments for Existing and Forecast Conditions

Segment	Existing Conditions (2019)				Opening Year (2024)				Design Year (2044)			
	a.m. Peak Hour		p.m. Peak Hour		a.m. Peak Hour		p.m. Peak Hour		a.m. Peak Hour		p.m. Peak Hour	
	Density[a]	LOS	Density[a]	LOS	Density[a]	LOS	Density[a]	LOS	Density[a]	LOS	Density[a]	LOS
Ramp												
I-605 NB Valley Blvd Off-Ramp	32.9	D	34.3	D	35.2	E	36.6	E	40.7	E	42.5	E
I-605 NB Valley Blvd Loop On-Ramp	21.8	C	22.6	C	23.3	C	23.7	C	27.9	C	27.6	C
I-605 SB Valley Blvd On-Ramp	31.2	D	27.2	C	32.7	D	29.0	D	39.0	E	34.6	D
Mainline Segment												
I-605 NB South of Valley Blvd Off-Ramp	27.4	D	29.1	D	30.4	D	32.0	D	40.3	E	42.2	E
I-605 NB Valley Blvd Off-Ramp to Valley Blvd Loop On-Ramp	24.0	C	25.2	C	26.1	D	26.9	D	33.8	D	33.8	D
I-605 NB Valley Blvd Loop On-Ramp to Valley Blvd Direct On-Ramp	24.6	C	25.5	C	26.8	D	27.6	D	34.9	D	34.4	D
I-605 SB Valley Blvd Loop Off-Ramp to Valley Blvd Loop On-Ramp	24.9	C	25.2	C	26.8	D	27.1	D	36.4	E	35.0	D
I-605 SB South of Valley Blvd On-Ramp	33.0	D	29.5	D	35.5	E	32.3	D	-[b]	F	44.1	E
Weaving Segment												
I-605 NB Valley Blvd Direct On-Ramp to I-10 Off-Ramp	-[b]	F	36.3	E	-[b]	F	-[b]	F	-[b]	F	-[b]	F
I-605 SB I-10 On-Ramp to Valley Blvd Loop Off-Ramp	-[b]	F	-[b]	F	-[b]	F	-[b]	F	-[b]	F	-[b]	F

Source: *Traffic Operations Analysis Report* (Intueor Consulting, Inc., 2019)

[a] Density is equal to passenger cars per mile per lane

[b] Demand exceeds the capacity of the weaving segment

LOS = level of service; Blvd = Boulevard; I-10 = Interstate 10

Table 1.4-3. Intersection Level of Service for Existing and Forecast Conditions

Intersection	Existing Conditions (2019)				Opening Year (2024)				Design Year (2044)			
	a.m. Peak Hour		p.m. Peak Hour		a.m. Peak Hour		p.m. Peak Hour		a.m. Peak Hour		p.m. Peak Hour	
	Delay[c]	LOS	Delay[c]	LOS	Delay[c]	LOS	Delay[c]	LOS	Delay[c]	LOS	Delay[c]	LOS
I-605 SB Ramp and Valley Blvd[a]	28.4	D	50.1	F	33.3	D	65.4	F	46.3	E	139.0	F
I-605 NB Ramp and Temple Ave and Valley Blvd[b]	>300.0	F	>300.0	F	>300.0	F	>300.0	F	>300.0	F	>300.0	F
Temple Ave and Railroad Ave[a]	49.6	E	>300.0	F	95.3	F	>300.0	F	>300.0	F	>300.0	F
Temple Ave and Perez Pl[b]	7.2	A	12.1	B	7.3	A	12.6	B	7.9	A	13.5	B

Source: *Traffic Operations Analysis Report* (Intueor Consulting, Inc., 2019)

[a] Intersection traffic control is one-way stop

[b] Intersection traffic control is signalized

[c] Average delay in seconds per vehicle

LOS = level of service; I-605 = Interstate 605; SB = southbound; Blvd = Boulevard; NB = northbound; Ave = Avenue; Pl = Place

Table 1.4-4. Summary of Accident Rates within Project Area (January 1, 2016 through December 31, 2018)

Segment	Total Accidents	Actual Accident Rates[a]			Average Accident Rates[a,b]		
		Fatal	F + I	Total	Fatal	F + I	Total
Mainline							
SR-60 Interchange to Valley Blvd Interchange - NB	344	0.004	**0.37**	**1.38**	0.004	0.31	0.97
SR-60 Interchange to Valley Blvd Interchange - SB	379	0.004	**0.45**	**1.52**	0.004	0.31	0.97
Valley Blvd Interchange to I-10 Interchange – NB	188	**0.010**	**0.51**	**1.83**	0.004	0.33	1.05
Valley Blvd Interchange to I-10 Interchange – SB	141	**0.010**	**0.42**	**1.37**	0.004	0.33	1.05
Ramp							
I-605 SB On-Ramp from Valley Blvd	7	0.000	**0.37**	**1.29**	0.001	0.06	0.20
I-605 NB Off-Ramp to Valley Blvd	13	0.000	0.08	**1.03**	0.004	0.32	0.92
I-605 SB On-Ramp from WB Valley Blvd	15	0.000	**0.39**	**1.16**	0.002	0.13	0.39
I-605 SB On-Ramp from EB Valley Blvd	1	0.000	0.00	0.42	0.003	0.19	0.56
I-605 NB Loop On-Ramp from EB Valley Blvd	2	0.000	0.60	**1.20**	0.003	0.23	0.71
I-605 SB On-Ramp Segment from WB Valley Blvd	20	0.000	**0.08**	**0.82**	0.001	0.06	0.20
I-605 SB Loop Off-Ramp to Valley Blvd	8	0.000	0.29	0.59	0.002	0.31	0.92
I-605 NB On-Ramp from WB Valley Blvd	8	0.000	0.08	**0.63**	0.003	0.19	0.56

Source: *Traffic Operations Analysis Report* (Intueor Consulting, Inc., 2019)

[a] Accident rates are expressed as the number of accidents per million vehicle miles

[b] Average accident rates for similar facilities throughout the state of California

Bold indicates an actual accident rate that is higher than the statewide average for similar facility.

F + I = Fatal + Injury; SR-60 = State Route 60; Blvd = Boulevard; NB = northbound; SB = southbound; I-10 = Interstate 10; I-605 = Interstate 605

This page is intentionally left blank.

1.4.3 Independent Utility and Logical Termini

Independent Utility

The reconfiguration and widening of freeway on-/off-ramps, modifications to Temple Avenue and Valley Boulevard, and installation of signals at intersections included in the project would provide benefits to the traveling public without requiring or being dependent on the provision of other improvements to the I-605/Valley Boulevard interchange, the mainline freeway, or other arterials. These improvements would benefit the public as they enter/exit the freeway or travel along the arterial roadways. The project represents a reasonable expenditure even if no additional improvements are made along the I-605 corridor or arterial roadways and can be implemented in the absence of other improvements. Additionally, the project does not restrict consideration of alternatives for other reasonably foreseeable transportation improvements in areas adjacent to the project limits. The project would have independent utility because it meets the project purpose in the absence of other improvements to I-605 and arterial roadways.

Logical Termini

The focus of the project is to reduce congestion and improve operations at the I-605/Valley Boulevard interchange. As previously discussed, several segments of the freeway mainline, ramps and intersections currently operate at a LOS D or lower during one or both peak hour periods within the project area. Similarly, accident rates are higher than the statewide average for the four freeway mainline segments and six of the eight ramp segments evaluated. The proposed operational improvements are expected to result in improved operating conditions throughout the project area, with reductions in vehicle delay and travel time. Safety would be improved as a result of widening freeway on-/off-ramps, installation of traffic signals, and geometric design features. The project provides logical termini because the endpoints provide sufficient area to integrate interchange improvements with existing facilities and avoid abrupt transitions.

1.5 Project Description

This section describes the proposed action and the project alternatives developed to meet the purpose and need of the project while avoiding and minimizing environmental impacts. The project is located at the I-605/Valley Boulevard interchange, between post miles R18.9 and R19.5, and includes improvements to Valley Boulevard, Temple Avenue, and freeway on-/off-ramps (see **Figure 1.6-1**). The new configuration and improvements would improve traffic operations, reduce congestion, and enhance motorist, bicyclist, and pedestrian safety. The estimated construction cost for the Build Alternative is $35.5 million.

The No Build and Build Alternatives are evaluated in this environmental document and are described in this section. This project contains a number of standardized project measures which are employed on most, if not all, Caltrans projects and were not developed in response to any specific environmental impact resulting from the proposed project. These measures are addressed in more detail in the Environmental Consequences sections found in **Chapter 2**. In addition, for the purpose of consistency, these project features are included in **Appendix C**. Avoidance, Minimization, and/or Mitigation Measures Summary, and referenced in **Chapter 2** of this Initial Study with Negative Declaration/Environmental Assessment with Finding of No

Significant Impact (IS/EA ND/FONSI) as applicable.

1.6 Alternatives

There are two alternatives evaluated in this IS/EA, Alternative 1 (No Build Alternative) and Alternative 2 (Build Alternative). Under NEPA, the No Build Alternative provides the baseline for evaluating environmental impacts of the project. While under CEQA, the baseline is existing conditions at the time of environmental studies.

1.6.1 Alternative 1 (No Build Alternative)

Alternative 1 represents the No Build scenario and would not result in any project improvements to Valley Boulevard, Temple Avenue, of the I-605 on-/off-ramps. Under this alternative, the current lane configurations on Valley Boulevard and Temple Avenue, as well as the ramp connections to and from I-605 would be maintained. Without improvements to the intersections, roadways, and ramp connections, the increase in travel demand is expected to result in increased travel time, increased delays, safety issues, and LOS D or worse operating conditions at almost all intersections and ramp connections. This alternative would not meet the project's purpose and need. Additionally, the No Build Alternative is inconsistent with the regional programs for transportation improvements.

1.6.2 Alternative 2 (Build Alternative)

Under this alternative, operational and safety improvements would be completed on Valley Boulevard, Temple Avenue, and I-605 on-/off-ramps, achieving the desired safety and circulation improvements that would meet the project purpose and need. Operational and safety improvements would include:

- **Westbound Valley Boulevard:** Improvements to westbound Valley Boulevard would begin west of San Angelo Avenue and includes new overhead signage for the revised freeway on-ramp configurations. The existing three-lane configuration that widens to four lanes at the intersection of Valley Boulevard and Temple Avenue would remain. After this intersection, the fourth (right-most) lane would connect directly to the northbound on-ramp. The second and third lane would continue to a new signalized intersection and then continue WB along Valley Boulevard over the San Gabriel River. The first (left-most) lane would continue to the same new signalized intersection and widen into three mandatory left turn lanes onto the SB on-ramp. I-605 bridge structure constraints will require standard and nonstandard shoulders.
- **Eastbound Valley Boulevard:** The existing two-lane configuration for Valley Boulevard approaching the interchange over the San Gabriel River would not change up to the new signalized intersection for the southbound on- and off-ramps. After this intersection, three lanes would continue under the I-605 bridge structure. After the I-605 bridge structure, a dedicated right turn pocket onto the northbound loop on-ramp would be constructed. The three eastbound lanes along Valley Boulevard would continue to the Valley Boulevard and Temple Avenue intersection. The existing two left turn lanes onto Temple Avenue would remain. Additional project features include new overhead signage and a widened shoulder to provide a future bike lane along Eastbound Valley Boulevard up to the northbound loop on-ramp. Note, currently bike lanes do not exist along Valley Boulevard.

Figure 1.6-1. Project Limits

This page is intentionally left blank.

- lanes to enhance capacity and improve traffic flow through the Valley Boulevard signalized intersection. The intersection at Railroad Avenue would also be reconfigured to improve traffic flow. Improvements to Temple Avenue would also include pedestrian safety and operational improvements to the three-track joint Union Pacific Railroad (UPRR)/Metrolink railroad at-grade crossing on Temple Avenue, including crosswalk improvements and the widening of the at-grade crossing. The existing overhead guide sign would be replaced.
- **Southbound On-Ramp:** The existing "horseshoe" on-ramp from westbound Valley Boulevard/southbound Temple Avenue would be replaced with a three-lane on-ramp from a new signalized intersection at Valley Boulevard. The on-ramp would connect to the southbound I-605 freeway with an auxiliary lane to facilitate weaving movements. Please note: the horseshoe on-ramp under Valley Boulevard would be retained for future use by the ultimate I-605 Corridor Improvement Project.
- **Southbound Loop Off-Ramp:** The existing single-lane southbound loop off-ramp would be widened to two lanes after the exit nose and beyond the existing bridge deck. The ramp widens to three lanes as it approaches the new signalized intersection at Valley Boulevard with two right turn lanes and one left turn lane.
- **Northbound Loop On-Ramp:** The existing loop on-ramp would be modified to include a new, dedicated one-lane right turn pocket from eastbound Valley Boulevard. This new configuration would connect to the existing ramp with a smaller radius curve to slow traffic entering the ramp and enhance safety for bicyclists and pedestrians.
- **Northbound Off-Ramp:** The existing single-lane northbound off-ramp would be widened to three lanes after the exit nose to improve ramp queueing and intersection operational capacity. The three lanes are maintained to the existing signalized intersection, with one left turn lane, one through lane and one through/right turn lane. This improvement would not impact the existing sound wall or SF Tires property.
- **Northbound Direct On-Ramp:** The existing configuration would be reconfigured to eliminate weaving thereby improving traffic flow from westbound Valley Boulevard and southbound Temple Avenue onto the northbound direct on-ramp.
- **Signal Interconnection:** Signal improvements would be implemented between the I-605 southbound on- and off-ramp/Valley Boulevard intersection and I-605 northbound off- and on-ramp/Valley Boulevard/Temple Avenue intersection. These improvements would be configured in coordination with movements at the railroad at-grade crossing.
- **Americans with Disabilities Act Upgrades:** Curb ramps, sidewalks, driveways, and pedestrian signals would be upgraded to comply with current ADA standards.

The project would result in one highway easement acquisition along Valley Boulevard from an undeveloped vacant private property (Assessor's Parcel Number [APN] 8564-012-004). In addition, temporary construction easements (TCE) and retaining wall maintenance easements along Valley Boulevard from two adjacent undeveloped private properties (APN 8564-012-004 and 8564-012-003) would be required. Project improvements would also result in right of way impacts to accommodate the widening along Temple Avenue including: 1) a parcel owned by City

of Industry (APN 8564-007-901); 2) permanent easements from the UPRR/Metrolink crossing to enhance safety of the railroad crossing (APN 8564-007-800 and 8563-008-800); and 3) a parcel containing a clothing manufacturing facility whose owner has already offered to dedicate the necessary right of way for the widening of Temple Avenue to City of Industry (APN 8564-007-008). For the City of Industry and clothing manufacturing parcels, the City of Industry would be able to provide the needed right of way immediately (see **Figure 1.7-1**).

1.6.3 Transportation System Management (TSM) and Transportation Demand Management (TDM) Alternatives

Although Transportation System Management measures alone could not satisfy the purpose and need of the project, the following Transportation System Management measures have been incorporated into the build alternatives for this project: signal improvements would be implemented between the I-605 southbound on-/off-ramp/Valley Boulevard intersection and Temple Avenue/Valley Boulevard and the northbound on/off-ramp intersection. These improvements would be configured in coordination with movements at the railroad at-grade crossing on Temple Avenue. In addition, curb ramps, sidewalks, driveways, and pedestrian routes would be upgraded to comply with current ADA standards.

1.7 Comparison of Alternatives

There are two alternatives evaluated in this IS/EA ND/FONSI, Alternative 1 (No Build Alternative) and Alternative 2 (Build Alternative). The No Build Alternative would not include any construction or result in changes to existing conditions. This alternative would not meet the purpose and need of the project. Under NEPA, the No Build Alternative was evaluated as a baseline for comparison to the Build Alternative. However, under CEQA existing conditions were evaluated as a baseline for comparison. While there would be none of the impacts associated with the construction of the Build Alternative, the No Build Alternative could have impacts. The horseshoe entrance and I-605 exit ramps would remain in operation and traffic conflicts along Valley Boulevard and Temple Avenue and the on-/off-ramps of I-605 would continue. In addition, exit ramps with insufficient lengths could lead to traffic backing up onto the interstate during peak times. As traffic in the area increases over time, the inherent safety problems of these situations are anticipated to lead to more accidents. The Build Alternative would implement operational and safety improvements on Valley Boulevard, Temple Avenue, and the I-605 on-/off-ramps to achieve the desired safety and circulation improvements and to meet the project's purpose and need. The environmental impacts associated with the Build Alternative are outlined in the subsequent chapters of this document.

Figure 1.7-1. Project Footprint

This page is intentionally left blank.

1.8 Identification of a Preferred Alternative

A Preferred Alternative was identified after considering all information in the IS/EA ND/FONSI. It was also based on input from the Project Development Team (PDT) members, public stakeholders, and federal, state, and local agencies during the project development process. In addition, consideration was given to all issues raised during the public circulation period. Operation of Alternative 2 would reduce congestion and improve traffic operation at the I-605/Valley Boulevard interchange, alleviate mobility constraints, and enhance overall safety. Access disruptions to drivers, pedestrians, businesses, and the community during construction would be minimized to the extent feasible. Therefore, Alternative 2: Build Alternative, has been identified as the Preferred Alternative.

1.9 Alternatives Considered but Eliminated from Further Discussion Prior to the Draft Initial Study/Environmental Assessment

A Preliminary Environmental Analysis Report (PEAR) was prepared for this project in 2014. In this PEAR, two Build Alternatives were discussed, and three other alternatives were considered but were rejected from further consideration prior to the approval of the PEAR. As an Early Action Project of the I-605 Corridor Improvement Project, the alternatives included in the PEAR were used as a basis for developing the current Build Alternative for this project. The current Build Alternative built upon, enhanced, and refined the contents of the two Build Alternatives considered in the PEAR to create the one Build Alternative presented in this document. These five alternatives considered but eliminated from further discussion are briefly discussed below.

- SB “Horseshoe” On-Ramp: this alternative proposed the separation of entry onto the SB and NB I-605 ramps via WB Valley Boulevard. The existing on-ramp at the intersection of Valley Boulevard and Temple Avenue would be revised to serve as a NB I-605 on-ramp only. Access to the SB I-605 on-ramp from WB Valley Boulevard would be reconfigured to be a right-turn lane from Valley Boulevard, relocated just west of the undercrossing; and turning into the revised SB I-605 "horseshoe" on-ramp.
- Combined SB On-Ramp: this alternative proposed the separation of the entries to the SB and NB I-605 on-ramps on WB Valley Boulevard. The existing ramp entry location at the intersection of Valley Boulevard and Temple Avenue would be revised to be devoted to serve as the NB I-605 on-ramp only. Access to the SB I-605 on-ramp from WB Valley Boulevard would be reconfigured as a dual left-turn lane from Valley Boulevard and would be relocated west of the undercrossing at the location of the existing SB I-605 on-ramp on the south side of Valley Boulevard. The reconfigured SB I-605 on-ramp would be reconstructed from a one-lane ramp to a three-lane ramp that would merge with the SB traffic on I-605. The existing SB "horseshoe" on-ramp would be removed from the northwest and southwest quadrants of the interchange.
- Widening of Valley Boulevard, Temple Avenue, and the on-ramps: this alternative proposed more separation between the SB and NB on-ramp entry point at the Valley Boulevard/Temple Avenue intersection. This alternative also included other improvements

such as: the addition of a WB right turn lane from Valley Boulevard to Temple Avenue, widening of the SB lanes on Temple Avenue to provide two dedicated right-turn lanes, one lane to the NB on-ramp and one lane to the SB on-ramp.

- Replace existing on-ramps to NB I-605 and maintain "horseshoe": this alternative proposed to replace the two existing on-ramps to NB I-605 with one oblong loop on-ramp in the southeast quadrant, maintain the existing "horseshoe" on-ramp to SB I-605, and widen Valley Boulevard.
- Replace existing on-ramps to NB I-605 and revise SB I-605 access: this alternative proposed to replace the two existing on-ramps to NB I-605 with one oblong loop on-ramp in the southeast quadrant, revise the SB I-605 on-ramp to only be accessible by SB Temple Avenue, and provide access to SB I-605 from Valley Boulevard through left-turn movement at the SB ramps/Valley Boulevard intersection west of the undercrossing.

1.10 Permits and Approvals Needed

The following permits, reviews, and approvals would be required for project construction:

Table 1.10-1. Permits and Approvals Required for Project Construction

Agency	Permit/Approval	Status
Federal Highway Administration	Air Quality Conformity Approval Letter	The Transportation Conformity Working Group determined that the project is not considered a project of air quality concern on October 22, 2019. On November 20, 2020, the Federal Highway Administration determined that the project-level transportation conformity requirements have been met for this project.
State Water Resources Control Board	NPDES Construction General Permit Order No. 2009-0009-DWQ, NPDES No. CAS000002 as amended by Order No. 2010-0014-DWQ and Order No. 2012-006-DWQ, and any subsequent amendment or renewal	Project design will comply with all requirements; application and notice of intent will be submitted prior to construction.
Regional Water Quality Control Board	NPDES Permit, Statewide Storm Water Permit, Waste Discharge Requirements for the State of California and Caltrans, Order No. 2012-0011-DWQ, as amended by WQ 2014-0077-DWQ, NPDES No. CAS000003	General discharge permit to be obtained prior to construction.
Regional Water Quality Control Board	Health and Safety Plan	A Health and Safety Plan will be prepared by the contractor.
Regional Water Quality Control Board	Soil Management Plan	A Soil Management Plan will be prepared by the project team.
Union Pacific Railroad	Encroachment/Crossing Permit	Application for a Union Pacific Railroad construction

Table 1.10-1. Permits and Approvals Required for Project Construction

Agency	Permit/Approval	Status
		encroachment and crossing permit for temporary access onto public rights-of-way will be obtained prior to construction.
California Department of Transportation	Construction Encroachment Permit	Application for a California Department of Transportation construction encroachment permit will be obtained prior to construction, if a contractor is procured by Metro.
Los Angeles County	Construction Encroachment Permit	Application for a Los Angeles County construction encroachment permit for temporary access onto public rights-of-way will be obtained prior to construction.
City of Industry	Construction Encroachment Permit	Application for a City of Industry construction encroachment permit for temporary access onto public rights-of-way will be obtained prior to construction.

NPDES = National Pollutant Discharge Elimination System

2.0 Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

2.1 Topics Considered but Determined Not to be Relevant

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 located within the coastal zone; therefore, there will be no effect on coastal resources.
- Wild and Scenic Rivers: There are no wild and scenic rivers within the project study area; therefore, there will be no effect on wild and scenic rivers.
- Farmland/Timberlands: There are no farmlands or timberlands within or adjacent to the project study area; therefore, there will be no effect on farmland and timberland resources.
- Hydrology and Floodplain: According to the Federal Emergency Management Agency, the project is located in an area of minimal flood hazard (Zone X). Therefore, there will be no effects to the 100-year floodplain because the project area is not located within a 100-year base floodplain.
- Wildfire: The project area is not located within or near a very high fire hazard safety zone; therefore, there will be no effect on wildfire risks.

2.2 Human Environment

The project is located within the City of Industry and County of Los Angeles; therefore, this section provides an analysis of applicable goals and policies relevant to existing and future land use for the City of Industry and the County of Los Angeles**.**

2.2.1 Existing and Future Land Use

Regulatory Setting

State

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (CA Public Resources Code [PRC] Section 21001[b]).

Local

The following are applicable goals and policies relevant to existing and future land use for the City of Industry and the County of Los Angeles:

Los Angeles County

The County of Los Angeles 2035 General Plan, Land Use Element (Los Angeles County, 2015) outlines the following goals and policies that are applicable to the project:

- **Goal LU 9:** Land use patterns and community infrastructure that promote health and wellness.
    - **Policy LU 9.1:** Promote community health for all neighborhoods.
    - **Policy LU 9.2:** Encourage patterns of development that promote physical activity.
- **Goal LU 10:** Well-designed and healthy places that support a diversity of built environments.
    - **Policy LU 10.3:** Consider the built environment of the surrounding area and location in the design and scale of new or remodeled buildings, architectural styles, and reflect appropriate features such as massing, materials, color, detailing or ornament.
    - **Policy LU 10.4:** Promote environmentally sensitive and sustainable design.

City of Industry

The City of Industry General Plan, Land Use Element (LU) (City of Industry, 2014) outlines the following goal and policies that are applicable to the project:

- **Goal LU5**: High quality and well-maintained properties, buildings, and infrastructure that enhance property values and encourage additional public and private investment.
    - **Policy LU5-1:** Maintain high quality appearance and functionality of public lands, properties, and right of way, including sidewalks, streets trees/landscaping, curbs, and street lighting.
    - **Policy LU5-2:** Design new, and when necessary, retrofit existing streets and public right of way to maintain a high quality, professional appearance.

Affected Environment

Existing Land Uses

According to the City of Industry General Plan, Land Use Element, the project area is located adjacent to land uses designated as employment, commercial, institutional, and recreation/open space (City of Industry, 2014). Additionally, according to the Los Angeles County General Plan Land Use Element, the Community of Avocado Heights is located directly southeast of the project and consists of land uses designated as single-family residential and open space/recreation adjacent to the project area (Los Angeles County, 2015).

Future Development

According to the City of Industry's Public Works and Engineering Department, there are currently 23 development projects in progress with the city. Nine projects are currently under construction with an anticipated completion date by the end of 2020, two projects are entitled having received approval from the City but are not yet under construction, and 12 projects are currently under review by the City Council (see **Table 2.2-1** and **Figure 2.2-1**).

Table 2.2-1. Projects Under Construction in the City of Industry

Project Name	Jurisdiction	Address Location	Status
13400 Nelson New Warehouse	City of Industry	13400 Nelson Avenue	Under Construction – to be completed by the end of 2020
Children Play Facility	City of Industry	15301 Gale Avenue	Under Construction – to be completed by the end of 2020
IBC Project Building 11 and 12	City of Industry	Southwest of Baker Parkway and Grand Avenue	Under Construction – to be completed by the end of 2020
IBC Project Building 2	City of Industry	East of Grand Avenue	Under Construction – to be completed by the end of 2020
New 2-Story Office	City of Industry	13191 Crossroads Parkway North	Under Construction – to be completed by the end of 2020
New Industrial Building and Remodel of Existing Industrial Building	City of Industry	338 and 330 Turnbull Canyon Road	Under Construction – to be completed by the end of 2020
New Industrial Warehouse	City of Industry	333 South Hacienda Boulevard	Under Construction – to be completed by the end of 2020
Raising Canes	City of Industry	1420 South Azusa Avenue	Under Construction – to be completed by the end of 2020
Wei Chaun U.S.A Inc. Freezer/Cold Storage Expansion	City of Industry	13031 Temple Avenue	Under Construction – to be completed by the end of 2020
Kar Wing Trading New Industrial Building	City of Industry	241 North California Avenue	Entitled – approved by City Council but not yet under construction
Major Gloves and Safety Warehouse Addition	City of Industry	250 Turnbull Canyon Road	Entitled – approved by City Council but not yet under construction
13055 E. Temple Ave New Building	City of Industry	13055 East Temple Avenue	Under Review by City Council - construction dates have not been confirmed
EJ Growers Nursery	City of Industry	16835 Gale Avenue	Under Review by City Council - construction dates have not been confirmed
Ford Rooftop Cell Tower	City of Industry	17340 Gale Avenue	Under Review by City Council - construction dates have not been confirmed
Industry Tires	City of Industry	13478 Valley Boulevard	Under Review by City Council - construction dates have not been confirmed
New Electronic Billboard	City of Industry	19465 East Walnut Drive North	Under Review by City Council - construction dates have not been confirmed

Table 2.2-1. Projects Under Construction in the City of Industry

Project Name	Jurisdiction	Address Location	Status
New Industrial Warehouse	City of Industry	804 South Azusa Avenue	Under Review by City Council - construction dates have not been confirmed
Panera Bread	City of Industry	14727 Colima Road	Under Review by City Council - construction dates have not been confirmed
Penske, Volvo, Jaguar Dealership	City of Industry	17647 Gale Avenue	Under Review by City Council - construction dates have not been confirmed
Public Right of Way Cell Tower	City of Industry	Valley Boulevard and Stimson Avenue	Under Review by City Council - construction dates have not been confirmed
Round 1 Expansion at Puente Hills Mall	City of Industry	1600 Azusa Avenue, Unit #285 and #287	Under Review by City Council - construction dates have not been confirmed
Sysco Expansion	City of Industry	20701 East Currier Road	Under Review by City Council - construction dates have not been confirmed
Walmart Gasoline Station	City of Industry	17150 Gale Avenue	Under Review by City Council - construction dates have not been confirmed

Source: (City of Industry, 2020)

This page is intentionally left blank.

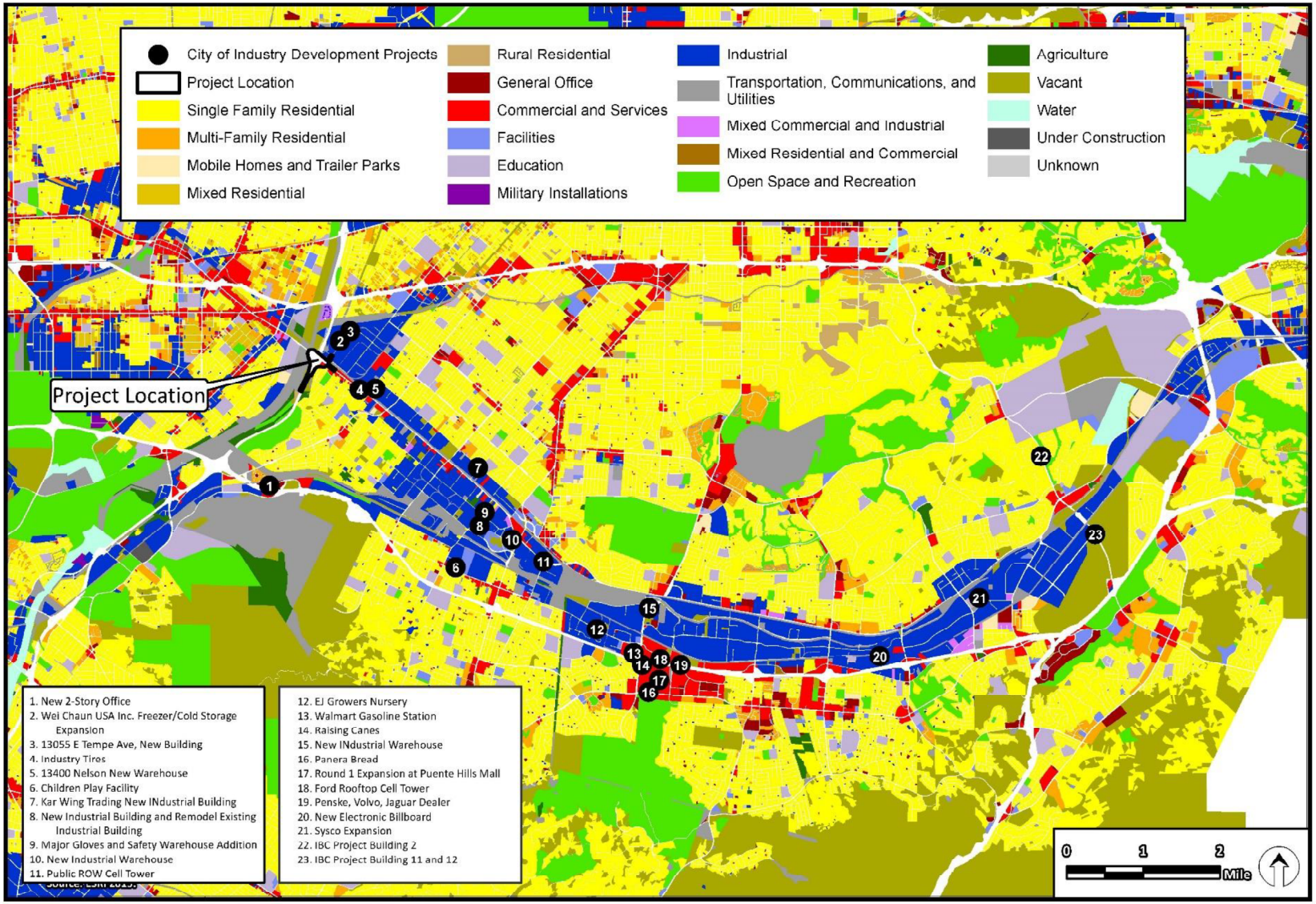


Figure 2.2-1. Existing and Future Land Use

This page is intentionally left blank.

Environmental Consequences

No Build Alternative

The No Build Alternative would not result in temporary or permanent impacts on existing and future land use.

Build alternative

Temporary Impacts

Construction of the Build Alternative would require a TCE along Valley Boulevard from two adjacent undeveloped private properties APN 8564-012-004 and APN 8564-012-003), located north of Valley Boulevard and west of I-605, adjacent to the I-605 southbound on-ramp. The size of the parcels required for TCEs are approximately 0.333 acre for APN 8564-012-004 and approximately 0.341 acre for APN 8564-012-003. These impacts would be temporary and would cease when construction of the project is complete.

Permanent Impacts

Project improvements would require acquisition and conversion of existing land uses into the transportation facility (see **Section 2.2.6**). The project would require one highway easement acquisition along Valley Boulevard from an undeveloped vacant private property (APN 8564-012-004). Additionally, the project would include the following impacts to accommodate the widening along Temple Avenue including: 1) right of way acquisition from a parcel owned by City of Industry (APN 8564-007-901); 2) permanent easements from the Union Pacific Railroad (UPRR)/Metrolink crossing to enhance safety of the railroad crossing (APN 8564-007-800 and 8563-008-800); and 3) right of way acquisition from a parcel containing a clothing manufacturing facility whose owner has already offered to dedicate the necessary right of way for the widening of Temple Avenue to City of Industry (APN 8564-007-008). Acquisitions from surrounding land uses would be minor, approximately 0.1 net acre, and insubstantial compared to the overall land use inventory in the City of Industry and the unincorporated community of Avocado Heights.

All other project improvements would be completed on the existing transportation facility within Caltrans right of way. The project would not include new buildings or structures that would disrupt existing or future land uses in the project area, the City of Industry, or Unincorporated Los Angeles County – Avocado Heights. The surrounding land uses would be maintained, and the project would be consistent with applicable plans, policies, and regulations.

Avoidance, Minimization, and/or Mitigation Measures

The project would not result in adverse temporary or permanent impacts on land use. Therefore, the project would not require Avoidance, Minimization, and/or Mitigation Measures for Land Use and Planning.

2.2.2 Consistency with State, Regional, and Local Plans and Programs

This section provides an analysis of the consistency of the project with transportation and land use plans and policies included in state, regional, and local plans for the City of Industry and Unincorporated Los Angeles County (see **Table 2.2-2**).

This page is intentionally left blank.

Table 2.2-2. Consistency with State, Regional, and Local Plans

Element or Chapter	Goal	Policy	Build Alternative
California Transportation Plan – 2040			
Goals, Recommendations, and Next Steps	Goal: Improve multimodal mobility and accessibility for all people		**Consistent –** The Build Alternative would ease congestion and improve overall mobility within the project area.
	Goal: Improve public safety and security		**Consistent –**The Build Alternative would improve and enhance safety while also reducing congestion.
	Goal: Practice environmental stewardship		**Consistent –**The Build Alternative has been designed to reduce environmental impacts to the greatest extent practicable. Environmental review has been completed in accordance with the NEPA and the CEQA and all other mandatory requirements of applicable regulatory agencies.
Connect SoCal – SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy			
Chapter 3 – A Path to Greater Access, Mobility and Sustainability	Core Vision: System Preservation & Resilience	"Fix it First" has been a guiding principle for prioritizing transportation funding in the RTP for the last decade. The cost of rebuilding roadways is eight times more than preventative maintenance. Preservation of the transportation system can extend the pavement life in a cost effective manner and can also improve safety.	**Consistent –** The existing pavement on Valley Boulevard and Temple Avenue throughout the project area has excessive cracking and evidence of distress, indicative of subgrade failure. The Build Alternative would include pavement rehabilitation to extend the pavement service life and preserve the existing transportation system. The proposed Build Alternative design would improve mobility, accessibility, reliability, and safety throughout the project area.
	Core Vision: Demand & System Management	Better managing the existing transportation system through demand management strategies and Intelligent Transportation Systems (ITS) yields significant mobility	**Consistent –**Transportation System Management measures have been incorporated into the Build Alternative design. Signal improvements would be implemented between the I-605 southbound on-/off-ramp/Valley Boulevard intersection and Temple

Table 2.2-2. Consistency with State, Regional, and Local Plans

Element or Chapter	Goal	Policy	Build Alternative
		benefits in a cost-effective manner.	Avenue/Valley Boulevard and the northbound on/off-ramp intersection. These improvements would be configured in coordination with movements at the railroad at-grade crossing on Temple Avenue. In addition, curb ramps, sidewalks, driveways, and pedestrian routes would be upgraded to comply with current ADA standards.
	Core Vision: Complete Streets	Creating "complete streets" that are safe and inviting to all roadway users is critical to increasing mobility choices, reducing traffic fatalities and serious injuries and meeting greenhouse gas reduction targets.	**Consistent –** The Build Alternative configuration and improvements would enhance motorist, bicyclist, and pedestrian safety. In addition, the Build Alternative includes Americans with Disabilities Act upgrades to curb ramps, sidewalks, driveways, and pedestrian signals. These upgrades would encourage the use multi-modal transportation in the project area.
County of Los Angeles General Plan			
Land Use	Goal LU 1: A General Plan that serves as the constitution for development, and a Land Use Policy Map that implements the General Plan's Goals, Policies and Guiding Principles.	Policy LU 1.5: In the review of a project-specific amendment(s) to convert OS-C (Conservation Land Use) designated lands to other land use designations, ensure that the project-specific amendment(s) does not contribute to the overall loss of open space that protects water quality, provides natural habitats, and contributes to improved air quality.	**Consistent –** The Build Alternative would not require amendment to the land use designations.

Table 2.2-2. Consistency with State, Regional, and Local Plans

Element or Chapter	Goal	Policy	Build Alternative
Mobility	Goal M 2: Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.	Policy M 2.1: Provide transportation corridors/networks that accommodate pedestrians, equestrians, and bicyclists, and reduce motor vehicle accidents through a context-sensitive process that addresses the unique characteristics of urban, suburban, and rural communities whenever appropriate and feasible.	**Consistent –** The Build Alternative would ease congestion and enhance safety and improve local and system interchange operations and connectivity.
City of Industry General Plan			
Land Use	Goal LU3: A mutually beneficial and compatible relationship with non-business resources and surrounding jurisdictions.	Policy LU3-1: Minimize impacts (including noxious fumes, air pollutants, excessive noise, and hazardous materials) to non-business uses through the use of land use regulations, site planning, and design controls.	**Consistent –** The potential impacts of the Build Alternative are related to air quality, noise, and hazardous materials, as well as other environmental resources. Impacts would be avoided, minimized, and/or mitigated to the maximum extent feasible through avoidance, minimization, and mitigation measures.
	Goal LU5: High quality and well-maintained properties, buildings, and infrastructure that enhance property values and encourage additional public and private investment.	Policy LU5-1: Maintain a high-quality appearance and functionality of public lands, properties, and rights-of-way, including sidewalks, street trees/landscaping, curbs, and street lighting.	**Consistent –**The Build Alternative would not reduce the visual character and quality of the project area, and the surrounding community.
Circulation	Goal C1: A transportation system that supports the Vision and planned land uses while maintaining the desired level of service.	Policy C1-1: Roadways in the City of industry will: • Comply with federal, state, and local designs and safety standards • Meet the needs of multiple transportation modes and users	**Consistent –** The Build Alternative would comply with all federal, state, and local designs and safety standards. The Build Alternative would improve and enhance safety throughout the project area and would improve the efficiency and accessibility of the existing transportation network while balancing the needs of surrounding communities.

Table 2.2-2. Consistency with State, Regional, and Local Plans

Element or Chapter	Goal	Policy	Build Alternative
		• Reflect the context and desired character of the surrounding land uses • Be maintained in accordance with best practices and City standards	
		Policy C1-3: Maintain and rehabilitate the circulation system as necessary and as funding is available, with a focus on identifying and improving roadways and intersections that are approaching or have reached unacceptable levels of service.	**Consistent –** The Build Alternative would ease congestion, improve mobility and travel times, improve and enhance safety, and improve local and system interchange operations and connectivity.
	Goal C4: Safe and efficient flow of goods through the City of Industry	Policy C4-1: Continue to design public roadways to accommodate trucks.	**Consistent –** Improvements implemented as part of the Build Alternative would improve traffic conditions and accommodate all motorists, including trucks, within the project vicinity.

Source: (City of Industry, 2014a; Los Angeles County, 2015; California Department of Transportation, 2016; Southern California Association of Governments, 2020; Southern California Association of Governments, 2021)

Affected Environment

State Plans

California Transportation Plan 2040

The California Transportation Plan provides long-range policy framework for the state's transportation system, exploring trends that will likely influence travel behavior and transportation decisions in the next 25 years. The California Transportation Plan outlines goals, policies, strategies, performance measures, and recommendations to meet future mobility needs and reduce greenhouse gas emissions (California Department of Transportation, 2016).

Regional Plans

2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

The *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*, adopted by the Southern California Association of Governments (SCAG), is a long-range plan that provides a vision for meeting future transportation and housing needs while balancing economic, environmental, and public health goals (Southern California Association of Governments, 2020). The *2020-2045 RTP/SCS* was prepared to address transportation needs in the SCAG Region, which includes Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. The project is included in the *2020-2045 RTP/SCS* under RTP ID #1163S009 and is therefore consistent with this regional plan (Southern California Association of Governments, 2021).Federal Transportation Improvement Program

The Federal Transportation Improvement Program (FTIP) is a four-year program that lists all transportation projects that will be receiving federal funding in the SCAG region (Southern California Association of Governments, 2019). The FTIP is part of the region's strategy to improve the safety and efficiency of the transportation system. The projects listed in the FTIP are consistent with SCAG's *2020-2045 RTP/SCS*, and include, but are not limited to, highway improvement, High-Occupancy Vehicle (HOV) lane, High-Occupancy Toll (HOT) lane, and freeway ramp projects. The project is included in the *2019 FTIP* (FTIP ID LA0G1457) and is therefore consistent with this regional plan.

Local Plans

General Plans are comprehensive planning documents that are developed by municipalities to help form decisions regarding the way their community will grow or better serve their existing populations in the future. General Plans typically include elements such as land use, transportation, community character, and more. Projects should be evaluated to ensure they do not conflict with the goals and policies established by applicable general or specific plans that the project area overlaps with. Goals and policies from the *City of Industry General Plan* and the *Los Angeles County 2035 General Plan* that are relevant to the project are identified above, under **Section 2.2.1**, Existing and Future Land Use.

Environmental Consequences

No Build Alternative

The No Build Alternative would not result in temporary or permanent impacts on the existing environment. However, the No Build Alternative would not achieve the goals of the SCAG *2020-2045 RTP/SCS*. Therefore, the No Build Alternative would not support applicable state, regional, or local plans and/or programs.

Build Alternative

The Build Alternative would improve the traffic operation of the Valley Boulevard/Temple Avenue intersection and approaches to the I-605 on-ramps, alleviate mobility constraints, and enhance overall safety. The project would therefore be consistent with applicable state, regional, and local plans and program, as shown in Table 2.2-2.

Avoidance, Minimization, and/or Mitigation Measures

As discussed above, the project would be consistent with state, regional, and local plans, and programs; therefore, no avoidance, minimization, and/or mitigation measures would be required.

2.2.3 Parks and Recreation Facilities

Regulatory Setting

State

The Park Preservation Act (California Public Resources Code [PRC] Sections 5400-5409) prohibits local and state agencies from acquiring any property which is in use as a public park at the time of acquisition unless the acquiring agency pays sufficient compensation or land, or both, to enable the operator of the park to replace the park land and any park facilities on that land.

Regional

County of Los Angeles Department of Parks and Recreation

The County of Los Angeles Department of Parks and Recreation operates 182 parks throughout the County and offers a wide variety of recreation, education, and entertainment facilities and activities (County of Los Angeles Department of Parks and Recreation, n.d.). The purpose of the County's Department of Parks and Recreation is to improve the quality of life in Los Angeles County by providing responsive, efficient, and high-quality public services to individuals, families, businesses, and communities.

Watershed Conservation Authority

The Watershed Conservation Authority is a local public entity of the State of California exercising joint powers of the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy and the Los Angeles County Flood Control District (Watershed Conservation Authority, n.d.). The Watershed Conservation Authority is funded primarily by grants and receives limited funding from contributions and lease revenues.

The Watershed Conservation Authority's work involves projects that conserve, preserve, improve,

and restore landscapes for natural functions and passive recreation. The Watershed Conservation Authority is responsible for planning and implementing The Emerald Necklace Master Plan, which was established by Amigos de los Rios, a California nonprofit organization, in conjunction with various cities and stakeholders. The plan proposes to improve a 17-mile interconnected network of bikeways, multi-use trails, parks, and greenways along the Rio Hondo and San Gabriel rivers, called "the Emerald Necklace" (Watershed Conservation Authority, 2013).

Local

Los Angeles County General Plan

The *Los Angeles County General Plan* (County's General Plan) contains the County's goals related to land use and is designed to serve as the basis for development decisions. The following goals and policies from the County's General Plan, Parks and Recreation Element are applicable to the project (Los Angeles County, 2015):

- **Goal P/R 1**: Enhanced active and passive park and recreation opportunities for all users
    - **Policy P/R 1.2**: Provide additional active and passive recreation opportunities based on a community's setting, and recreational needs and preferences.
    - **Policy P/R 1.11**: Provide access to parks by creating pedestrian and bicycle-friendly paths and signage regarding park locations and distances.

City of Industry General Plan

The *City of Industry General Plan, Resource Management Element* (City of Industry, 2014) contains the following goal and policies that are applicable to the project:

- **Goal RM3**: Open space areas that are well maintained, serve the target population, and function as a citywide amenity.
    - **Policy RM3-1**: Cooperate with regional efforts to upgrade the resource and recreational value of the San Gabriel River.
    - **Policy RM3-3**: Explore opportunities to maximize the recreational value, use, and access of the areas designated for recreation and open space on the land use plan.

Affected Environment

The project is located in an urbanized area within the City of Industry and unincorporated Los Angeles County. The following resources are within 0.5 mile of the project area:

- Walnut Creek Nature Trail Connection (Planned): A proposed Class I bike path along the northern bank of Walnut Creek, next to an existing Los Angeles County maintenance access road, and is located approximately 375 feet from the project area.
- San Gabriel River Trail: A Class I bike path that runs along the western bank of San Gabriel River and is located approximately 0.2 mile from the project area.
- Duck Farm River Park (Planned): A park planned as part of the Emerald Necklace Master Plan, proposed to include a 1.5-mile trail, overlook of the San Gabriel River, native planting, demonstration garden, dry stream, picnic area, and interpretive stations. This park would be

approximately 31 acres and is located adjacent to the project area

- San Angelo Park: A park including greenspace, baseball fields, basketball courts, a playground, community center, fitness zones, picnic tables, tennis courts, soccer fields, softball fields, and other recreational facilities for the public to use. This park is approximately 8.66 acres and is located approximately 0.1 mile from the project area.
- California Country Club: An 18-hole golf course that is privately owned and is located approximately 0.5 mile from the project area.
- Brookside Park: An open lawn and playground privately owned and located within the Brookside Country Club mobile home park and is located approximately 0.5 mile from the project area.

These parks and recreational facilities were evaluated to assess whether they are protected Section 4(f) resources. Walnut Creek Nature Trail Connection (Planned), San Gabriel River Trail, Duck Farm River Park (Planned), and San Angelo Park are considered Section 4(f) resources. However, these resources have been determined to not result in Section 4(f) Use because the project does not permanently use the property and does not hinder the preservation of the property, or the proximity impacts to not result in constructive use (see **Appendix A** for further analysis of Section 4(f) resources).

Environmental Consequences

No Build Alternative

The No Build Alternative would not result in temporary or permanent impacts to parks or recreational facilities.

Build Alternative

Temporary Impacts

Construction activities, including elevated noise, dust, and pollutant levels, could temporarily impact park and recreational facilities within the 0.5-mile buffer of the project area. However, these impacts would be temporary, and conditions would return to normal following completion of construction activities.

Permanent Impacts

The project would not result in permanent impacts to parks and recreational facilities; therefore, further analysis for park and recreational facility impacts is not necessary.

Avoidance, Minimization, and/or Mitigation Measures

The project would not require avoidance, minimization, and/or mitigation measures for parks and recreational facilities.

2.2.4 Growth

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.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. The CEQA guidelines (Section 15126.2[d]) require that environmental documents "…discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment…"

Affected Environment

The project is in an industrial, urbanized area within the City of Industry and unincorporated Los Angeles County; however, the growth study area accounts for the SCAG region. The project area includes existing transportation facilities surrounded by urban development and adjacent to a variety of land uses, including residential, commercial, industrial, public, and recreational uses.

Population and employment growth are expected to continue within the region as projected by SCAG (see **Table 2.2-3**).

Table 2.2-3. Forecasted Growth in the Project Area and Region

Growth Parameter	Location	2012	2019	2040	Annual Growth Rate[a]
Population	City of Industry	500	437	500	0.00%
	Unincorporated Los Angeles County[b]	1,040,700	1,057,162	1,273,700	0.72%
	Los Angeles County	10,105,722	10,283,729	11,514,800	0.47%
	SCAG Region	18,322,300	19,145,421	22,138,800	0.68%
Employment	City of Industry	67,700	80,388	74,700	0.35%
	Unincorporated Los Angeles County[b]	222,900	269,902	288,400	0.92%
	Los Angeles County	5,215,695	4,767,204	5,225,800	0.01%
	SCAG Region	7,440,400	8,465,304	9,871,500	1.01%

Sources: (Southern California Association of Governments, 2020; Southern California Association of Governments, 2019b)

[a] Annual growth rate is calculated using 2012 population and employment data from the 2016-2040 SCAG RTP/SCS

[b] SCAG does not provide/create predictions for separate communities, such as Avocado Heights; therefore, the projections for unincorporated County of Los Angeles have been used to represent the community of Avocado Heights.

SCAG = Southern California Association of Governments

Environmental Consequences

No Build

The No Build Alternative would not result in temporary or permanent impacts on population growth in the project area.

Build Alternative

Because growth-related effects represent permanent impacts of a project, there is no discussion of temporary impacts in the section aside from creating short-term construction jobs.

The analysis of potential growth-related impacts of the Build Alternative was completed using the first-cut screening analysis, including whether further analysis would be needed based on consideration of the following four questions (see **Table 2.2-4**).

Table 2.2-4. Summary of First Cut Screening Analysis

Screening Criteria	Project Consideration
How, if at all, does the proposed project potentially change accessibility?	The Build Alternative proposes improvements to existing roadways, freeway on- and off- ramps, and intersections and would not create any new roadways or alter existing accessibility within the project area. The project would improve travel times, reduce congestion, and improve safety within the project area resulting in improved operations of the interchange and roads. Therefore, the project does not have the potential to change accessibility.
How, if at all, do the project type, location, and growth pressure potentially influence growth?	In terms of influencing growth, the Build Alternative would address existing operational and capacity deficiencies and would not foster growth in excess of what is projected by SCAG and local and regional general plans. The Build Alternative would not be expected to influence the amount, location, or distribution of growth in the City of Industry or unincorporated Los Angeles County within the project area because no new interchanges or roadways are proposed and much of the project area is built out. It is not anticipated that the project would induce land development beyond what is already planned because there are very few open areas available in the vicinity of the project area. The Build Alternative would not create new housing or opportunities for capital investment by the public or private sectors. Therefore, the Build Alternative would accommodate existing and planned growth and would not influence growth beyond what is currently panned.
Is project-related growth reasonably foreseeable as defined in NEPA?	Construction of the project would create short-term jobs. While the project would generate additional employment opportunities during the construction phase, the majority of these jobs are expected to be filled by residents of neighboring cities and surrounding communities; therefore, substantial population growth associated with project construction is not anticipated. As discussed above the Build Alternative is not expected to influence the amount, timing, or location of growth in the project area because the Build Alternative proposes improvements to existing roads, freeway ramps, and intersections, within an area that is already highly developed. Therefore, there is no reasonably foreseeable project-related growth expected to result from the Build Alternative.

Table 2.2-4. Summary of First Cut Screening Analysis

Screening Criteria	Project Consideration
If there is project-related growth, how, if at all, could it affect resources of concern?	As described above, there are no reasonably foreseeable project-related growth impacts anticipated under the Build Alternative. Therefore, there would be no impacts on resources of concern. Because the Build Alternative would not result in project-related growth impacts, further analysis of growth-related impacts is not necessary.

Avoidance, Minimization, and/or Mitigation Measures

The project would not induce growth, and no further analysis of growth-related impacts is required. Therefore, no avoidance, minimization, or mitigation measures are required.

2.2.5 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.

Under the California Environmental Quality Act (CEQA), an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

Affected Environment

Community character includes characteristics that make a community unique or contribute to its sense of place. Influences such as geography, demographics, notable institutions, prominent neighborhood groups and organizations, types of businesses, community access and circulation, and availability of public services and facilities can all contribute to a community's character (California Department of Transportation, 2011).

Community cohesion is the degree to which residents feel a sense of belonging to their neighborhood, their level of commitment to the community, or a strong attachment to neighbors, groups, and institutions, usually as a result of continued association over time. Certain indicators can be evaluated to provide clues about a community's level of cohesion. Community cohesion indicators include age, ethnicity, and housing demographics.

The I-605/Valley project *resource study area* is the area within a 0.5-mile buffer around the project footprint. The *demographic study area* includes two census tracts, Census Tract 4070.02, which

is located in the City of Industry, and Census Tract 4083.01. which is located in the unincorporated Community of Avocado Heights, overlap the project area (see **Figure 2.2-2**). The demographic study area was used to evaluate resources related to age, ethnicity, housing, income and poverty status, and employment. Datasets from the 2013–2017 American Community Survey (ACS) 5-Year Estimates were used to collect data regarding the community character in the project area.

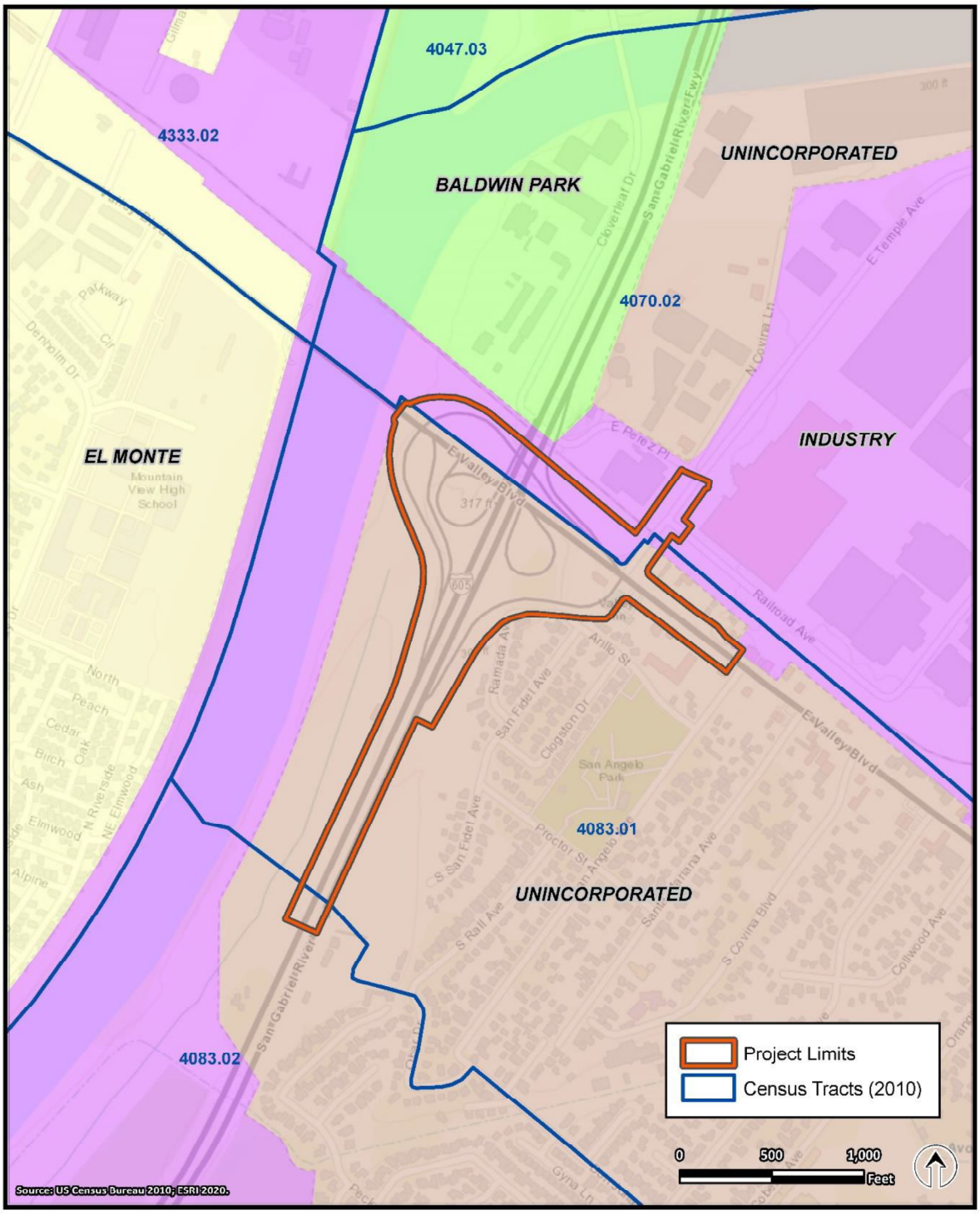


Figure 2.2-2. Jurisdictional Boundaries and Census Tracts

This page is intentionally left blank.

Geography

The project area is in the San Gabriel Valley, bordered by the Cities of La Puente and Walnut to the north, Diamond Bar and unincorporated Los Angeles County to the south, and Pico Rivera and El Monte to the west. The City of Industry includes a fragmented area of land that extends east of I-605 along the northern side of SR-60, approximately 12.04 square miles in area. The Community of Avocado Heights is a portion of unincorporated Los Angeles County that includes the I-605/SR-60 interchange, land to the northeast of the interchange, and portions of the I-605 and SR-60. The project area is approximately 22 miles to the southeast of downtown Los Angeles.

Demographics

The City of Industry has a population of 334 residents. The City of Industry demographic study area includes a population of 3,486 residents. The population of Census Tract 4070.02 is larger than the City of Industry's population because it extends outside of the boundaries of the City of Industry, an area of predominately industrial use, and into adjacent residential neighborhoods. The median age is 30.8 for the City of Industry and 39.6 for the City of Industry demographic study area (see **Table 2.2-5**). The median household income is $74,464 for the City of Industry and $68,571 for the City of Industry demographic study area (see **Table 2.2-6**). The majority of the City of Industry's population identify as either Hispanic or Latino (64 percent), White (23 percent), Asian (23 percent), or African American (1 percent) (see **Table 2.2-7**). Persons that reside within the City of Industry demographic study area primarily identify as Hispanic or Latino (85 percent), Asian (10 percent), White (2 percent), or two or more races (2 percent).

Table 2.2-5. Age Indicators (Years)

Census Tract Number	Population Count	Median Age	19 Years and Younger (%)	20 to 64 Years (%)	65 Years and Over (%)
Los Angeles County	10,105,722	36.0	25.2	62.3	12.5
City of Industry	334	30.8	32.1	58.5	9.4
Census Tract 4070.02	3,486	39.6	21.8	61.6	16.6
Avocado Heights (Unincorporated)	16,213	36.6	23.3	62.2	13.9
Census Tract 4083.01	5,767	33.1	26.5	62.7	10.8

Source: 2013-2017 American Community Survey 5-Year Estimates Table DP05 (United States Census Bureau, 2018)

Table 2.2-6. Income Levels

Census Tract Number	Median Household Income (Dollars as of 2017)	Population Determined as Poverty Status (Percent)	Poverty Status – Under 18 Years (Percent)	Poverty Status – 18 to 64 Years (Percent)	Poverty Status – 65 Years and Over (Percent)
Los Angeles County	61,015	17.0	24.0	15.2	13.4
City of Industry	74,464	6.9	0	9.8	9.4
Census Tract 4070.02	68,571	11.8	16.1	9.8	14.6
Avocado Heights (Unincorporated)	70,034	10.6	15.9	9.6	6.9
Census Tract 4083.01	64,487	18.1	15.6	14.1	11.8

Source: 2013-2017 American Community Survey 5-Year Estimates Table DP03 and DP05 (United States Census Bureau, 2018)

Table 2.2-7. Race and Ethnicity

Census Tract Number	Total Population	Hispanic or Latino	Not Hispanic or Latino						
			White	Black or African American[a]	American Indian and Alaska Native	Asian[a]	Native Hawaiian and Other Pacific Islander	Some Other Race	Two or More Races
Los Angeles County	10,105,722	4,893,579 (48%)	2,676,982 (27%)	799,579 (8%)	19,915 (<1%)	1,442,577 (14%)	24,950 (<1%)	28,960 (<1%)	219,180 (2%)
Industry	334	212 (64%)	75 (23%)	2 (1%)	0 (0%)	45 (23%)	0 (0%)	0 (0%)	0 (0%)
4070.02	3,486	2,957 (85%)	83 (2%)	44 (1%)	0 (0%)	334 (10%)	5 (0%)	0 (0%)	63 (2%)
Avocado Heights (Unincorporated)	16,213	13,443 (83%)	981 (6%)	50 (<1%)	0 (0%)	1,672 (10%)	0 (0%)	57 (<1%)	10 (<1%)
4083.01	5,767	5,061 (85%)	184 (3%)	11 (<1%)	0 (0%)	501 (9%)	0 (0%)	10 (<1%)	0 (0%)

Source: 2013-2017 American Community Survey 5-Year Estimates Table DP05 (United States Census Bureau, 2018)

This page is intentionally left blank.

Businesses and Institutions

The City of Industry is a major business and industrial hub, featuring many manufacturing, distribution, and industrial facilities. Employment land use, which includes manufacturing, warehouse, and office uses, accounts for nearly 69 percent of the city's total land use (City of Industry, 2014). The City of Industry demographic study area includes the highly industrialized land use of the City of Industry, as well as a residential neighborhood to the east, identified as West Puente Valley. The City of Industry also is home to several cultural heritage sites, including the Workman and Temple Family Homestead Museum and El Campo Santo, one of the oldest private cemeteries in southern California. A significant portion of the unincorporated community Avocado Heights remains semi-rural and equestrian due to the proximity of industries located in what became the City of Industry.

Most of the businesses in the resource study area are located east of I-605 along Valley Boulevard. Businesses along Valley Boulevard include a mix of automobile services, restaurants, hotel/accommodations, and retail. To the north of Valley Boulevard, businesses transition to large manufacturing, warehouse, and industrial operations. Buildings owned by Los Angeles County Department of Parks and Recreation are located to the northwest of the I-605/SR-60 interchange and the land is vacant to the southwest of the interchange.

There are four community facilities within the I-605/Valley resource study area (see **Figure 2.2-3**):

- San Gabriel Valley Training: senior citizen center
- Mountain View High School: public school for grades 9 through 12
- El Buen Samaritano Church: religious facility, and
- Church of God of Prophecy: religious facility.

Community Access/Circulation

The project area is located near the intersection of two major regional freeways, I-605 and SR-60. Due to the density of industrial and commercial businesses within the City of Industry, there are three east-west (Crossroads Parkway S, Crossroads Parkway N, and Valley Boulevard) and one north-south (Baldwin Park Boulevard) major roadways, which provide local access and serve as a truck route. Crossroads Parkway S and Crossroads Parkway N, both divided four-lane roadways, provide access to SR-60 for City of Industry. Valley Boulevard, a six-lane roadway (widening to seven lanes near I-605), is primarily a commercial corridor and provides access to I-605. Baldwin Park Boulevard, a four-lane roadway, connects City of Industry to I-10 via Baldwin Park. Additionally, the unincorporated area of Avocado Heights consists of one north-south (Workman Mill Road) major roadway that connects Avocado Heights to the surrounding cities.

The project area's proximity to major transportation corridors characterizes the project area as highly accessible. The project area does not include any public transit facilities. Additional information regarding access and circulation is available in **Section 2.2.9**, Traffic and Transportation/Pedestrian and Bicycle Facilities.

This page is intentionally left blank.

Figure 2.2-3. Community Facilities

This page is intentionally left blank.

Community Cohesion

Within the City of Industry demographic study area, there is a greater percentage of single-family homes (96.1 percent), household members in the same housing unit prior to 2000 (50.8 percent), and owner-occupied housing units (80.8 percent) than the City of Industry (79.8 percent, 24.1 percent, and 17.7 percent, respectively) (United States Census Bureau, 2018). For the demographic study area, three of three indicators that makeup the stability index are higher than the city, which may indicate a higher level of community cohesion for the demographic study area than found in other local communities.

Within the Community of Avocado Heights demographic study area, there is a greater percentage of single-family homes (91.5 percent) and a lower percentage of household members in the same housing unit prior to 2000 (47.4 percent) and owner-occupied housing units (71.5 percent) than the Community of Avocado Heights (87.8 percent, 50.8 percent, and 78.8 percent, respectively) (United States Census Bureau, 2018). For the demographic study area, two of the three indicators that makeup the stability index are lower than the community, which may indicate a lower level of community cohesion for the demographic study area than found in other local communities.

Environmental Consequences

No Build

The No Build Alternative would not result in temporary or permanent impacts on community character and cohesion.

Build Alternative

Temporary Impacts

Construction of the project would require TCEs from two adjacent undeveloped private properties (APN 8564-012-004 and APN 8564-012-003), located north of Valley Boulevard and west of I-605, adjacent to the I-605 southbound on-ramp. Additionally, TCEs would be required from parcels that would be partially acquired as a result of the project. Additional TCEs would include a parcel owned by City of Industry, APN 8564-007-901, and a parcel containing a clothing manufacturing facility, APN 8564-007-008.

Changes to noise levels and air quality could result in changes to the overall quality of life experienced by a community. Changes to quality of life could result in changes to vacancy rates, home values, and other community character indicators. Project construction would result in temporary noise disruptions from construction activities (i.e., transport and use of equipment). During construction, noise from construction activities may intermittently dominate the noise environment in the immediate area of construction. Construction equipment commonly used on roadway construction projects is expected to generate noise levels ranging from 80 to 89 dBA (A-weighted decibel) at a distance of 50 feet. Noise produced by construction equipment would be reduced over distance, at a rate of approximately 6 dB (decibels) per doubling of distance (e.g., if the construction noise level is 80 dBA at a distance of 50 feet from the source, the predicted noise level would be 74 dBA at a distance of 100 feet from the source, and 68 dBA at a distance of 200 feet from the source). Increased noise levels from construction equipment would be short-term and would cease upon completion of the project. Additionally, access to community facilities

and businesses would not be impacted as a result of project construction. The project would result in temporary roadway closures and freeway ramp closures during the nighttime. A Traffic Management Plan (TMP) was developed for the project to minimize potential temporary traffic impacts as a result of project construction. The TMP includes measures (**AVM-TR-1** through **AVM-TR-7**) that would minimize potential temporary impacts on local and regional traffic, as discussed in **Section 2.2.9**, Traffic and Transportation/Pedestrian and Bicycle Facilities. Therefore, project construction would not result in substantial impacts on community character and cohesion.

Permanent Impacts

The Build Alternative would require one highway easement acquisition from a private property along Valley Boulevard (APN 8564-012-004). This property is currently vacant and undeveloped, and its acquisition would not impact any residential or business properties in the project area. Project improvements would also result in right of way impacts to accommodate the widening along Temple Avenue including: 1) a parcel owned by City of Industry (APN 8564-007-901); 2) permanent easements from the UPRR/Metrolink crossing to enhance safety of the railroad crossing (APN 8564-007-800 and 8563-008-800); and 3) a parcel containing a clothing manufacturing facility whose owner has already offered to dedicate the necessary right of way for the widening of Temple Avenue to City of Industry (APN 8564-007-008).

The demographic study area exhibits indicators of strong community cohesion including age, ethnicity, and housing demographics; therefore, populations within the demographic study area could be sensitive to changes in their community. The project would include roadway improvements to an existing transportation facility, that would reduce congestion, alleviate mobility constraints, and enhance safety on the I-605 mainline and at the interchange. Project improvements would improve traffic conditions and traffic circulation entering and existing I-605 from the project area. Project improvements would benefit community access and circulation. Although the project would require partial right of way acquisitions from two parcels, the project would not result in separation of residential areas and community facilities through changes in land use or result in residential displacements within the project area. Therefore, the project is anticipated to improve community character and cohesion within the project area as a result of enhanced traffic circulation and access.

Avoidance, Minimization, and/or Mitigation Measures

The project would not result in impacts that would require avoidance, minimization, and/or mitigation measures for community character and cohesion.

2.2.6 Relocations and Real Property Acquisition

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.

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.

Affected Environment

The study area for assessing effects related to relocation and property acquisition was defined as Census Tracts 4070.02 and 4083.01 for the City of Industry and unincorporated community of Avocado Heights. This study area covers the project and surrounding areas where easements and right of way acquisitions are required for the construction of the Build Alternative. As described previously in **Section 2.2.1**, existing land use in the study area include primarily industrial, commercial, retail, office, transportation, residential, and open space/recreation.

Construction of the Build Alternative will require permanent, temporary construction, maintenance, and highway easements and partial right of way acquisitions (see **Table 2.2-8**). However, the area that will be utilized or acquired for the project will not require relocations of residential or commercial properties.

Table 2.2-8. Easements and Right of Way Acquisitions

APN	Existing Use	Impact Type	Area (square feet)	Relocation
8563-008-800	Railroad	Permanent easement	2,554	No
8564-007-008	Warehouse, unvegetated, paved parking lot	TCE Partial ROW dedication	2,158 4,063	No
8564-007-800	Railroad	Permanent easement	2,888	No
8564-007-901	Unimproved, unpaved fenced lot	TCE Partial ROW acquisition	1,301 2,677	No
8564-012-003	Vacant, vegetated with wild grasses	TCE Maintenance easement	2,925 2,034	No
8564-012-004	Vacant, vegetated with wild grasses	TCE Maintenance easement Highway easement	2,753 2,043 769	No

APN=assessor's parcel number; TCE=temporary construction easement; ROW=right of way

Environmental Consequences

No Build

The No Build Alternative would maintain the existing configuration of I-605 and Valley Boulevard and would not require easements or the acquisition of any right of way.

Build Alternative

Temporary Impacts

The construction of the Build Alternative would require TCEs from three private properties and

one from property owned by the City of Industry. The TCEs would be used for staging and providing a safety zone during the construction. After the completion of construction, the TCE areas would be restored to their original pre-project conditions to the extent feasible (**PF-ROW-1**).

Permanent Impacts

Construction of the Build Alternative would require easements and partial right of way acquisitions to accommodate the widening of Temple Avenue and maintenance of retaining walls (descriptions are below). However, these acquisitions would not displace any businesses or residents as a result of the project. Therefore, there will be no impact to the residential/commercial markets in the area.

Maintenance Easement

Construction of the Build Alternative would require retaining wall maintenance easements to Caltrans along Valley Boulevard from two adjacent undeveloped private properties (APN 8564-012-004 and APN 8564-012-003).

Highway Easement

The project would result in one Caltrans highway easement acquisition along Valley Boulevard from an undeveloped vacant private property (APN 8564-012-004).

Permanent Easement

The widening of Temple Avenue would require two permanent easements from the UPRR/Metrolink to enhance safety of the railroad crossing (APN 8564-007-800 and APN 8563-008-800).

Partial Right of Way Acquisition

Partial right of way acquisition would be required to accommodate the widening of Temple Avenue from a parcel owned by the City of Industry (APN 8564-007-901) and a parcel containing a clothing manufacturing facility whose owner has already offered to dedicate the necessary right of way to the City of Industry (APN 8564-007-008).

Avoidance, Minimization, and/or Mitigation Measures

The project would not result in impacts that would require mitigation measures related to relocations and real property acquisitions. The project would include the following avoidance and minimization measure.

- **AVM-ROW-1:** After project construction is complete, TCEs used for the Build Alternative would be restored to their original pre-project conditions to the extent feasible.

2.2.7 Environmental Justice

Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 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 EO 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 2019, this was $25,750 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.

Affected Environment

Minority and low-income populations are identified by analyzing the demographic and economic characteristics of the affected area and comparing those to the characteristics of the larger community. For purposes of this analysis, the most recent data from the U.S. Census Bureau American Community Survey 2013-2017 was used. Census block groups are subdivisions of census tracts and are the smallest geographic units that the U.S. Census Bureau collets data on. Census block groups generally have a population size of between 600 and 3,000 people. Potential impacts that could result from proposed construction and project operations were considered when determining the extent of the population considered to be an environmental justice population. The environmental justice population for this project is composed of three census block groups within two census tracts (see **Table 2.2-9**).

Table 2.2-9. Summary of Minority and Low-Income Population by Block Group

State/County/Census Tract/Census Block Group	Total Population	Percent Minority[a]	Median Household Income[b]
Block Group 2, Census Tract 4070.02	1,428	98	$69,479
Block Group 1, Census Tract 4083.01	4,842	96	$64,018
Block Group 2, Census Tract 4083.01	925	100	$75,156
Total Population of Census Block Groups	7,195		
Los Angeles County	10,105,722	71	$55,322
U.S. Department of Health and Human Services' 2019 Poverty Guidelines (4-Person Family)			$25,750
California Department of Housing and Community Development 2019 State Income Limits for Los Angeles County (4-Person Family, Very Low)-			$52,200

Source: DP03, DP05, B03002, and B19013, U.S. Census Bureau 2018; United States Department of Health and Human Services, 2019; California Department of Housing and Community Development, 2019

[a] Percent Minority refers to racial minorities who self-identify as members of the following population groups: American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander, or Black or African American; and ethnic minorities who self-identify as Hispanic or Latino. Percent minority was calculated by adding the number of individuals who self-identify as Not Hispanic or Latino and American Indian or Alaska Native, Asian, Native Hawaiian or Pacific Islander, or Black or African American with the number of individuals who self-identify as Hispanic or Latino in the 2013-2017 American Community Survey (5 Year Estimates).

[b] Low-Income Populations were identified by comparing the median household income for each census block group in the 2013-2017 American Community Survey (5 Year Estimates) to the very low income threshold for a household family of four ($52,200) (California Department of Housing and Community Development 2019).

Minority Populations

U.S. DOT Order 5610.2(a) defines a minority as a person who is a member of the following population groups: Black, Hispanic or Latino, Asian American, American Indian and Alaskan Native, and Native Hawaiian and Other Pacific Islander. The U.S. Census Bureau data used for this report lists the following race categories: White, Black/African American, American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, Some Other Race (i.e., any race not included in the aforementioned race categories), and Two or More Races. According to the U.S. Census Bureau, Hispanic or Latino is an ethnicity, not a race. As such, individuals who self-identify as Hispanic or Latino in the U.S. Census also may self-identify as a member of any of the U.S. Census Bureau's race categories.

U.S. DOT Order 5610.2(a) defines "minority population" to mean "any readily identifiable groups of minority persons who live in geographic proximity, and if circumstances warrant, geographically dispersed [persons] who will be similarly affected by a proposed DOT program, policy or activity." Minority populations were identified where either:

- the minority population of the affected area exceeds 50 percent, or
- the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis" (Council on Environmental Quality, 1997).

For purposes of this analysis, Los Angeles County was the community of comparison, and meaningfully greater was conservatively defined as any census block group within the project study area with a minority population that is 5 percent or greater than that of Los Angeles County.

Table 2.2-9 compares the demographics of Los Angeles County and the census block groups within the project study area. According to the 2013-2017 American Community Survey 5-year Estimates data, when racial minority groups are combined with the Hispanic or Latino population, the total minority population of Los Angeles County is 71 percent, which combines ethic and racial minorities.

Approximately 97 percent of the total population within the three selected census block groups identify as belonging to a minority race or ethnicity. All three individual census block groups had meaningfully greater percentages of minority populations (98 percent, 96 percent, and 100 percent) than Los Angeles County (71 percent). Therefore, all three census block groups have a high percentage of minority populations and are environmental justice populations protected under EO 12898.

Low Income Populations

U.S. DOT Order 5610.2(a) defines low income as "any individual whose median household income is at or below the U.S. Department of Health and Human Services poverty guidelines." U.S. DOT Order 5610.2(a) defines a "low income population" as "any readily identifiable group of low-income persons who live in geographic proximity, and, if circumstances warrant, geographically dispersed/transient persons (e.g., migrant workers or Native Americans) who would be similarly affected by a proposed U.S. DOT program, policy, or activity."

The most current poverty guidelines, U.S. Department of Health and Human Services' 2019

Poverty Guidelines for the 48 Contiguous States and the District of Columbia identify the poverty level for a family or household of four as having an income of $25,750 or less. A household includes all persons occupying a housing unit. This threshold provides a national measurement of income; it has not been adjusted for the higher cost of living in Los Angeles County or California. In addition, federal and state low-income programs may have income eligibility requirements that are much greater than that of the poverty guidelines.

In some instances, it may be appropriate for agencies to select a threshold for identifying low-income populations that exceeds the poverty level (Federal Interagency Working group on Environmental Justice and NEPA Committee, 2016). Given the higher standard of living in Los Angeles County, the California Department of Housing and Community Development's 2019 State Income Limits for Los Angeles County was used to identify low income populations for purposes of this analysis.

The 2019 State Limits are used to determine eligibility for designated programs, including state and local affordable housing programs, subject to program requirements and additional factors. The very low limit typically reflects 50 percent of the median family income; however, it may be adjusted for an area or county to account for conditions that warrant special considerations. The very low-income limit is also used as the basis to calculate income limits for all of the other income categories (California Department of Housing and Community Development, 2019). According to the 2019 State Income Limits, the very low-income limit for a household of four in Los Angeles County was $52,200. This limit was used to identify low-income populations for purposes of this analysis. All three census block group populations have median household incomes that surpass the Los Angeles County median household income ($55,322), the United States Department of Health and Human Services Poverty Guideline for a family of four ($25,750), and the California Department of Housing and Community Development "Very Low" Los Angeles County income limit ($52,200). Therefore, no low-income populations within the project study area would qualify as low-income populations using this threshold.

Environmental Consequences

No Build

The No Build Alternative would maintain the existing configuration of I-605 and Valley Boulevard and there would be no temporary or permanent impacts on minority or low-income populations under the No Build Alternative. Therefore, the No Build Alternative would not result in temporary or permanent impacts to environmental justice populations.

Build Alternative

Temporary Impacts

The project would include physical improvements to existing roadways, on- and off-ramps, and sidewalks in the project area. Temporary noise, visual, and air quality impacts would affect residents within the project area during construction. These temporary impacts would be distributed throughout the project area and would affect all census block groups, regardless of demographic or socioeconomic characteristics. Any temporary impacts resulting from project construction would not surpass the project construction period and post-construction conditions would be similar to existing conditions. Avoidance and minimization measures would be

implemented as part of the project to avoid and minimize potential impacts on surrounding communities during project construction, including **AVM-ROW-1**, **AVM-UT-1** through **AVM-UT-3**, **AVM-ES-1**, and **AVM-TR-1** through **AVM-TR-7**. Therefore, the proposed construction activities would not have a disproportionately high and adverse effect on any minority or low-income population.

Permanent Impacts

The project is not anticipated to result in significant impacts on the human or physical environment as discussed in **Section 2.1**, Human Environment, and **Section 2.2**, Physical Environment. Project improvements would benefit nearby communities and commuters, including minority and low-income populations by easing congestion, improving freeway operations (mainline and ramps) and improving mobility and travel times, improving and enhancing safety, and improving local and system interchange operations and connectivity. As such, the project could ultimately improve access to jobs and community services. These benefits would be shared by all communities within the project area.

There are minority populations and no low-income populations present within the project study area. However, the project would not cause disproportionately high and adverse effects on any minority population in accordance with the provisions of EO 12898. Additionally, the project would have beneficial effects on the surrounding communities, when compared to existing conditions. Overall, the project would result in a fair distribution of the beneficial and adverse effects of the project as all members of the public, including those within the project study area would benefit from improvements proposed under the Build Alternative. Minority populations would not be denied benefits or receive fewer benefits than the general population. Therefore, the project would not cause disproportionately high and adverse effects on any minority or low-income population in accordance with the provisions of Executive Order 12898.

Avoidance, Minimization, and/or Mitigation Measures

Based on the above discussion and analysis, the Build Alternative will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of EO 12898 and no further environmental justice analysis is required. No additional avoidance, minimization, and/or mitigation measures are required.

2.2.8 Utilities/Emergency Services

Affected Environment

Utilities

Existing utilities and service systems located within the project area have been identified by the Preliminary Utility Impact Report (California Department of Transportation, 2019), with data from the I-605 CIP Final Utility Impact Report dated January 22, 2019, as shown in **Table 2.2-10**.

Table 2.2-10. Potential Utility Owner List

Utility Owner	Type of Utility	Utility Ownership	Total Lines	Distribution Lines	Transmission Lines
Frontier	Telecommunications	Private	1	1	0

Table 2.2-10. Potential Utility Owner List

Utility Owner	Type of Utility	Utility Ownership	Total Lines	Distribution Lines	Transmission Lines
LA County Public Works	Water and Sewer	Public	5	5	0
LA County Sanitation District	Sewer	Public	1	0	1
LADWP – Electric Transmission	Electrical	Public	1	0	1
Level 3 Communications	Telecommunications	Private	1	0	1
SGVWC	Water	Private	9	8	1
SCE - Distribution	Electrical	Private	9	9	0
SCE - Transmission	Electrical	Private	2	0	2
SoCal Gas	Natural Gas Pipeline	Private	6	6	0
Sprint	Telecommunications	Private	1	0	1
Suburban Water Systems	Water	Private	1	1	0
TWC - SFS	Telecommunications	Private	2	2	0

Source: (California Department of Transportation, 2019)

LA = Los Angeles; LADWP = Los Angeles Department of Water and Power; SGVWC = San Gabriel Valley Water Company; SCE = Southern California Edison; TWC = Time Warner Cable

Utilities and service systems crossing or adjacent to the project area include underground and overhead power transmission and distribution lines, as well as natural gas, water, sewer, and telecommunication lines. The project area currently includes a total of 48 distribution lines involving seven utility owners. **Table 2.2-11** lists the current identified owners of utilities that are located within the project area.

Table 2.2-11. Existing Local Distribution Facilities

Utility Owner	Type of Utility	Utility Ownership	Distribution Lines
Frontier	Telecommunications	Private	1
Los Angeles County Public Works	Water and Sewer	Public	5
San Gabriel Valley Water Company	Water	Private	8
Southern California Edison - Distribution	Electrical	Private	9
SoCal Gas	Natural Gas Pipeline	Private	6
Suburban Water Systems	Water	Private	1
Time Warner Cable - SFS	Telecommunications	Private	2

Source: Preliminary Utility Impact Report, 2019

The project area includes a total of six regional transmission lines involving five utility owners, as shown in **Table 2.2-12**. Regional transmission facilities provide utility services to the local

distribution owners.

Table 2.2-12. Existing Regional Transmission Facilities

Utility Owner	Type of Utility	Utility Ownership	Transmission Lines
Los Angeles County Sanitation District	Sewer	Public	1
Los Angeles Department of Water and Power – Electric Transmission	Electrical	Public	1
Level 3 Communications	Telecommunications	Private	1
San Gabriel Valley Water Company	Water	Private	1
Southern California Edison - Transmission	Electrical	Private	2
Sprint	Telecommunications	Private	1

Source: Preliminary Utility Impact Report, 2019

Emergency Services

Emergency services, including fire and medical services, for the City of Industry and unincorporated Los Angeles County are provided by the Los Angeles County Fire Department (LACFD). The nearest station to the project area is Fire Station 87, located at 140 South Second Avenue, approximately 0.9 of a mile east of the project area. However, the project area is surrounded by four LACFD fire stations from the neighboring cities of El Monte, South El Monte, and unincorporated Los Angeles County, including Fire Station 26, located at 15336 Elliott Avenue, approximately 4.1 miles east of the project area; Fire Station 90, located at 10115 Rush Street, approximately 3.3 miles west of the project area; Fire Station 168, located at 3207 Cogswell Road, approximately 1.2 miles north of the project area; and Fire Station 167, located at 11567 Bryant Road, approximately 2.5 miles north of the project area.

Police services for the City of Industry and unincorporated Los Angeles County are provided by the Los Angeles County Sheriff's Department (LACSD). The project area is served by the LACSD's Industry Station, located at 150 North Hudson Avenue, approximately 3.6 miles southeast of the project area. However, the project area is surrounded by three police stations from neighboring cities, including the City of El Monte Police Department, located 11333 Valley Boulevard, approximately 2.1 miles northwest of the project area; the City of Baldwin Park Police Department, located at 14403 Pacific Avenue, approximately 4 miles northeast of the project area; and the City of West Covina Police Department, located at 1444 West Garvey Avenue, approximately 4.7 miles northeast of the project area.

Environmental Consequences

No Build

The No Build Alternative would not result in temporary or permanent impacts on existing utilities and service systems or emergency services.

Build Alternative

According to the Preliminary Utility Impact Report, each utility location within the project limits has been evaluated for potential conflicts with the proposed improvements. Utility conflict criterion is

based upon the policies of Caltrans and each specific utility owner. Caltrans has encroachment policy criterion that defines the allowable angle of a utility facility when crossing State right of way, the need for encasement of underground facilities that encroach within the State right of way and whether or not a utility facility can encroach within the State right of way. Additionally, utility owner criterion typically defines clearances from their facilities in vertical and horizontal terms based on access for maintenance and repair (California Department of Transportation, 2019).

Proposed utility relocations are based on actual conflicts determined from available data and not by perceived encroachment into clearance envelopes. The outcome of the evaluations was classified with each one placed in a category as follows:

- Protect in Place - Existing utility facility is to remain in place during construction and the contractor to take action to avoid damage such as installing temporary markings.
- To Abandon – Existing utility facility to be taken out of service and remain in place.
- Add Protection – Existing utility facility is to remain in place during construction with permanent added protection such as extending casings beyond existing casing ends.
- Permanent Relocation – Existing utility facility is to be removed and a new replacement facility is to be placed in a new location to accommodate the proposed improvements (possibly on the same horizontal or vertical alignment as existing but offset up/down or to the one side).
- Temporary Relocation – Existing utility facility must be placed into a temporary position to allow for construction activities and then moved a second time into the permanent location. *If a line is relocated temporarily, it will also be relocated permanently.* For example, a line being moved from an existing bridge to a temporary alignment to allow bridge demolition and new construction will then move a second time to a permanent location in the replacement bridge. Replacement of the Obregon Street, Beverly Boulevard, and Rose Hills Road bridges over I-605 may require temporary relocations (also at Rivera Road under I-605 due to utility configuration).

Temporary Impacts

Utilities

Temporary impacts to local distribution facilities would include the temporary relocation of one Southern California Edison (SCE) underground (UG) power line located adjacent to the westbound lanes of Valley Boulevard. This UG power line would conflict with proposed retaining wall within the project area. Additionally, one fire hydrant located along Temple Avenue would need to be relocated in addition to a 6 inch waterline along Valley Boulevard in front of the SF Wheel & Tire and ASAP Towing properties, due to the proposed storm drain facilities. Shallow facilities in conflict with roadway excavation activities could be maintained in place with concrete protection slabs. Additionally, positive location potholing would be used during the final design phase to position traffic signals and overhead signs that require piled foundations. With the implementation of **AVM-UT-1** through **AVM-UT-3**, Caltrans and Metro would coordinate with the utility owners/operators as the design progresses to minimize the disruption to any utility service to ensure that project improvements would not adversely affect customer service or utility operations during relocation.

The project would not result in temporary impacts to any regional transmission facilities located within the project area.

Emergency Services

The Build Alternative would not result in the partial acquisition or TCE from any Emergency Service facility within 500 feet of the project area. Project construction would involve construction activities that would require nearby temporary lane closures, ramp closures, rerouting of traffic, and other activities. Construction activities could result in traffic delays that could affect the ability of fire, law enforcement, and emergency service providers to meet response-time goals. However, the affected emergency service response times associated with construction would be temporary, and detour routes would be provided. In addition, with implementation of **AVM-ES-1**, Caltrans and Metro would coordinate with local emergency providers and communicate with the surrounding community prior to construction to minimize construction-related impacts. Medical emergencies that are not fire-related could temporarily increase with the presence of construction workers and heavy machinery during construction of the project, due to the risk of construction site accidents.

Permanent Impacts

Utilities

The project would permanently impact one Southern California (SoCal) Gas Company 6-inch/ 8-inch distribution line located at the intersection of Temple Avenue and the UPRR/Metrolink railroad crossing. The distribution line would be permanently relocated because of its conflict with the proposed railroad crossing signal foundations at Temple Avenue. One fire hydrant located along Temple Avenue would need to be relocated, in addition to a 6 inch waterline along Valley Boulevard in front of the SF Wheel & Tire and ASAP Towing properties, due to the proposed storm drain facilities. However, in general, roadway pavement reconstruction is at or above original grade and permanent impacts to existing facilities are not anticipated. With the implementation of **AVM-UT-1** through **AVM-UT-3**, Caltrans and Metro would coordinate with the utility owners/operators as the design progresses to minimize the disruption to any utility service to ensure that project improvements would not adversely affect customer service or utility operations during relocation.

The project would not result in permanent impacts to any regional transmission facilities located within the project area.

Emergency Services

Operation of the project would help reduce congestion, alleviate mobility constraints, and enhance safety on the mainline and at the interchange in the project area. The Build Alternative would enhance traffic circulation and could thereby reduce emergency response times. The project is not expected to increase crime rates requiring an increased need of law enforcement and fire protection services in the resource study area.

The project is an improvement of an existing transportation facility, does not propose new land use types, and would not involve development of new housing units that would foster population growth or bring crime to the area. In addition, the Build Alternative would not include construction of a new infrastructure facility (e.g. park and ride lot), which is often associated with increased

crime rates. Access to hospitals and medical facilities and services in the project area would be generally improved after completion of construction.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures would be implemented for the project.

Utilities

- **AVM-UT-1**: Prior to construction, Caltrans and Metro would coordinate with the utility owner/operator if any disruptions to utility service during relocations would be scheduled to ensure that relocations would not adversely affect customer service or utility operations.
- **AVM-UT-2**: Prior to final design, Caltrans and Metro would coordinate with impacted utility owners to ensure all utilities are accurately identified and provide feedback on the conceptual relocation designs where applicable.
- **AVM-UT-3**: Prior to final design, Caltrans and Metro would ensure relocation of existing utilities would comply to the maximum extent feasible with Caltrans' standards and policies related to encroachments into State right of way.

Emergency Services

- **AVM-ES-1**: Prior to construction, coordination with local emergency service providers and communication with the surrounding community would be conducted by Caltrans and Metro to minimize impacts during construction.

2.2.9 Traffic and Transportation/Pedestrian and Bicycle Facilities

A Traffic Operations Analysis Report (TOAR) and a Transportation Management Plan (TMP) were completed for the project in December 2019 and June 2019, respectively. The reports support the discussion included below.

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.

Affected Environment

Traffic Counts

Traffic counts were conducted in the project area on Thursday, February 7, 2019 from 6:30 to 9:30 a.m. and from 3:30 to 6:30 p.m. In addition, 24-hour average daily traffic (ADT) counts were collected at the six I-605/Valley Boulevard interchange ramps on Thursday, February 7, 2019.

According to the TOAR, all freeway general purpose and HOV lane segments, as well as all freeway ramp junctions, in the study area are currently operating at level of service (LOS) D or better during all peak hours , except for the I-605 northbound weave segment between the Valley Boulevard direct on-ramp and the I-10 off-ramp where the general purpose lane operates at LOS E or worse during both a.m. and p.m. peak hours and the I-605 southbound weave segment between the I-10 on-ramp and the Valley Boulevard loop off-ramp where the general purpose lane operates at LOS F during both AM and PM peak hours. Additionally, all intersections in the study area are currently operating at LOS D or better, except I-605 southbound and Valley Boulevard during the p.m. peak hour; I-605 northbound ramps/Temple Avenue and Valley Boulevard, during both a.m. and p.m. peak hours; and Temple Avenue and Railroad Avenue, during both a.m. and p.m. peak hours, all of which are currently operating at LOS E or worse.

Accident Analysis

An analysis of the freeway mainline and ramp collision history was performed using the Caltrans Traffic Accident Surveillance and Analysis System (TASAS) database. All the freeway mainline segments, analyzed within the study area, show greater accident rates than the statewide average accident rates. In addition, both the northbound and southbound freeway mainline segments north of the Valley Boulevard interchange show actual fatal accident rates greater than the statewide average fatal accident rates. The results show the actual total accident rates ranging from about 30 percent to about 74 percent higher than the total statewide average accident rate for the freeway mainline segments. Additionally, four of the eight freeway ramp segments analyzed have actual accident rates greater than the statewide average for similar facilities.

The data shows that about 45 percent of the freeway mainline collisions occurred in the interior lanes, with most of the remaining collisions taking place in the right and left lanes. The predominant types of collisions were rear ends, accounting for about 60 percent of the total, followed by sideswipes which accounted for about 30 percent of the total accidents. The primary collision factor was speeding, which accounted for over 50 percent of the total accidents. The location, type, and primary collision factors of the reported accidents are considered congestion related and are predominantly due to stop-and-go traffic and the formation of vehicular queues.

City of Industry

Freeways and Major Roadways

I-605 and SR-60 pass through portions of the City of Industry, providing residents a connection to the rest of the region. According to the City of Industry General Plan Circulation Element, the City of Industry proposed to add a truck-bypass route along the San Jose Creek (City of Industry, 2014). There are three east-west (Crossroads Parkway S, Crossroads Parkway N, and Valley Boulevard) and one north-south (Baldwin Park Boulevard) major roadways in City of Industry,

which provide local access and serve as a truck route because of the density of industrial and commercial businesses within the city.

Crossroads Parkway S and Crossroads Parkway N, both divided four-lane roadways, provide access to SR-60 for the City of Industry. Valley Boulevard, a divided six-lane roadway (widening to seven lanes near I-605), is primarily a commercial corridor and provides access to I-605. Baldwin Park Boulevard, a divided four-lane roadway, connects City of Industry to I-10 via Baldwin Park.

Parking

The City of Industry is primarily an industrial area; 95 percent of the City of Industry's roadways are built out to accommodate trucks (City of Industry, 2014).

Bicycle, Pedestrian, and Equestrian Facilities

The City of Industry has limited opportunities to accommodate shared on-street bicycle travel because of the high level of heavy trucks utilizing the roadways for the transport of goods. There is limited pedestrian travel; therefore, multipurpose sidewalks are the primary path for bicycle travel (City of Industry, 2014). Segments of the San Gabriel River Trail and San Jose Creek Trail are within city boundaries.

Unincorporated Los Angeles County – Avocado Heights

Freeways and Major Roadways

Avocado Heights is transected by I-605 and SR-60. There is one north-south (Workman Mill Road) major roadway that connects Avocado Heights to the surrounding cities. Workman Mill Road continues as a divided four-lane roadway through Avocado Heights.

Parking

There are no park-and-ride facilities in the unincorporated area of Avocado Heights within the resource study area and on-street parking is limited.

Bicycle, Pedestrian, and Equestrian Facilities

A portion of the San Jose Creek Trail passes through the community of Avocado Heights. The Avocado Heights Trail connects to the San Jose Creek Trail and is in an equestrian community within the unincorporated area of Avocado Heights. The Avocado Heights Trail is approximately 3.5 miles of decomposed granite and is primarily available for equestrian use, but it can be utilized by bicycles and pedestrians (Los Angeles County, 2015).

Environmental Consequences

No Build

Under the No Build Alternative, project related improvements would not be constructed within the project area. Traffic congestion would continue to increase, and mobility and safety constraints in the project area would remain the same. The No Build Alternative would not result in impacts to parking and bicycle, pedestrian, and equestrian facilities.

Build Alternative

Temporary Impacts

Construction Staging

The Build Alternative would require construction staging strategies to help minimize delays and congestion associated with project construction activities. Construction staging for the Build Alternative would be divided into five general stages, as described in **Table 2.2-13**.

Table 2.2-13. Construction Staging

Construction Stage	Proposed Construction Activities
1	**Northbound I-605 Sound Wall** • During a nighttime freeway lane closure, restripe northbound I-605 approaching the off-ramp to Valley Blvd and set K-rail along the outside edge of the freeway to create a work zone on the shoulder. Maintain off-ramp traffic flow. • Construct sound wall on concrete barrier and associated drainage modifications at edge of northbound I-605 shoulder. **Northbound Off-Ramp** • During a nighttime ramp closure, restripe the off-ramp to shift traffic onto the right shoulder while maintaining the existing number of ramp lanes and set temporary railing (K-rail) along the left edge of the ramp. • Construct left side widening hot mix asphalt (HMA pavement). • During a 55-hour weekend ramp closure construct Portland cement concrete PCC ramp terminus using rapid set concrete (RSC), slurry seal the existing ramp pavement and stripe the off-ramp to its final configuration
2	**Temple Avenue** • During a nighttime closure, restripe southbound Temple Avenue to shift traffic to the inside of the roadway while maintaining the existing number of lanes, and set K-rail along the right side of the roadway. • Construct southbound outside widening (HMA pavement and curbs) and around right turn up along part of northbound on-ramp. Work will be completed with no disruption to Metrolink and Union Pacific Railroad (UPRR) rail traffic. • During a nighttime closure, remove K-rail and shift southbound Temple Avenue traffic to the outside using the widened pavement to allow closing the inside southbound lane along the median. • During a 55-hour weekend closure, close the inside northbound lane next to the median leaving one lane for northbound Temple Avenue traffic. Construct the median curbs, stamped median concrete, and railroad gates. Work will be completed with no disruption to Metrolink and UPRR rail traffic. • During a 55-hour weekend closure of Temple Avenue, carry out pavement rehabilitation (cold plane and overlay), curb return/pedestrian ramp work and construct the median to the northbound on-ramp and stripe Temple Avenue to its final configuration.

Table 2.2-13. Construction Staging

Construction Stage	Proposed Construction Activities
3A	**Southbound On-Ramp** • During a nighttime ramp closure, restripe southbound "horseshoe" on-ramp to one lane and set K-rail along the left side of the on-ramp. During two nighttime freeway lane closures, restripe southbound I-605 at the on-ramp to shift traffic towards the inside while maintaining the existing number of freeway lanes and set K-rail along the outside edge of the freeway to create a work zone in the on-ramp gore area. Construct temporary HMA pavement at the connection to I-605 as needed to detour and maintain one lane of traffic for the existing "horseshoe" and southbound on-ramps. • During a nighttime ramp closure, construct RSC pavement at connection to freeway as needed to detour and maintain one lane of traffic for the existing "horseshoe" and southbound on-ramps. • During the closure, move K-rail and shift the traffic from the "horseshoe" and eastbound Valley on-ramps onto the temporary pavement and newly constructed gore concrete pavement to allow closing the right side of the ramp. • Construct PCC pavement along the right side at the gore and convergence taper and HMA pavement along the middle stretch of on-ramp while eastbound Valley on-ramp is shifted towards southbound loop off-ramp. Construct outside retaining walls. • During a nighttime ramp closure of southbound on-ramp and southbound off-ramps, restripe the ramp to shift traffic into the right shoulder while maintaining the existing number of lanes and set K-rail along the left edge of the ramps. • Construct remaining HMA pavement at top of on-ramp, the additional left lane of the southbound loop off-ramp and the concrete barrier between the two ramps. • When southbound on-ramp is completed, the existing "horseshoe" on-ramp can be closed at the connection to Valley Boulevard, with traffic accessing the on-ramp from the new Valley Boulevard intersection.
3B	**Southbound Off-Ramp** • Note that the widening of the left side of this ramp was started with Stage 3A Southbound on-ramp. • During the nighttime ramp closure applied in Stage 3A, with traffic shifted to the right side, complete the left side HMA paving and concrete barrier. • During a nighttime ramp closure, restripe the off-ramp to shift traffic to the left while maintaining the existing number of lanes and set K-rail along the right edge of the ramp. • Construct right-side widening (HMA pavement). • During a 55-hour weekend ramp closure construct PCC ramp terminus using RSC, complete any remaining edge of ramp items, slurry seal the existing ramp pavement, and stripe the off-ramp to its final configuration.
4	**Eastbound Valley Boulevard Outside Widening and Northbound Loop On-Ramp** • During a nighttime closure, restripe eastbound Valley Boulevard to shift traffic to the inside of the roadway while maintaining the existing number of lanes and set K-rail along the right side of the roadway. Maintain connections with southbound loop off-ramp and northbound loop on-ramp. • Construct the retaining wall along the south abutment of the I-605 bridge structure, eastbound Valley Boulevard sidewalk behind bridge columns, bridge column concrete barriers, and Valley Boulevard outside pavement widening. • During a 55-hour weekend ramp closure, reconstruct the northbound loop on-ramp.

Table 2.2-13. Construction Staging

Construction Stage	Proposed Construction Activities
	Westbound Valley Boulevard Outside Widening • During a nighttime closure, restripe westbound Valley Boulevard to shift traffic to the inside of the roadway while maintaining the existing number of lanes and set K-rail along the right side of the roadway. Maintain connection to northbound on-ramp. Note, the "Horseshoe" ramp is no longer in operation. • Construct Valley Boulevard outside pavement widening, bridge column concrete barriers, short retaining wall west of I-605 and grading to allow realigning of the northbound on-ramp. **Eastbound and Westbound Valley Boulevard Inside Widening** • During a nighttime closure, remove K-rail, restripe eastbound and westbound Valley Boulevard and shift traffic to the outside using the widened pavement to allow closing the inside median area. Set K-rail along the inside edge of pavement. • Remove existing raised medians and replace with HMA pavement and concrete barriers at median bridge columns. Construct median curbs and stamped concrete at River Bridge approach. • During several nighttime lane closures along Valley Boulevard, carry out pavement rehab and stripe Valley Boulevard to its final configuration
5	**Northbound On-Ramp (after closure of Southbound "Horseshoe" Connector)** • During a nighttime ramp closure, restripe the on-ramp to shift traffic to the right into the right shoulder while maintaining the existing number of ramp lanes and set K-rail along the left edge of the ramp. During a nighttime lane closure of westbound Valley Boulevard, set K-rail along right edge shoulder of westbound Valley Boulevard to create a work zone for the on-ramp gore area. • Construct realigned on-ramp HMA pavement and contrasting paving to join outside shoulder of westbound Valley Boulevard. • Under a 55-hour ramp closure, reconstruct the on-ramp connection to the existing bridge structure, and the on-ramp at connection to Temple Avenue. Stripe on-ramp to its final configuration.

Construction Strategies

Additionally, the Build Alternative would implement the following construction strategies to help minimize delays and congestion in the project area during construction activities:

- **Stage Construction/Traffic Handling Plans:** A draft of the stage construction plans will be prepared for the project to show the sequence of construction activities and traffic handling through the work zone.
- **Lane Modifications:** Lane modifications can be implemented to maintain the existing number of highway lanes to the extent possible. These modifications would include reduced lane widths to maintain number of lanes (11-foot minimum), reduced shoulder width to maintain number of lanes, shoulder closures to provide worker safety, and lane shift to shoulder or median to maintain number of lanes.
- **Ramp Closures/Relocation:** To allow room for ramp improvements or widening, the project would require partial or full closure of some freeway ramps in the project area. In some instances, freeway ramps would remain open while the number of the lanes at the ramp may be reduced due to construction. In other instances, a closure will occur overnight or short-term

(extended weekend: 55-hours). During the overnight and short-term closure of these ramps, alternative routes will be provided to motorists.

- Additional Construction Strategies:
  - Night Work to minimize impacts on motorists and adjacent businesses.
  - Maintain business access where local street improvements are proposed.
  - Incentive/Disincentive Clauses to ensure that the contractor complies with schedule milestones, closure hours, and lane requirements. A payment or penalty would be incorporated to encourage the contractor to stay on schedule while minimizing impacts to the traveling public and maintaining safety standards.
  - Innovative Construction Techniques would be considered to reduce impact to the public during closures, such as the use of rapid strength concrete for pavement, and precast concrete slabs for work on the "Duck Farm" undercrossing structure at the southbound on-ramp.
  - Railroad Crossing Controls would be considered for enhancement when a crossing is located within a work zone such as Temple Avenue near Valley Boulevard which crosses with UPRR and Southern California Regional Rail Authority rail lines.

Detour Routes

Construction activities would require closures of freeway ramps during nighttime. Detour routes utilizing alternate freeway interchanges and local streets would be required during full ramp closures to route traffic around the ramp. The detour routes would be identified, coordinated and approved by Caltrans and the affected local agencies prior to the closure. Additionally, emergency providers and police departments would be notified in advance about the detour routes and the planned closures.

Permanent Impacts

According to the TOAR, the proposed improvements would significantly reduce the average vehicular delay at the study intersections and predominantly provide adequate storage to accommodate queues, thus easing congestion and enhancing mobility. In addition, the potential for the spill back of vehicular queues from the off-ramp terminus intersections to the freeway would be minimized.

Opening Year (2024)

Under the Build Alternative, all of the basic freeway general purpose lane segments are anticipated to operate at LOS D during the weekday a.m. and p.m. peak hours, except for southbound I-605, south of the Valley Boulevard on-ramp, which is anticipated to operate at LOS E during the weekday a.m. peak hour. Additionally, all of the HOV lane segments are anticipated to operate at LOS D or better during the weekday a.m. and p.m. peak hours, and all of the general-purpose lane weaving segments are anticipated to operate at LOS F during all peak hours. All of the freeway ramp junctions are anticipated to operate at LOS D or better during the weekday a.m. and p.m. peak hours, except for the I-605 northbound Valley Boulevard off-ramp, which is anticipated to operate at LOS E during the weekday a.m. and p.m. peak hours. All study

intersections are anticipated to operate at LOS B or better except for the two intersections along Valley Boulevard.

Design Year (2044)

Under the Build Alternative, all of the freeway segments in the study area are anticipated to operate at LOS D or better during the design year (2044), except for the I-605 northbound general purpose freeway segment south of the Valley Boulevard off-ramp (LOS E during a.m. and p.m. peak hours), the I-605 northbound HOV lane segment south of the Valley Boulevard off-ramp (LOS E during p.m. peak hours), the I-605 southbound general purpose freeway segment between the Valley Boulevard loop off-ramp and the Valley Boulevard on-ramp (LOS E during a.m. peak hours), the HOV lane segment between the Valley Boulevard loop off-ramp and the Valley Boulevard on-ramp (LOS E during a.m. peak hours), the general purpose freeway segment south of the Valley Boulevard on-ramp (LOS F during a.m. and LOS E during p.m. peak hours), and the HOV lane segment south of the Valley Boulevard on-ramp (LOS E during a.m. peak hours). The general purpose lanes along the freeway weave segments are anticipated to operate at LOS F during both the a.m. and p.m. peak hours and the HOV lane segments are anticipated to operate at LOS E in the southbound direction during the a.m. peak hour and in the northbound direction during the p.m. peak hour. Additionally, all freeway ramp junctions are anticipated to operate at LOS D or better during all peak hours, except for the I-605 northbound Valley Boulevard off-ramp (LOS E during a.m. and p.m. peak hours), and the I-605 southbound Valley Boulevard on-ramp (LOS E during a.m. peak hours).

Intersections are anticipated to operate at LOS B or better except for the I-605 southbound ramps and Valley Boulevard (LOS F during a.m. and p.m. peak hours), and the I-605 northbound ramps/Temple Avenue and Valley Boulevard (LOS F during a.m. and p.m. peak hours).

Freeways and Major Roadways

To reduce existing and future congestion, the Build Alternative would include lane and on- and off-ramp reconfiguration at the I-605 and Valley Boulevard interchange. The proposed project would improve traffic operations at the I-605/Valley Boulevard interchange; alleviate mobility constraints; and enhance overall safety, thus providing long-term benefits for the surrounding communities. Therefore, the Build Alternative is expected to address operational deficiencies and result in traffic flow improvements on the arterial roadways and local/system interchanges.

Parking

Street parking is currently not allowed on Valley Boulevard or Temple Avenue within the project area. Therefore, implementation of the project would not affect current conditions related to parking.

Bicycle, Pedestrian, and Equestrian Facilities

The Build Alternative would not impede pedestrian, bicycle, or equestrian access to existing facilities. The existing shared-use paths would not be relocated or removed.

Within the project area, the project proposes to upgrade pedestrian curb ramps and pedestrian signals to comply with Caltrans Standard Plans, the Caltrans Highway Design Manual with respect to Complete Streets, the Design Information Bulletin 82-06 "Pedestrian Accessibility

Guidelines for Highway Projects," and the Public Right of Way Accessibility Guidelines as they specifically relate to sidewalk widths and slopes, directional and blended pedestrian ramps for single and dual crosswalks, signage, and visibility. Therefore, the project would be compliant with ADA requirements.

Avoidance, Minimization, and/or Mitigation Measures

- **AVM-TR-1**: Prior to construction, Caltrans and Metro will implement an effective Traffic Management Plan, that would include the following elements:
    - Construction staging plans
    - Public awareness campaign
    - Analysis of impacts to traffic
    - Options for lane closures
    - Alternate route strategies
- **AVM-TR-2**: Prior to construction, Caltrans and Metro will coordinate with local agencies including municipalities, emergency services, and law enforcement on road and freeway closures, and traffic detours to minimize disruptions to access, circulation, and parking.
- **AVM-TR-3**: Prior to construction, Caltrans and Metro will stagger the closure of consecutive on/off ramps.
- **AVM-TR-4**: Prior to construction, Caltrans and Metro will coordinate with local municipalities and County of Los Angeles to adjust signal timing on arterial streets during construction to minimize traffic congestion.
- **AVM-TR-5**: Prior to construction, Caltrans and Metro will provide detour routes for temporary closure of shared-use paths.
- **AVM-TR-6**: Prior to construction, Caltrans and Metro will provide appropriate signage as needed throughout construction. Construction Contractor will maintain appropriate signage to direct pedestrians, bicyclists, and vehicular traffic via alternate routes. Disabled access will be maintained during construction.
- **AVM-TR-7**: Prior to construction, Caltrans and Metro will coordinate with public transportation agencies (Metro bus service and Foothill Transit) to provide rerouting information, including operating schedules, to the public at least one month in advance to minimize impacts.

2.2.10 Visual/Aesthetics

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969, as amended, establishes that the federal government use all practicable means to ensure all Americans 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 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 taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of aesthetic, natural, scenic and historic environmental qualities" (CA Public Resources Code [PRC] Section 21001[b]).

California Streets and Highways Code Section 92.3 directs Caltrans to use drought resistant landscaping and recycled water when feasible and incorporate native wildflowers and native and climate-appropriate vegetation into the planting design when appropriate.

Los Angeles County

The Los Angeles County General Plan's Conservation and Natural Resources Element outlines the following goal, objectives, policies (Los Angeles County, 2015):

- **Goal C/NR 13**: Protected visual and scenic resources.
    - **Policy C/NR 13.1**: Protect scenic resources through land use regulations that mitigate development impacts.
    - **Policy C/NR 13.4**: Encourage developments to be designed to create a consistent visual relationship with the natural terrain and vegetation.

City of Industry

The City of Industry General Plan's Land Use Element outlines the following goal, objectives, policies (City of Industry, 2014):

- **Goal LU5**: High quality and well-maintained properties, buildings, and infrastructure that enhance property values and encourage additional public and private investment.
    - **Policy LU5-1**: Maintain high quality appearance and functionality of public lands, properties, and right of way, including sidewalks, streets trees/landscaping, curbs, and street lighting.
    - **Policy LU5-2**: Design new, and when necessary, retrofit existing streets and public right of way to maintain a high quality, professional appearance.

Affected Environment

The information in this section is based on the *Scenic Resource Evaluation and Visual Impact Assessment Memorandum* (California Department of Transportation, 2019) completed for the project.

The project is located at the I-605/Valley Boulevard interchange between SR-60 and I-10 in the City of Industry, and the unincorporated community of Avocado Heights, California. The landscape is characterized by a built environment consisting of roadway infrastructure (freeway mainline, ramps, arterial roadways), a railroad crossing, commercial and residential buildings, and open space adjacent to the highway. The land use within the project area consists of industrial, commercial services, residential, transportation, and open space.

Environmental Consequences

No Build Alternative

The No Build Alternative would not result in temporary or permanent impacts to visual/aesthetic

resources in the project area.

Build Alternative

Temporary Impacts

Construction of the Build Alternative would result in temporary visual impacts within the project area, including grading, hauling equipment and materials, construction staging areas or laydown yards, and signs for detours; however, these impacts would be short term. Once construction is completed, construction equipment and materials would be removed from the area. Therefore, temporary impacts would not be considered adverse.

Permanent Impacts

Construction of the Build Alternative would result in additional man-made components to the existing built environment, with design changes consisting of ramp realignment, additional travel lanes, noise barriers, and new signage. The locations of the proposed ramp realignments and other modifications does not alter the existing setting and would be constructed as extensions of the existing roadway features. Existing vegetation that is removed would be replaced, where feasible. With the incorporation of **AVM-VA-1** through **AVM-VA-3** the permanent visual impacts of the Build Alternative would not be considered adverse.

Avoidance, Minimization, and/or Mitigation Measures

The following measures would be implemented to avoid and/or minimize impacts related to visual and aesthetic resources:

- **AVM-VA-1**: Where feasible, existing trees and vegetation would be pruned and protected in place to provide a vertical hierarchy with new landscaping. In addition, new landscaping would be installed at the ramp interchanges after reconfiguration. Vegetation would be planted within bioswales to increase the success of the BMP and to maintain lush visual presence.
- **AVM-VA-2**: New barriers would receive a minimum fractured fin treatment (type of texture treatment for concrete) to deter graffiti.
- **AVM-VA-3**: Application of aesthetics (including the noise barriers) and landscape in the project area would follow the I-605 Corridor Aesthetics Master Plan.

2.2.11 Cultural Resources

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 and state laws, cultural resources that meet certain criteria of significance are referred to by various terms including "historic properties," "historic sites," "historical resources," and "tribal cultural resources." Laws and regulations dealing with cultural resources include:

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 in 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).

The California Environmental Quality Act (CEQA) requires the consideration of cultural resources that are historical resources and tribal cultural resources, as well as "unique" archaeological resources. California Public Resources Code (PRC) Section 5024.1 established the California Register of Historical Resources (CRHR) and outlined the necessary criteria for a cultural resource to be considered eligible for listing in the CRHR and, therefore, a historical resource. Historical resources are defined in PRC Section 5020.1(j). In 2014, Assembly Bill 52 (AB 52) added the term "tribal cultural resources" to CEQA, and AB 52 is commonly referenced instead of CEQA when discussing the process to identify tribal cultural resources (as well as identifying measures to avoid, preserve, or mitigate effects to them). Defined in PRC Section 21074(a), a tribal cultural resource is a CRHR or local register eligible site, feature, place, cultural landscape, or object which has a cultural value to a California Native American tribe. Tribal cultural resources must also meet the definition of a historical resource. Unique archaeological resources are referenced in PRC Section 21083.2.

PRC Section 5024 requires state agencies to identify and protect state-owned historical resources that meet the NRHP listing criteria. It further requires the Department to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the NRHP or are registered or eligible for registration as California Historical Landmarks. Procedures for compliance with PRC Section 5024 are outlined in a Memorandum of Understanding (MOU) between the Department and SHPO, effective January 1, 2015. For most Federal-aid projects on the State Highway System, compliance with the Section 106 PA will satisfy the requirements of PRC Section 5024.

Affected Environment

Information in this section is based on the *Draft Historic Property Survey Report* (HPSR) (GPA Consulting, 2020) and the *Draft Archaeological Survey Report* (ASR) (Duke Cultural Resources Management, LLC, 2020) prepared for the project. The ASR is included as an attachment to the HPSR.

Area of Potential Effects

The Area of Potential Effects (APE) was established to include all areas that could potentially be directly or indirectly affected by the project. The direct APE is defined as the areas where physical impacts will occur (direct effects). It includes both the horizontal and vertical areas associated with ground disturbing activities. The vertical direct APE extends from the existing grade levels to a maximum excavation depth of 35 feet, including road construction (excavation depth of 3 feet), storm drains (8 feet), and footings for overhead signs and traffic signal poles (35 feet). The horizontal direct APE is generally limited to the proposed and existing rights of way. It includes segments of Valley Boulevard, Temple Avenue, the southbound loop off-ramp and northbound off-ramp onto Valley Boulevard, and the southbound on-ramp, northbound loop on-ramp, and northbound on-ramp from Valley Boulevard onto I-605. It also includes all or portions of six parcels (see parcel list below).

The areas of indirect effects, or indirect APE, extend beyond those of the direct effects and incorporate areas that may be indirectly affected by visual, noise, or other effects. The indirect APE includes the direct APE, plus the entirety of the parcels that are only partially in the direct APE, with the exception of a one-mile long UPRR parcel (APN 8563-008-800) just east of Temple Avenue. Only a segment of this parcel is included due to its large size.

The full list of parcels in the direct and indirect APE are as follows:

- APN 8564-012-004 (vacant land entirely in direct APE)
- APN 8564-012-003 (vacant land entirely in direct APE)
- APN 8564-007-901 (vacant land partially in direct APE, entirely in indirect APE)
- APN 8564-007-800 (building constructed in 2014 partially in direct APE, entirely in indirect APE)
- APN 8564-007-008 (railroad parcel partially in direct APE, entirely in indirect APE)
- APN 8563-008-800 (railroad parcel partially in direct APE, partially in indirect APE)

Records Search

Records searches of the California Historical Resources Inventory System (CHRIS) were conducted by the South Central Coastal Information Center (SCCIC) at California State University, Fullerton on March 14, 2019 for historical and archaeological resources. The records search included a review of all recorded cultural resources and known cultural resource surveys within a one-mile radius of the APE. The following sources were consulted as part of the SCCIC record search:

- National Register of Historic Places (NRHP)
- California Register of Historical Resources (CRHR)
- National Historic Landmark
- California Historical Landmark
- California Points of Historical Interest
- California Historic Property Data File

In addition, the Caltrans Highway Bridge Inventory, Caltrans Cultural Resources Database, Los Angeles County Tax Assessor Data, and historical aerial photographs and maps were also reviewed.

The original as-built plans (1962) and boring logs for the construction of this segment of I-605 and the boring logs (1999) for the Rivergrade Overhead Widening project were reviewed.

Previous Cultural Resource Studies

Several studies previously conducted for the I-605 Corridor Improvement Project were consulted as part of the research for this project. The following studies were reviewed: the ASR, the Archaeological Sensitivity Study, and an Extended Phase I (XPI) Study, all of which were prepared for the I-605 Corridor Improvement Project.

Field Survey

A combined reconnaissance and intensive pedestrian survey of the direct and indirect APE was conducted on April 5, 2019. An additional reconnaissance survey with the project archaeologist and Caltrans was conducted on February 18, 2020 to better understand the existing site conditions. Some areas of the APE were inaccessible because of fencing or safety concerns, as much of the APE is within an active transportation corridor. Areas of exposed ground that could be accessed were surveyed by walking linear transects spaced up to five meters apart. The entirety of the direct and indirect APE can be characterized as developed and heavily disturbed.

Native American Consultation

Consultation was conducted with the Native American Heritage Commission (NAHC) and several Native American tribes to comply with Section 106 of the NHPA and Assembly Bill (AB) 52. The NAHC was contacted on March 18, 2019 to conduct a Sacred Lands File search in order to ascertain the presence of known sacred sites, Native American cultural resources, and/or human remains within the APE. On April 4, 2019 the NAHC responded with a positive result for Native American cultural resources in the APE and recommended contacting the Gabrieleño Band of Mission Indians – Kizh Nation for information. The NAHC also recommended contact with four additional Native American groups/individuals for information regarding cultural resources that could be affected by the project.

Chapter 4.0, Comments and Coordination, provides detailed information regarding Native American consultation. However, the following Native American tribes, groups, and individuals were initially contacted via letter sent by certified mail on April 10, 2019:

- Gabrieleño Band of Mission Indians – Kizh Nation: Andrew Salas, Chairperson
- Gabrieleno/Tongva San Gabriel Band of Mission Indians: Anthony Morales, Chairperson
- Gabrielino/Tongva Nation: Sandonne Goad, Chairperson
- Gabrielino Tongva Indians of California Tribal Council: Robert Dorame, Chairperson,
- Gabrielino-Tongva Tribe: Charles Alvarez, Chairperson

Native America consultation is ongoing.

Results

The records search and tribal consultation identified nine cultural resources within one mile of the

APE; one prehistoric archaeological resource, one tribal cultural resource, and seven are historic built environment resources.

Archaeological Resources

One prehistoric archaeological site was identified during the records search within one mile of the APE. However, no archaeological resources were identified within the APE during the pedestrian field survey or the records search. Modern construction debris and trash were observed within the APE during the field survey and observed soils were a light grayish-brown silty sand with approximately 20 percent gravel and small stones. Extensive ground disturbance within the APE resulting from construction of I-605, arterial roadways, the railroad, and adjacent modern residential and commercial developments were observed during the survey. Although the APE is in the prehistoric/historic course of the San Gabriel River, there is a lack of previously recorded archaeological sites within or directly adjacent to the APE.

In addition, the review of the as-built plans shows that I-605 and its on- and off-ramps are placed on five to 40 feet of engineered fill. Valley Boulevard west of I-605 within the project APE is placed on approximately two feet of fill, increasing as Valley Boulevard approaches the San Gabriel River Channel to approximately 17 feet of fill. East of I-605, Valley Boulevard appears to be at, or near, the original grade. The geotechnical boring from 1962 indicates that approximately eight feet of fill is beneath Valley Boulevard. The other 1962 borings under the I-605 bridge did not indicate fill soils. The 1995 borings completed for the 1999 I-605 bridge widening show approximately two feet of fill near, or possibly within, Valley Boulevard and four feet of fill near Cloverleaf Drive.

The high level of prior disturbance within the APE is also indicative of a lack of sensitivity for archaeological deposits. A review of historic topographic maps and aerial photographs of the project area showed a high level of agricultural development in the late 19th and early 20th centuries, as well as a high level of residential and commercial development beginning in the mid-20th century. Flood control measures that channelized the San Gabriel River began in the early 20th century (Gumprecht 1999) and had completely channelized the river by 1964 (McGinnis and Crawford 2019), heavily disturbing much of the direct APE. The construction of I-605 between 1963 and 1964 caused an even greater and deeper level of disturbance that impacted the majority of the project area.

Based on these details, the project APE is considered to have a low sensitivity for buried archaeological resources.

Additionally, through consultation with the Gabrieleño Band of Mission Indians – Kizh Nation, one Tribal Cultural Resource within the project APE is assumed eligible for listing in the NRHP and CRHR for the purposes of this project only. Valley Boulevard (formerly Mission Road), a Gabrielino trade route, is assumed eligible due to the potential for significance, large size (i.e., length) of the linear resource. Valley Boulevard (formerly Mission Road) is being assumed eligible for the NRHP for the purposes of this project at the local and state levels of significance under Criterion A/1 in the areas of Ethnic Heritage (Native American) and Social History for its association as a trade route that facilitated community bonding within Gabrielino territory and with sister tribal groups through the ability to trade over thousands of years.

The Tribe considers Valley Boulevard (formerly Mission Road) to be the area of a Gabrielino trade

route, part of a cultural landscape that includes the ethnographic villages and settlements in and around the Whittier Narrows at the confluence of the Rio Hondo and the San Gabriel River, the provincial village of *Ahwiinga* to the east, *La Mision Vieja* (original 1771 location), and the *Mission San Gabriel Arcángel* (1775 location). The Tribe considers the route to be a Tribal Cultural Resource. For the purposes of this project, Caltrans has assumed this resource eligible for listing in the NRHP and the CRHR at the local level of significance under Criterion A/1 in the areas of Ethnic Heritage (Native American) and Social History for its association as a trade route that facilitated community bonding within the Gabrielino territory and with sister tribal groups through the ability to trade over thousands of years. The Gabrielino trade route follows Valley Boulevard (formerly Mission Road) for an approximately 28-mile-long route that runs from the intersection of Mission Road and Alhambra Road in the community of Lincoln Heights in the City of Los Angeles, through the Cities of Alhambra, San Gabriel, Rosemead, El Monte, Industry, La Puente, Walnut, and parts of unincorporated County to Fairplex Drive in Pomona.

The approximately 28-mile long route along Valley Boulevard (formerly Mission Road) is in a highly developed urban environment. Identification of intact archaeological deposits within soils prior to construction is unlikely due to previous ground disturbances within the direct APE. Additionally, no physical remnants of the original unpaved Gabrielino trade route are visible on Valley Boulevard (formerly Mission Road) in the APE due to the highly developed built environment of the interchange and surrounding area. However, in consideration of the Tribe's concerns, and out of an abundance of caution, Caltrans has chosen to implement minor phasing of its identification and evaluation efforts. Under **AVM-CUL-1**, Caltrans will implement a phased cultural resources identification plan approach that includes archaeological and tribal monitoring within the Direct APE during final design and construction phases of the project. Caltrans has prepared a post-review discovery and monitoring plan to outline the steps needed in the event of the discovery of archaeological or tribal cultural resources during construction.

Built Environment Resources

One property within the project APE, the UPRR line, is assumed eligible for listing in the NRHP and CRHR for the purposes of this project only, due to its large size, and is presumed to be a historical resource for the purposes of CEQA. Two additional historic built resources pass over the APE and are not included in the APE.

Union Pacific Railroad

The UPRR line, historically part of the Southern Pacific Railroad's (SPRR) Los Angeles Division, is being assumed eligible for the NRHP for the purposes of this project at the local and state levels of significance under Criterion A for its association with the development of the Los Angeles area in the late nineteenth and early twentieth century. Its period of significance was previously documented as 1877 to 1885, from the year of its completion to the arrival of the competing Atchison, Topeka & Santa Fe Railroad in Los Angeles. The historic property boundary corresponds to the limits of the existing railroad right of way.

The SPRR line was originally constructed between 1874 and 1877 from Yuma, Arizona through California's Imperial Valley, the San Bernardino Mountains, and the San Gabriel Valley to Los Angeles. It became known as the Sunset Route and eventually connected with New Orleans, Louisiana by the mid-1880's. Within the APE, a 0.038-mile segment of railroad consists of three

parallel lines of track (APN 8564-007-800 and 8563-008-800). The tracks are currently part of the UPRR Alhambra Subdivision, which UPRR shares with Metrolink. All three lines consist of steel rails embedded in concrete and steel plates where they cross Temple Avenue. Outside the roadway each line consists of steel rails and granite ballast. The northernmost line has concrete ties east of Temple Avenue and wood ties to the west; the center line has concrete ties east and west of Temple Avenue; and the southernmost line has wood ties east and west of Temple Avenue. The segment features typical at-grade crossing signals, gates, equipment boxes, and roadway striping. The signals and gates are installed into the sidewalks and central, raised median.

Environmental Consequences

Section 106 Finding for the Project

Within the project APE, two historic properties were identified and are assumed eligible for the NRHP for the purposes of this project only; the UPRR, former Southern Pacific Railroad tracks and the Valley Boulevard (prehistoric trade route). However, the project would not result in an adverse effect to either historic property. No physical remnants of the original unpaved Gabrielino trade route are visible on Valley Boulevard (formerly Mission Road) in the APE due to the highly developed built environment of the interchange and surrounding area (i.e., in the APE, no physical remnants of the original unpaved trade route are extant on the ground surface). The Tribe considers the trade route to follow Valley Boulevard as part of a cultural landscape and thus a Tribal Cultural Resource. Project work as it relates to the UPRR complies with the Secretary of the Interiors Standards (SOIS) for Rehabilitation and the Build Alternative would not result in an adverse effect on the UPRR within the APE. Therefore, a Finding of No Adverse Effect without Standard Conditions has been prepared for this project.

To ensure that the project continues to comply with the Section 106 Programmatic Agreement, Caltrans has CSO approval on minor phasing under Stipulation XII.B as it relates to tribal concerns. The Gabrieleño Band of Mission Indians – Kizh Nation has agreed to archaeological and Native American monitoring during project construction and a Phased Cultural Resources Identification Plan and a Post-Review Discovery and Monitoring Plan was prepared by Caltrans. Additionally, to ensure that work proposed on the UPRR conforms to the SOIS Rehabilitation Standards as the design and construction progress, a Secretary of the Interior's Standards for the Treatment of Historic Properties Action Plan (SOIS Action Plan) was prepared. The SOIS Action Plan identifies specific tasks during each stage of the undertaking that will be required to ensure that the work complies with the Rehabilitation Standards. Caltrans Cultural Studies Office (CSO) concurred on the effect finding for the project on February 18, 2021. Caltrans initiated consultation with the State Historic Preservation Office on February 17, 2021 on the finding of no adverse effect without standard conditions and requested Section 4(f) concurrence for the historic Gabrielino Trade Route site and UPRR. The State Historic Preservation Office did not object to the findings on March 17, 2021.

The discussion below describes temporary and permanent impacts of the No Build and Build Alternatives on archaeological resources and the historic property.

No Build

The No Build Alternative would maintain the existing configuration and would not result in improvements. Therefore, the No Build Alternative would not result in any temporary or permanent impacts to cultural resources in the project area.

Build Alternative

Temporary Impacts

Archaeological Resources

Construction of the Build Alternative would not result in temporary impacts on archaeological resources because any impacts to this type of resource during construction would be considered permanent and are described below.

Built Environment Resources

The TCEs required for the Build Alternative would not affect the UPRR line within the APE; therefore, there are no temporary impacts on this resource.

Permanent Impacts

Archaeological Resources

No archaeological resources were discovered within the project APE during the field survey. The survey observed extensive ground disturbance within the direct and indirect APE, likely resulting from the construction of I-605, Valley Boulevard, Temple Avenue, the railroad, and adjacent modern residential and commercial developments. The records search did not identify any archaeological resources within or immediately adjacent to the APE. Based on the archaeological studies completed for this project and previous evaluations, the project APE was determined to have a low sensitivity for encountering buried archaeological resources.

Through on-going consultation with the Gabrieleño Band of Mission Indians – Kizh Nation, in consideration of the Tribes' concerns due to the Tribe considering Valley Boulevard (formerly Mission Road) to be the area of a Gabrielino trade route, part of a cultural landscape, and thus a Tribal Cultural Resource.

Caltrans has thoroughly considered the Gabrieleño Band of Mission Indians-Kizh Nation's (the Tribe) concerns and acknowledges the importance of Valley Boulevard (formerly Mission Road) as an east-west Gabrielino trade route. During construction, identification of intact archaeological deposits in the soils prior to construction within the Direct APE is unlikely due to previous ground disturbances. Due to the highly developed built environment of the interchange and surrounding area, no physical remnants of the original unpaved Gabrielino trade route are visible on Valley Boulevard (formerly Mission Road) in the APE.

However, out of an abundance of caution, under **AVM-CUL-1**, Caltrans will implement a phased cultural resources identification plan approach that includes archaeological and tribal monitoring within the Direct Area of Potential Effects during final design and construction phases of the project. Caltrans has prepared and will implement a monitoring and unanticipated discovery plan.

If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if project limits are extended beyond the

present survey limits.

In the event of a discovery of cultural materials or human remains, **AVM-CUL-1** and **AVM-CUL-2** would be implemented during construction, consistent with State of California Public Resources Code 5097.94, 5097.95, 5097.99 and State of California Health and Safety Code 7050.5.

Built Environment Resources

Caltrans has applied the Criteria of Adverse Effect to the assumed eligible historic property within the APE, the UPRR line. According to 36 CFR 800.5(a)(1), an Adverse Effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, setting, design, materials, workmanship, feeling, or association. The project includes alterations to multiple roadways within the APE. Of these, the changes that have the potential to affect the UPRR line are those related to the southbound side of Temple Avenue.

To accomplish the widening and improvements, portions of the at-grade crossing would be reconstructed, ties and ballast east and west of the existing roadbed would be removed, and the amount of track embedded in concrete and steel plates would be increased. The total size of permanent easements required from the UPRR would be: 2,888 square feet west of the existing roadway; and 2,554 square feet east of the existing roadway. The easement to the west would accommodate the added third lane heading southbound on Temple Avenue; the easement to the east would accommodate a new sidewalk crossing the tracks. Changes to the immediate setting would include reconstructing and enlarging center medians on Temple Avenue, restriping, and installing new signals and equipment.

The historic property will not be removed from its historic location. The property will continue to be in operation as a rail line and will therefore not be neglected; and the property is not in federal control and will therefore not be transferred from federal ownership without enforceable conditions. However, the project has the potential to directly and indirectly affect the UPRR line due to physical changes resulting from the modification of the intersection of Temple Avenue and the railroad line, ADA-compliant upgrades to pedestrian routes, and visual changes resulting from additional modifications to Temple Avenue in the immediate vicinity.

The Secretary of the Interior's Standards for Rehabilitation (Rehabilitation Standards) allow for reasonable change to a historic property, including related new construction, changes to setting, and ADA-compliant improvements, provided the change does not destroy character-defining features unnecessarily or impair a historic property's ability to convey its significance. After construction of the Build Alternative, the UPRR line would retain the same aspects of integrity as it exhibits presently: location, design, and association. To ensure the project continues to comply with the Rehabilitation Standards, standard conditions (**AVM-CUL-3**) will be implemented. Therefore, the project is proposed to have a Finding of No Adverse Effect without Standard Conditions, through the use of the Secretary of Interior's Standards for Treatment of Historic Properties.

Avoidance, Minimization, and/or Mitigation Measures

- **AVM-CUL-1**: Caltrans will implement a phased cultural resources identification plan approach that includes archaeological and tribal monitoring within the Direct APE. Caltrans has

prepared a post-review discovery and monitoring plan to outline the steps needed in the event of the discovery of archaeological or tribal cultural resources during construction. 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.

- **AVM-CUL-2**: If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Claudia Harbert, Caltrans District 7 Cultural Resources Environmental Branch Chief, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.
- **AVM-CUL-3**: Monitoring will be conducted for the following activities at the specified intervals/milestones to ensure compliance with the Rehabilitation Standards. The qualified monitor must meet the Secretary of Interior's Professional Qualification Standards (PQS) for architectural history and/or historic architecture or be Caltrans staff under the direction of a Caltrans PQS Principal Architectural Historian.
    - Review and approve plans, including plans related to the at-grade crossing at 60 and 95 percent completion, in the form of a memo prior to the start of construction.
    - Be on-call to inspect and consult on unanticipated impacts to the historic property that may occur during construction. Any impacts or issues will be documented in construction monitoring reports.
    - Visit the historic property post-construction to document that the work was completed according to the approved plans, any recommendations provided during construction were incorporated, and that the project overall meets the Secretary of Interior Standards.

2.3 Physical Environment

2.3.1 Water Quality and Storm Water Runoff

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[3] 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

[3] A point source is any discrete conveyance such as a pipe or a man-made ditch.

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[4] 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

[4] The U.S. EPA defines "effluent" as "wastewater, treated or untreated, that flows out of a treatment plant, sewer, or industrial outfall."

document is included in the Wetlands and Other Waters section.

State Requirements: 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 Board

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. RWCQBs 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

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. 2014-0006-EXEC (effective January 17, 2014), Order No. 2014-0077-DWQ (effective May 20, 2014), and Order No. 2015-0036-EXEC (conformed and effective April 7, 2015) and Order No. 2017-0026-EXEC (effective November 27, 2017) 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.

In addition, Caltrans developed the Statewide Trash Implementation Plan (California Department of Transportation, 2019) to comply with the statewide Trash Amendments (Order No. 2017 0026 EXEC, effective November 27, 2017), as adopted by the SWRCB, through implementation of trash control measures. The Statewide Trash Implementation Plan includes areas identified as Significant Trash Generating Areas and measures to be implemented for trash control throughout the state. The proposed project will be programmed to follow the guidelines and procedures outlined in the latest Statewide Trash Implementation Plan to address trash.

Construction General Permit

Construction General Permit, Order No. 2009-0009-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. 2012-006-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.

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.

Regional and Local Regulations

Basin Plan for Los Angeles Region

Section 13240 of the Porter-Cologne Water Quality Control Act requires each RWQCB to formulate and adopt water quality control plans, or basin plans, for all areas within the region. Water quality in the project study area is regulated by the Los Angeles RWQCB through the Water Quality Control Plan (Los Angeles RWQCB Basin Plan) (Los Angeles Regional Water Quality Control Board, 2014).

The Los Angeles RWQCB Basin Plan lists the beneficial uses of surface waters and groundwaters in the region. Beneficial uses are the basis for establishing objectives to maintain and enhance water quality. These uses include domestic, municipal, agricultural, and industrial supply; power generation; navigation; preservation or enhancement of fish, wildlife, and other aquatic resources or preserves; recreation; and aesthetic enjoyment. The beneficial uses of surface waters and groundwaters in the basin are designated in the water quality control plans.

The Los Angeles RWQCB Basin Plan also includes water quality objectives, which are the limits or levels of water quality constituents or characteristics, which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area.

Los Angeles Regional Water Quality Control Board Waste Discharge Requirements for Municipal Separate Storm Sewer Systems

Phase I of the SWRCB's MS4 program, issued in 1990, requires medium and large cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their storm water discharges. Phase I requires permittee to develop and implement a Storm water Management Plan/Program to reduce the discharge of pollutants to the maximum extent practicable. A municipal NPDES storm water permit was issued to the County of Los Angeles and 84 incorporated cities (except for the City of Long Beach) under Order No. R4-2012-0175, NPDES Permit No. CAS004001 by the Los Angeles RWQCB on November 8, 2012 (Los Angeles Regional Water Quality Control Board, 2012).

Los Angeles County General Plan

The *Los Angeles County General Plan* (County's General Plan) contains the County's goals related to land use and is designed to serve as the basis for development decisions. The following goals and policies from the County's General Plan, Conservation and Natural Resources (C/NR) Element are applicable to the project (Los Angeles County, 2015):

- **Goal C/NR 6**: Protected and usable local groundwater resources.
    - **Policy C/NR 6.1**: Support the Low Impact Development philosophy, which incorporates distributed, post-construction parcel-level storm water infiltration as part of new development.
    - **Policy C/NR 6.2**: Protect natural groundwater recharge areas and regional spreading grounds.
- **Goal C/NR 7**: Protected and healthy watersheds.
    - **Policy C/NR 7.1**: Support the Low Impact Development philosophy, which mimics the

natural hydrologic cycle using undeveloped conditions as a base, in public and private land use planning and development design.

- **Policy C/NR 7.2**: Support the preservation, restoration, and strategic acquisition of available land for open space to preserve watershed uplands, natural streams, drainage paths, wetlands, and rivers, which are necessary for healthy function of watersheds.

City of Industry General Plan

The *City of Industry General Plan, Resource Management Element* (City of Industry, 2014) contains the following goal and policies that are applicable to the project:

- **Goal RM1**: A reliable system that enables the City of Industry to efficiently and cost-effectively manage its water resources and needs.
  - **Policy RM1-4**: Require the control and management of urban runoff, consistent with RWQCB and Los Angeles County Municipal Separate Storm Sewer Systems (MS4) Permit regulations.
  - **Policy RM1-5**: Seek and pursue the most efficient and cost-effective means of implementing NPDES permit requirements. Allow new development projects to creatively implement NPDES standards and requirements.

Affected Environment

The project study area is located in an urbanized area, with land uses that include residential, commercial, industrial, and recreational uses. Most of the project study area is located within an existing transportation corridor, bordered by heavily disturbed land. Much of the area is covered with semipermeable or nonpermeable material (i.e., paved).

The Los Angeles RWQCB – Region 4 oversees the protection of surface water and groundwater quality in the Los Angeles Region, where the project study area is located (Los Angeles Regional Water Quality Control Board, 2014).

Precipitation and Climate

The project study area has a subtropical Mediterranean climate, characterized by mild rainy winters and warm dry summers. As moist air from the Pacific Ocean is carried inland, it is forced upward by the mountains, resulting in storms, which are common from November through March.

Average yearly precipitation between 2010 and 2017 for the project study area was 11.47 inches, as measured by the Whittier 2.9 WNW weather station (National Oceanic and Atmospheric Administration, 2018). The project study area does not receive snowfall.

Surface Water

The Los Angeles Region encompasses 10 Watershed Management Areas, which generally consists of a single large watershed with smaller subwatersheds that are tributaries to the main river. The project area is within the San Gabriel River watershed; however, there are no waterways in the project area. The San Gabriel River is approximately 100 feet west of the project area.

San Gabriel River Watershed

The San Gabriel River watershed is approximately 689 square miles with areas of undisturbed riparian and woodland habitat and with headwaters (initial source of waterway) originating in the San Gabriel Mountains (State Water Resources Control Board, 2018a). The upper portion of the watershed contains a series of flood control dams and naturally eroding sediment that settles in reservoirs behind the flood control dams. The middle reaches of the San Gabriel River, which parallel the project alignment, have been extensively modified to control flood and debris flows and to recharge groundwater. The watershed is hydraulically connected to the Los Angeles River through the Whittier Narrows Reservoir (normally only during high storm flows). The middle and lower part of the river flows through a concrete-lined channel in a heavily urbanized portion of the Los Angeles Coastal Plain before becoming a soft-bottom channel once again near the Pacific Ocean in Long Beach. In the project study area, the Alamitos Bay, Lower San Gabriel River (includes Santa Fe Flood Control Basin and Coyote Creek), Lower San Jose Creek, and Big Dalton Wash subwatersheds are in the San Gabriel River watershed.

Surface Water Beneficial Uses

Surface water beneficial uses are the foundation of water quality protection under the Los Angeles RWQCB Basin Plan (Los Angeles Regional Water Quality Control Board, 2014). After beneficial uses are designated, water quality objectives are established. Together, the beneficial uses and water quality objectives form water quality standards. Beneficial uses are designated as existing, intermittent, or potential. **Table 2.3-1** shows the beneficial uses and their designations for the receiving water reaches in the project study area.

Table 2.3-1. Surface Water Beneficial Uses

Waterbody	Existing	Intermittent	Potential
San Gabriel River Reach 3	• WILD	• GWR • REC-1[a] • WARM • REC-2	• MUN
San Gabriel River Reach 2	• WILD • REC-1[a] • RARE • REC-2	• GWR • WARM	• MUN • PROC • IND
San Gabriel River Reach 1	• REC-1[a] • REC-2		• MUN • WILD • WARM
San Gabriel River Estuary	• IND • WILD • NAV • RARE • COMM • MIGR • EST • SPWN • MAR		• SHELL
Alamitos Bay	• IND • WILD • NAV • RARE • COMM • MIGR • EST • SPWN • MAR		• WET[b]

Source: (Los Angeles Regional Water Quality Control Board, 2014)

[a] Access is prohibited in the concrete channel by Los Angeles County Department of Public Works.

[b] Waterbodies designated as WET may have wetlands habitat associated with only a portion of the waterbody; therefore, any regulatory action would require a detailed analysis of the area.

WILD = Wildlife Habitat
GWR = Ground Water Recharge
WARM = Warm Freshwater Habitat
REC-1 = Water Contact Recreation
REC-2 = Non-Contact Water Recreation
MUN = Municipal and Domestic Supply
RARE = Rare, Threatened, or Endangered Species
IND = Industrial Service Supply
PROC = Industrial Process Supply
NAV = Navigation
COMM = Commercial and Sport Fishing
EST = Estuarine Habitat
MAR = Marine Habitat
MIGR = Migration of Aquatic Organisms
SPWN = Spawning, Reproduction, and/or Early Development
SHELL = Shellfish Harvesting
WET = Wetlands Habitat

The beneficial use definitions for waterbodies in the project study area include the following:

- **Wildlife Habitat (WILD)**: Uses of water that support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.
- **Ground Water Recharge (GWR)**: Uses of water for natural or artificial recharge of groundwater for purposes of future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.
- **Warm Freshwater Habitat (WARM)**: Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
- **Water Contact Recreation (REC-1)**: Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.

- **Non-Contact Water Recreation (REC-2)**: Uses of water for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
- **Municipal and Domestic Supply (MUN)**: Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.
- **Rare, Threatened, or Endangered Species (RARE)**: Uses of water that support habitats necessary, at least in part, for the survival and successful maintenance of plant or animal species established under state or federal law as rare, threatened, or endangered.
- **Industrial Service Supply (IND)**: Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.
- **Industrial Process Supply (PROC)**: Uses of water for industrial activities that depend primarily on water quality.
- **Navigation (NAV)**: Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.
- **Commercial and Sport Fishing (COMM)**: Uses of water for commercial or recreational collection of fish, shellfish, or other organisms including, but not limited to, uses involving organisms intended for human consumption or bait purposes.
- **Estuarine Habitat (EST)**: Uses of water that support estuarine ecosystems including, but not limited to, preservation or enhancement of estuarine habitats, vegetation, fish, shellfish, or wildlife (e.g., estuarine mammals, waterfowl, shorebirds).
- **Marine Habitat (MAR)**: Uses of water that support marine ecosystems including, but not limited to, preservation or enhancement of marine habitats, vegetation such as kelp, fish, shellfish, or wildlife (e.g., marine mammals, shorebirds).
- **Migration of Aquatic Organisms (MIGR)**: Uses of water that support habitats necessary for migration, acclimatization between fresh and salt water, or other temporary activities by aquatic organisms, such as anadromous fish.
- **Spawning, Reproduction, and/or Early Development (SPWN)**: Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.
- **Shellfish Harvesting (SHELL)**: Uses of water that support habitats suitable for the collection of filter-feeding shellfish (e.g., clams, oysters, and mussels) for human consumption, commercial, or sports purposes.
- **Wetlands Habitat (WET)**: Uses of water that support wetland ecosystems including, but not limited to, preservation or enhancement of wetland habitats, vegetation, fish, shellfish, or wildlife, and other unique wetland functions that enhance water quality, such as providing flood and erosion control, stream bank stabilization, and filtration and purification of naturally occurring contaminants.

Surface Water Quality

The San Gabriel River Reach 3 (Whittier Narrows Dam to Ramona Boulevard) is listed as impaired in the CWA Section 303(d) list provided in the *Final 2014/2016 California Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report)* (State Water Resources Control Board, 2018b). TMDLs must be developed for waters listed as impaired (**Table 2.3-2**).

Table 2.3-2. List of 303(d) Waterbody Pollutants Requiring TMDLs

Waterbody	Pollutant	TMDL Requirement Status[a]	Scheduled Completion Date	USEPA Approved Date
San Gabriel River Reach 3	Indicator Bacteria	B	--	2016
San Gabriel River Reach 2	Cyanide	A	2021	
	Lead	B		2007
	Temperature, water	A	2027	
San Gabriel River Reach 1	Temperature, water	A	2027	
	pH	A	2009	
San Gabriel River Estuary	Copper	B		2007
	Dioxin	A	2021	
	Indicator Bacteria	B		2016
	Nickel	A	2021	
	Oxygen, dissolved	A	2021	
Alamitos Bay	Indicator Bacteria	A	2019	
	Oxygen, dissolved	A	2027	

Source: (State Water Resources Control Board, 2018b)

[a] Requirement status: A – TMDL still required; B – Being addressed by USEPA approved TMDL; C – Being addressed by other action

TMDL = Total Maximum Daily Load; USEPA = United States Environmental Protection Agency

Caltrans' MS4 permit identifies TMDL-based requirements that have been imposed in accordance with 40 CFR 122.44(d)(1)(vii)(B), which requires that effluent limitations be consistent with the assumptions and requirements of any available Waste Load Allocation (WLA) for the discharge. Caltrans' MS4 permit establishes BMP-based requirements for TMDL implementation that meet the WLA requirement. As part of the implementation, Caltrans' MS4 permit also requires monitoring of implemented BMPs for effectiveness and to be adaptively managed for modifications, as necessary, to achieve WLAs.

The TMDL for indicator bacteria in the San Gabriel River, Estuary and Tributaries was adopted by the Los Angeles RWQCB, effective on June 14, 2016. The TMDL requires responsible agencies, including Caltrans, to achieve compliance with WLAs in 20 years. In addition, the TMDL for metals in the San Gabriel River and Tributaries was approved by the U.S. EPA on March 26, 2007. The TMDL assigns the following to MS4 permittees and Caltrans:

- dry weather WLAs for copper in the San Gabriel River Estuary and the San Gabriel River Reach 1; and
- wet weather WLAs for lead in San Gabriel River Reach 2, upstream reaches, and tributaries.

Caltrans will be working with groups of Responsible Agencies to jointly comply with the TMDL. Project Engineer will consider treatment controls for the project and consult with the NPDES Storm Water Coordinator (NCM Engineering Corporation, 2019).

Groundwater

The project study area is in the South Coast hydrologic region, in the San Gabriel Valley Groundwater Basin (California Department of Water Resources, 2019). Percolation from precipitation is one of the primary contributors to recharge of the basin. Recharge also comes from runoff from the mountains, imported water flowing from the San Gabriel River to the adjacent groundwater basin, and treated sewage effluent (California Department of Water Resources, 2003). Groundwater in the San Gabriel River basin has been progressively lowering since the 1930s (Group Delta, 2019). Groundwater in the project area is estimated to be 50 feet below ground surface.

Groundwater Beneficial Uses

The following existing groundwater beneficial uses are identified in the Los Angeles RWQCB Basin Plan for San Gabriel Valley Groundwater Basin:

- **Municipal and Domestic Supply** (see description under Surface Water Beneficial Uses).
- **Industrial Service Supply**: Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.
- **Industrial Process Supply**: Uses of water for industrial activities that depend primarily on water quality.
- **Agricultural Supply**: Uses of water for farming, horticulture, or ranching, including, but not limited to, irrigation, stock watering, or support of vegetation for range grazing.

Groundwater Quality

According to the Los Angeles RWQCB Basin Plan, the general quality of groundwater in the region has degraded substantially from background levels due to land use. In the project study area, the quality of groundwater in the upper aquifers is affected by organic and inorganic pollutants from sources such as leaking aboveground and underground tanks, leaking sewer lines, and illegal discharges (Los Angeles Regional Water Quality Control Board, 2014).

Environmental Consequences

The project study area has an existing impervious surface area of 8.57 acres. During construction the disturbed soil area (DSA) for the project would be 14.79 acres (**Table 2.3-3**).

Table 2.3-3. Impervious Surface Area Impact (acres)

Alternative	Disturbed Soil Area	Post-Project Impervious Area	Net New Impervious Area	Replaced Impervious Surface	New Impervious Surface Area
No Build	0	8.57	0	0	0
Build	14.79	9.02	2.31	2.71	5.02

Source: (NCM Engineering Corporation, 2019)

No Build

Under the No Build Alternative, no change would result in existing water quality conditions; therefore, this alternative would not result in temporary or permanent impacts on water quality.

Build Alternative

Temporary Impacts

Construction activities have the potential to impact current and future water quality through the transport of pollutants, erosion of soils, and increased soil disturbance. Pollutants of concern during construction are trash, petroleum products, concrete, and chemicals. Construction activities could include grading, roadway widening, freeway ramp modifications, and construction of new and modified drainage ditches, berms, and swales, which has the potential to disturb soil in the project area.

In addition, during construction there is potential for construction-related pollutants such as chemicals, paints, and fuel to be transported via storm runoff into drainages adjacent to the project area and into downstream receiving waters. Trash and debris generated at the project site (e.g. food wrappers, sediment) has the potential to be transported to downstream receiving waters via storm runoff as well.

Excavations would be required for roadway widening, storm drains, construction of walls, and installation of traffic lights and overhead signs. However, the maximum depth of excavation is 35 feet, the groundwater table is 50 feet below ground surface; therefore, the groundwater table is not anticipated to be encountered and dewatering is not expected.

The project is anticipated to be a Risk Level 1[5] per the Project Planning and Design Guide, because of the combined low sediment risk and low receiving water risk. Therefore, the project is subject to additional BMPs, visual monitoring, and effluent water quality testing requirements (State Water Resources Control Board, 2013).

In accordance with the NPDES Construction General Permit, a SWPPP would be required; however, no work would be completed within or over a waterway. The SWPPP would include the development of a Construction Site Monitoring Program, including procedures and methods related to visual monitoring, sampling and analysis plans for pollutants, sediment, turbidity, and pH. In addition, the SWPPP would include temporary erosion and sediment control measures. Also, there are no surface waters in the project area; therefore, a Section 404 General Permit from the United States Army Corps of Engineers and a Section 401 Water Quality Certification

[5] Risk Levels are classified by the Construction General Permit.

from the Los Angeles RWQCB are not anticipated.

AVM-WQ-1 through **AVM-WQ-2** would be implemented to avoid and/or minimize impacts related to construction of the Build Alternative.

Permanent Impacts

The proposed project would result in a net increase in impervious surface area of 2.31 acres. The additional impervious surface area could increase the volume and velocity of storm water runoff, as well as the amount of pollutants traveling into the drainage system and into downstream receiving waters. However, treatment BMPs (three biofiltration swales) would be implemented under the Build Alternative to address these pollutants.

During operation, oil, grease, and chemical pollutants (e.g. particulates from pavement wear, metals, diesel fuel, etc.) could be discharged into the storm drain system in the project area from incidental drippings from vehicles and accidental spills during maintenance activities. Design Pollution Prevention BMPs (e.g. drainage design follows existing drainage pattern, unlined channels would be kept, as much as possible, to promote infiltration), treatment BMPs, and adherence to operation maintenance protocols would be implemented to address these potential impacts. **AVM-WQ-3** through **AVM-WQ-4** would be implemented to minimize impacts related to operation of the Build Alternative. Therefore, no substantial impacts on water quality are anticipated.

Avoidance, Minimization, and/or Mitigation Measures

- **AVM-WQ-1**: During construction, Caltrans' Resident Engineer or designated contractor will ensure that all applicable construction site BMPs follow the latest edition of the Caltrans Construction Site BMP Manual to address temporary impacts associated with project construction (California Department of Transportation, 2017), including those associated with waste management, non-storm water management, tracking controls, and other BMPs as applicable. In addition to applicable BMPs in the Caltrans Construction Site BMP Manual, the following measures will also be implemented:
    - Good housekeeping
    - Erosion control
    - Sediment control
- **AVM-WQ-2**: During construction, Caltrans' Resident Engineer or designated contractor will ensure compliance with the provision of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002 as amended by Order No. 2010-0014-DWQ and Order No. 2012-006-DWQ) and any subsequent amendment or renewal, as they relate to construction activities for the project. This will include submission of the Permit Registration Documents, including a Notice of Intent, risk assessment, site map, SWPPP, annual fee, and signed certification statement to the SWRCB via the Stormwater Multi-Application and Report Tracking System at least seven days prior to the start of construction. Construction activities will not commence until a Waste Discharger Identification number is received from the Stormwater Multi-Application and Report Tracking System. The SWPPP will be prepared by a qualified SWPPP developer and will meet the requirements of

the Construction General Permit:

- Identifying potential pollutant sources associated with construction activities;
- Identifying non-storm water discharges;
- Developing a water quality monitoring and sampling plan;
- Implementing and maintaining BMPs to reduce or eliminate pollutants associated with construction sites.

- **AVM-WQ-3**: Permanent Design Pollution Prevention and treatment BMPs will be implemented to minimize downstream effects, stabilize slopes, control runoff, and treat water quality volume generated from new impervious surface area. The project will include the construction and integration of 3 biofiltration swales into aesthetics, landscape, and revegetation plans within the project area.
- **AVM-WQ-4**: Procedures in the Caltrans Stormwater Quality Handbooks, Project Planning and Design Guide will be followed for implementing and constructing treatment BMPs (three biofiltration swales) to the Maximum Extent Practicable. Additionally, all treatment BMPs will be consistent with the requirements of applicable permits, including the Caltrans MS4 permit, and will be inspected/monitored to ensure effectiveness.

With the implementation of avoidance and minimization measures, adverse impacts are not anticipated; therefore, no mitigation is proposed.

2.3.2 Geology/Soils/Seismic/Topography

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." Topographic and geologic features are also protected under the California Environmental Quality Act (CEQA).

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.

The following are applicable goals and policies relevant to geology, soils, seismicity, and topography for the County of Los Angeles and the City of Industry:

County of Los Angeles

The *Los Angeles County General Plan, Safety Element* (Los Angeles County, 2015) contains the following goal and policies that are applicable to the project:

- **Goal S1**: An effective regulatory system that prevents or minimizes personal injury, loss of life

and property damage due to seismic and geotechnical hazards.

- **Policy S1.1:** Discourage developing in Seismic Hazard and Alquist-Priolo Earthquake Fault Zones.

City of Industry

The *City of Industry General Plan, Safety Element* (City of Industry, 2014) contains the following goal and policies that are applicable to the project:

- **Goal S1:** Minimal loss of life and damage to property resulting from an earthquake or other geologic hazards
  - **Policy S1-3:** Cooperate and coordinate with public and quasi-public agencies to assure seismically strengthened or relocated facilities and other appropriate measures to safeguard water, electricity, natural gas, and other transmission and distribution systems.

Affected Environment

Site Geology

The project is located in the San Gabriel Valley, in the northeastern block of the Los Angeles Basin (Basin). The Basin is a large, low-lying coastal plain bordered by mountains to the north, east, and south. The Basin floor is a predominantly flat surface with a gentle rise from sea level to an apron of uplifted terrain along the base of the surrounding mountains. The San Gabriel Valley is a sediment-filled, east-west trending structural trough at the base of the San Gabriel Mountains (a component of the Transverse Ranges Geomorphic Province of California).

According to regional geologic maps (California Department of Conservation, 2016) the project area is underlain by non-marine Quaternary age alluvium. Quaternary age alluvium underlies most of the project alignment, consisting of alluvial wash deposits and young alluvium. Young alluvial fan deposits derived from a confined valley or canyon predominantly consist of interbedded layers of gravels, sands, silts, clays, and occasionally cobbles and boulders. Alluvial wash deposits derived from the San Gabriel River predominantly consist of medium dense to dense, porous to very porous, massive to crudely layered, silty, and coarse to fine sand and gravels.

In addition to Quaternary age deposits, fill is anticipated throughout the project area. Freeway improvements including embankments, fill slopes, earth retaining walls, and storm drains are areas in which fill is expected. Fill is also expected in areas of remedial over-excavations. The fill was likely derived locally consisting of predominantly compacted sands and silts.

Soils

Urban Land-Palmview-Tujunga Complex, 0 to 5 Percent Slopes

This soil unit is composed of multiple soil types and the soil texture within the unit varies from fine sandy loam to loamy sand. Urban Land-Palmview-Tujunga Complex, 0 to 5 Percent Slopes underlies approximately 23 percent of the project area. This soil unit is in Hydrologic Soil Group A and B. Soils in Hydrologic Soil Group A are soils that have a high infiltration rate (low runoff potential) when thoroughly wet and a high rate of water transmission. Soils in Hydrologic Soil

Group B are soils that have a moderate infiltration rate when thoroughly wet and have a moderate ability to transmit water.

Urban Land-Tujunga-Typic Xerorthents, Sandy Substratum Complex, 0 to 2 Percent Slopes

This soil unit is composed of multiple soil types and the soil texture within the unit varies from sandy loam to loamy coarse sand. Urban Land-Tujunga-Typic Xerorthents, Sandy Substratum Complex, 0 to 2 Percent Slopes underlies approximately 77 percent of the project area. This soil unit is a mix of soils from Hydrologic Soil Group A and C. Soils in Hydrologic Soil Group C are soils that have a low infiltration rate when thoroughly wet and have a slow rate of water transmission.

Faulting and Seismicity

The project study area is within the seismically active southern California region. Although the project is not located within the boundaries of an Alquist-Priolo Earthquake Fault Zone (California Geological Survey, 2017), the Elsinore Fault Zone (Whittier Segment) is approximately five miles to the southwest. The northwest-trending Whittier-Elsinore fault zone is a right-lateral strike-slip with some reverse slip and with an estimated slip rate between 2.5 and 3 millimeters per year (California Institute of Technology, 2013). Locally, the Whittier Section lies at the Puente Hills range front along the southeast side of the Whittier Narrows and dips toward the northeast. The fault zone is exposed for approximately 25 miles along the south slopes of the Puente Hills between the Whittier Narrows at the northwest end of the hills and the Santa Ana River near the southeast end. Caltrans Fault Database (2017) assumes a slip rate of 2.5 millimeters per year and maximum magnitude of 6.9 for the Whittier segment of the Elsinore Fault Zone.

Acceleration Response Spectrum (ARS) Online was used to estimate the seismic shaking for the project area. Based on ARS Online evaluation, the controlling deterministic scenario for the southwest end is based on the Elsinore Fault (Whittier Section). The controlling Peak Ground Acceleration (PGA) was estimated following the latest Caltrans SDC and Caltrans ARS Online methodology, which uses the upper bound envelope of probabilistic and mean deterministic spectra for seismic design. Based on the soil profile in the as-built log of test boring showing medium dense to very dense sandy soils, and correlations with Standard Penetration Test (SPT) blow-counts, the estimated average shear wave velocity in the upper 30 meters is about 300 meters per second. Near fault factors were applied to both the deterministic and probabilistic spectra. No basin factor was applied since the site is not in a deep sedimentary basin. Note that for this site the maximum deterministic event has a PGA of 0.47 gravity (g), while the probabilistic scenario controls the PGA at 0.67g. Due to high PGA (>0.6g) non-standard design is required for conventional cast-in-place retaining walls. For conventional cast-in-place walls or mechanically stabilized embankment walls that can displace in an earthquake, pseudo-static horizontal acceleration coefficient of K_h=1/3 of PGA, or K_h=0.22 should be used for design.

Soil Liquefaction

The term liquefaction describes a phenomenon in which saturated, cohesionless soils temporarily lose shear strength (liquefy) when subjected to cyclic ground motions. Cyclic loading of saturated soils leads to the build-up of pore water pressure because of soil particles being rearranged with a tendency toward closer packing. Under undrained conditions, shaking of loose non-cohesive

soils may result in loads being transferred from the soil skeleton to the pore water with consequent reduction in the soil strength and stiffness. Structures founded on or above potentially liquefiable soils may experience bearing capacity failures because of the temporary loss of foundation support, vertical settlements (both total and differential), and/or undergo lateral spreading. Additionally, deep foundations are subject to downward movement of adjacent soils within penetrated liquefiable zones. The factors known to influence liquefaction potential include soil type, relative density, grain size, confining pressure, depth to groundwater, and the intensity and duration of the seismic ground shaking. Liquefaction is most prevalent in loose to medium-dense, silty, sandy, and gravelly soils below the groundwater table. The project area is located within a liquefaction zone, as delineated by the State of California, Seismic Hazard Zone for Liquefaction (California Geological Survey, 2017).

Environmental Consequences

No Build

No Build Alternative would not result in temporary or permanent impacts on geology, soils, seismic, and topography.

Build Alternative

Temporary Impacts

Construction of the project could temporarily disturb soils within the project area. Construction activities such as grading, compacting, and excavating could expose subsurface soils increasing the possibility of soil erosion. During project construction, the contractor would be required to adhere to the requirement of the Caltrans Construction General Permit and implement erosion and sediment control BMPs; specifically, those identified in the SWPPP. To avoid and/or minimize impacts on soils **AVM-GEO-1** through **AVM-GEO-3** would be implemented.

Seismic activity is possible during construction, which can create opportunities for liquefaction and settlement, as well as instability at natural and temporary slopes. To minimize risk to workers, safe work practices in accordance with Caltrans and the California Division of Occupational Safety and Health Administration (Cal/OSHA) would be implemented (see **AVM-GEO-2**).

Permanent Impacts

The project includes roadway widening and ramp improvements that could be impacted by ground motion and liquefaction. The Build Alternative would be designed and constructed to current highway design standards, including seismic design; therefore, potential impacts would be minimized. The potential geologic and geotechnical hazards affecting the design and construction of the Build Alternative include:

- Moderate ground accelerations due to the project's proximity to active and potentially active faults; and
- Liquefaction and seismically induced settlement where shallow groundwater is present. Most of the project area is within designated liquefaction zones.

Faulting/Seismicity

The project includes roadway widening and freeway ramp improvements that could be impacted by seismic ground shaking from nearby active and potentially active faults. However, the project would be designed and constructed to current seismic standards and would not increase exposure to existing seismic hazards. Therefore, impacts on the project from seismic activity would be minimized.

Liquefaction and Seismically Induced Settlement

The project area is within a liquefaction zone, as delineated by the California Geological Survey (2017). However, the project would replace existing infrastructure and would not alter land use in the study area. Additionally, groundwater is deeper than 50 feet and soil density is high at that depth. The project would be designed and constructed to current standards. Therefore, liquefaction potential at the site is considered low.

Avoidance, Minimization, and/or Mitigation Measures

Implementing standard design would reduce the impacts associated with geologic hazards, such as seismic shaking, liquefaction and settlement, and slope instability.

The following measures would be implemented to avoid and/or minimize impacts:

- **AVM-GEO-1**: During construction, exposed soils may be more susceptible to erosion due to the lack of any barrier and the introduction of water from rain events and/or construction activities. Erosion and sediment control measures will be implemented as required by construction permits and the project SWPPP. Implementation of BMPs would help minimize the effects of unwanted water intrusion into exposed soils.
- **AVM-GEO-2**: During construction, the Resident Engineer will ensure that safe work practices in accordance with Caltrans and Cal/OSHA are implemented to mitigate the risk to workers. This includes sloping and/or shoring of excavations to prevent collapse of unstable soils. Sloping and/or shoring of excavations would be constructed in accordance with Caltrans Shoring Manual, Cal/OSHA, and any local standards.
- **AVM-GEO-3**: During final design, a quality assurance/quality control plan will be prepared and implemented during construction. The quality assurance/quality control plan would include observation, monitoring, and testing by a geotechnical engineer and/or engineering geologist during construction to confirm that geotechnical/geologic recommendations are followed, or if different site conditions are encountered, ensure appropriate changes are made to accommodate such issues. The geotechnical engineer will prepare field observation reports while grading and construction activities are underway.

2.3.3 Paleontology

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.

Antiquities Act of 1906 (16 USC 431-433)

16 United States Code (USC) 431-433 (the "Antiquities Act") prohibits appropriating, excavating, injuring, or destroying any object of antiquity situated on federal land without the permission of the Secretary of the Department of Government having jurisdiction over the land. Fossils are considered "objects of antiquity" by the Bureau of Land Management, the National Park Service, the Forest Service, and other federal agencies.

National Registry of Natural Landmarks (16 USC 461-467)

16 USC 461-467 established the National Natural Landmarks (NNL) program. Under this program property owners agree to protect biological and geological resources such as paleontological features. Federal agencies and their agents must consider the existence and location of designated NNLs, and of areas found to meet the criteria for national significance, in assessing the effects of their activities on the environment under NEPA.

Paleontological Resources Preservation Act (16 USC 470aaa)

16 USC 470aaa (the Paleontological Resources Preservation Act) prohibits the excavation, removal, or damage of any paleontological resources located on federal land under the jurisdiction of the Secretaries of the Interior or Agriculture without first obtaining an appropriate permit. The statute establishes criminal and civil penalties for fossil theft and vandalism on federal lands.

Limitation on Federal Participation (23 USC 1.9(a))

23 USC 1.9(a) requires that the use of Federal-aid funds must be in conformity with all federal and state laws.

Archaeological and Paleontological Salvage (23 USC 305)

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.

California Environmental Quality Act of 1970

Under California law, paleontological resources are protected by the California Environmental Quality Act (CEQA).

Local Plans and Policies

The following are applicable goals and policies relevant to paleontology for the County of Los Angeles:

<u>County of Los Angeles</u>

The *Los Angeles County General Plan, Conservation and Natural Resources Element* (Los Angeles County, 2015) contains the following goal and policies that are applicable to the project:

- **Goal C/NR 14**: Protected historic, cultural, and paleontological resources.
    - **Policy C/NR 14.1**: Mitigate all impacts from new development on or adjacent to historic,

cultural, and paleontological resources to the greatest extent feasible.

- **Policy C/NR 14.2**: Support an inter-jurisdictional collaborative system that protects and enhances historic, cultural, and paleontological resources.
- **Policy C/NR 14.6**: Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.

Affected Environment

The information in this section is based on the combined *I-605 Corridor Improvement Project Paleontological Identification Report-Paleontological Evaluation Report* (Paleo Environmental Associates, Inc., 2019).

Paleontological Setting

The project is located in the San Gabriel Valley, in the northeastern block of the Los Angeles Basin. As illustrated on **Figure 2.3-1**, the project footprint and construction zone are underlain by younger alluvium and channel deposits of Holocene age at and near the current surface. However, the younger alluvium and channel deposits become progressively older with increasingly greater depths below the surface. The alluvial and channel deposits have produced fossilized bones and teeth representing extinct, latest Pleistocene or Rancholabrean species of Ice Age land mammals. The units underlying the project area are flat lying and relatively undissected and unconsolidated.

The project area is covered by pavement and landscaping; therefore, little or no exposure of the rock units that could be prospected for fossil remains can be observed.

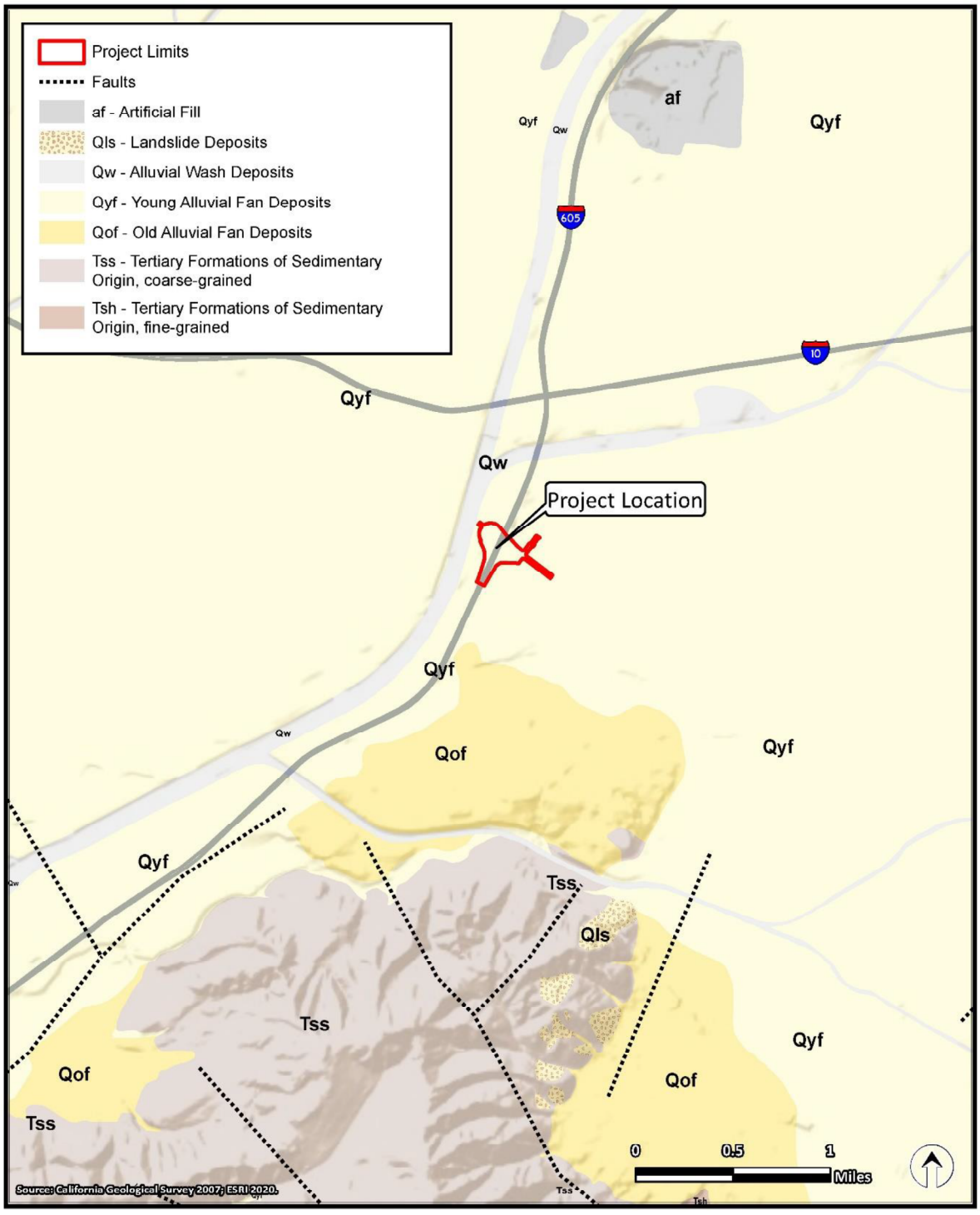


Figure 2.3-1. Surrounding Geology

This page is intentionally left blank.

Paleontological Resource Evaluation

Identification Efforts

A baseline paleontological resource inventory of the project area by stratigraphic unit was compiled through the following tasks.

- Published geologic maps and reports portraying the geology of the project area were reviewed to determine the sedimentary units exposed therein, particularly those units known to be fossiliferous, and to delineate their respective areal distributions in the project area.
- Published and unpublished paleontological literature was reviewed to document the number, locations, and depths of previously recorded fossil localities in the project footprint and vicinity from each rock unit exposed in the footprint. The types of fossil remains the unit produced locally and the taxa represented by the remains were also documented.
- The literature review was supplemented by an archival search performed by the Natural History Museum of Los Angeles County Vertebrate Paleontology Department on September 23, 2014, for additional information on the occurrences of fossil localities in the same stratigraphic units from the project area, and the types of fossil remains that were recovered at those localities.

Scientific Importance and Sensitivity of Paleontological Resources

Paleontological resources include fossil remains and their respective fossil localities, associated fossil specimen data and corresponding geologic and geographic locality data, and the fossil-bearing rock units that immediately underlie the ground surface. Fossils are the remains of ancient organisms that are preserved in sedimentary strata of the earth's crust. Fossils are considered an important scientific resource because of their use in (1) documenting the evolution of particular groups of organisms, (2) reconstructing the environments in which they lived, and (3) determining the ages of the rock units in which they occurred and of the geologic events that resulted in the deposition of the sediments constituting the rock units.

Caltrans has three rankings in their paleontological sensitivity scale (California Department of Transportation, 2014). The criteria for each ranking are:

- High Potential. Rock units that, based on previous studies, contain or are likely to contain significant vertebrate, significant invertebrate, or significant plant fossils. These units include, but are not limited to, sedimentary formations that contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. These units may also include some volcanic and low-grade metamorphic rock units. Fossiliferous deposits with very limited geographic extent or an uncommon origin (e.g., tar pits and caves) are given special consideration and ranked as highly sensitive. High sensitivity includes the potential for containing (1) abundant vertebrate fossils; (2) a few significant fossils (large or small vertebrate, invertebrate, or plant fossils) that may provide new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data; (3) areas that may contain datable organic remains older than Recent, including Neotoma (sp.) middens; or (4) areas that may contain unique new vertebrate deposits, traces, or trackways. Areas with a high potential for

containing significant paleontological resources may require monitoring and mitigation.

- Low Potential. This category includes sedimentary rock units that (1) are potentially fossiliferous, but have not yielded significant fossils in the past; (2) have not yet yielded fossils, but possess a potential for containing fossil remains; or (3) contain common or widespread invertebrate fossils if the taxonomy, phylogeny, and ecology of the species contained in the rock are well understood. Sedimentary rocks expected to contain vertebrate fossils are not placed in this category because vertebrates are generally rare and found in more localized stratum. Rock units designated as low potential generally do not require monitoring and mitigation. However, as excavation for construction gets underway, it is possible that new and unanticipated paleontological resources might be encountered.
- No Potential. Rock units of intrusive igneous origin, most extrusive igneous rocks, and moderately to highly metamorphosed rocks are classified as having no potential for containing significant paleontological resources. For projects encountering only these types of rock units, paleontological resources can generally be eliminated as a concern.

Applying Caltrans' paleontological sensitivity scale, a fossil specimen is considered scientifically highly important if it is identifiable to a low taxonomic level; relatively complete; comparatively well-preserved; age diagnostic; useful in environmental reconstruction; a type or topotypic specimen; a member of a rare species; a species that is part of a taxonomically diverse assemblage; or a skeletal element different from, or a specimen more complete than, those now available for its respective species.

The paleontological importance of a rock unit reflects its potential for containing scientifically important fossil remains that might be encountered by earth-moving activities in a project construction zone underlain by the rock unit. The potential paleontological productivity of the rock unit, in turn, reflects the number or density of fossil localities the unit contains in the project footprint and vicinity, as well as the number of fossil specimens that have been recovered at the fossil localities.

Results

As previously stated, the project area is underlain by younger alluvium and channel deposits. A paleontological resource evaluation of each rock unit in the project area and based on the results of the data searches is presented below (**Table 2.3-4**).

Table 2.3-4. Paleontological Productivities and Scientific Importance of Rock Units

Rock Unit	Productivity/Importance
Younger channel deposits (Qg)	High
Younger alluvium (Qa) (depths above six feet)	Low
Younger alluvium (Qa) (depths at or below six feet)	High

Younger Channel Deposits (Qg)

The younger channel deposits consist of sand and silt of major stream channels, including those of the San Gabriel River and its tributaries and the adjacent floodplains. Holocene in age at and near the surface, the younger channel deposits become progressively older and are perhaps

latest Pleistocene in age with increasing depth. These formations have high paleontological productivities and scientific importance.

The archival search and literature review conducted in support of the *Paleontological Identification Report and Paleontological Evaluation Report* documented only one previously recorded fossil locality as occurring in the younger channel deposits, situated north of the San Jose Hills in Irwindale in an aggregate quarry in the southwestern quadrant of the Arrow Highway–Vincent Avenue intersection. The remains were probably American mastodon and were recovered at an undetermined depth in a pit that was approximately 115 to 120 feet deep (Paleo Environmental Associates, Inc., 2019). In accordance with Caltrans standard practice, because a previously recorded fossil locality was documented during the archival search and literature review in the vicinity of the project footprint, the younger channel deposits for this project are considered to have high potential for containing additional fossil remains.

Younger Alluvium (Qa)

The younger alluvium consists of undissected alluvial deposits of silt, sand, and gravel of valley and floodplain origin. Holocene in age at and near the surface, the younger alluvium becomes progressively older and perhaps latest Pleistocene in age with increasing depth. These formations have high paleontological productivities and scientific importance at depths below six feet.

Several documented occurrences of extinct, late Pleistocene (Ice Age) or Rancholabrean land mammal species have been previously recorded in localities in the younger alluvium (unit Qa), in Carbon Canyon between the southeastern Puente and northwestern Chino Hills. Those localities yielded remains probably assignable to Harlan's ground sloth, the western horse, and the western or yesterday's camel, all extinct (Paleo Environmental Associates, Inc., 2019).

Environmental Consequences

No Build

The No Build Alternative would not result in temporary or permanent impacts on paleontological resources.

Build Alternative

Temporary Impacts

Any impact on paleontological resources would be permanent and irreversible; therefore, there would not be temporary impacts under the Build Alternative.

Permanent Impacts

The impact sensitivity of a stratigraphic unit is regarded as corresponding to its paleontological importance, as shown in **Table 2.3-4**. Therefore, a sedimentary unit of high paleontological importance would be considered highly sensitive to the impacts accompanying project-related earth-moving activities such as grading and excavating because of the correspondingly high potential for the disturbance or loss of paleontological resources. Project-related earth-moving activities might directly affect paleontological resources within the project area. To mitigate impacts on paleontological resources **PAL-1** through **PAL-6** would be implemented.

Of the geologic units, the younger alluvium at depths greater than six feet below the previous ground surface and the younger channel deposits have produced the fossilized remains of mostly extinct marine and continental vertebrate, invertebrate, and plant species at numerous, previously recorded fossil localities near the project footprint. Those localities occur elsewhere in the San Gabriel Valley. Earth-moving activities where the construction zone is underlain by those rock units have a high potential for disturbing remains.

In contrast to the other units, no remains old enough to be considered fossilized are recorded from the younger alluvium at depths less than six feet below the previous ground surface. Therefore, earth-moving activities at depths less than six feet where the construction zone is underlain by younger alluvium, have only a low potential for disturbing any fossil remains.

Avoidance, Minimization, and/or Mitigation Measures

The following measures would be implemented to avoid and/or minimize impacts related to paleontological resources:

- **PAL-1**: A Paleontological Mitigation Plan, prepared according to Caltrans Standard Environmental References Guidelines, will be finalized by a qualified Principal Paleontologist when final engineering design details are available and more-specific information on the location and vertical and horizontal extent of project excavation activities is known.
- **PAL-2**: A qualified principal paleontologist working for a paleontological specialist approved by Caltrans will be notified at least 15 days in advance of the start of any earth-moving activity in areas underlain by a paleontologically highly sensitive rock unit. The qualified principal paleontologist will be retained to implement the practices and procedures discussed in the Paleontological Mitigation Plan prepared for this project.
- **PAL-3**: Within 10 days prior to the start of earth-moving activities, the principal paleontologist, his or her designated representative (e.g., paleontological field supervisor), or a paleontological monitor, along with the project engineer and paleontological coordinator, will provide a 1-hour employee environmental awareness training session for all construction contractor and subcontractor representatives, particularly employees to be involved with project-related earth-moving activities. The program will establish lines of communication, procedures for cooperation and coordination, and measures to ensure worker safety during paleontological monitoring and fossil recovery. Attendance will be required of heavy-equipment operators before they will be allowed to conduct any earth-moving activity at the project site. A written request for such a training session will be submitted to the project engineer at least 10 days before the start of earth-moving activities.
- **PAL-4**: Before earth-moving activities begin, paleontological specialist staff members will conduct a preconstruction field survey of the project construction zone, and any exposed fossil remains will be recovered.
- **PAL-5**: A qualified paleontological monitor working under the direction of the principal paleontologist or his or her designated representative (i.e., paleontological field supervisor) will monitor earth-moving activities whenever they occur in areas underlain by paleontologically highly sensitive rock units. In addition, spot checking of low-sensitivity units

will also be undertaken to ensure that the transition points between the high- and low-sensitivity units are not inadvertently overlooked. No such earth-moving activity will be allowed without written authorization from the project engineer and the presence of a paleontological monitor. The project engineer will arrange for the paleontological monitor to be at the project site when needed. Monitoring will include inspecting freshly exposed strata to allow for the discovery and subsequent recovery of larger fossil remains, as well as the collection and processing of rock and sediment samples to allow for the recovery of smaller fossil remains too small to be observed in the field.

- **PAL-6**: If an unusually large or productive fossil occurrence is found, the paleontological monitor will immediately notify the project engineer of the need to have earth-moving activities avoid the fossil site until the remains have been recovered. If necessary to ensure the paleontological monitor is not diverted from the monitoring task and to expedite fossil recovery and reduce the potential for any construction delay, additional personnel (i.e., paleontological recovery team) also working under the direction of the principal paleontologist or his or her designated representative will be assigned to recover the occurrence. The recovery team will establish an exclusionary or buffer zone with a 60-foot radius to temporarily stop or divert earth-moving activities around the fossil site while fossil removal is being conducted. As appropriate, Caltrans staff members will examine and modify the dimensions of the exclusionary zone. Earth-moving activities will not proceed through the fossil site until authorized by the paleontological recovery team member.

2.3.4 Hazardous Waste/Materials

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and 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)

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.

California regulates hazardous materials, waste, and substances under the authority of the CA Health and Safety Code and is also authorized by the federal government to implement RCRA in the state. California law also addresses specific handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning of hazardous waste. The Porter-Cologne Water Quality Control Act also restricts disposal of wastes and requires cleanup of wastes that are below hazardous waste concentrations but could impact ground and surface water quality. California regulations that address waste management and prevention and cleanup of contamination include Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection.

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.

Affected Environment

The information in this section is based on the *Initial Site Assessment (ISA) I-605/Valley Boulevard Interchange Improvement Project* (Group Delta, 2019). The purpose of the ISA was to review, evaluate, and document present and past land uses and practices, and visually examine site conditions to identify Recognized Environmental Conditions (RECs). A REC is defined as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures or into the ground, groundwater, or surface water of the subject property.

The project area is located in the City of Industry and unincorporated Los Angeles County, California, approximately 0.5 miles south of I-10 and two miles north of SR-60. The project would include acquisition of six parcels to support the improvements (see **Table 2.3-5**). Therefore, the ISA included parcel-specific analysis for these six acquisition parcels.

Table 2.3-5. Parcel Acquisition

APN	Owner	Type	Receiving Party
8563-008-800	UPRR/Metrolink[a]	Permanent easement	City of Industry
8564-007-008	Yang	Temporary construction easement Right of way acquisition	LA Metro City of Industry
8564-007-800	UPRR/Metrolink[a]	Permanent easement	City of Industry
8564-007-901	City of Industry	Temporary construction easement Right of way acquisition	LA Metro City of Industry
8564-012-003	Russel L. Fox	Temporary construction easement Maintenance easement	LA Metro Caltrans
8564-012-004	Russel L. Fox	Temporary construction easement Maintenance easement	LA Metro Caltrans

Table 2.3-5. Parcel Acquisition

APN	Owner	Type	Receiving Party
		Highway easement	Caltrans

[a] The segment of railroad within the project area was historically part of the Southern Pacific Railroad's Los Angeles Division; the tracks are currently part of the UPRR Alhambra Subdivision, which UPRR shares with Metrolink.

APN = Assessor's Parcel Number; UPRR = Union Pacific Railroad; LA Metro = Los Angeles County Metropolitan Transportation Authority; Caltrans = California Department of Transportation

The ISA was conducted in conformity with Caltrans Guidance and the American Society for Testing and Materials (ASTM) Standard. The ISA included an environmental database search, a review of historical land use records, and field reconnaissance.

A search of readily available environmental records was obtained from Environmental Data Resources (EDR) based in Shelton, Connecticut. The environmental database search was limited to within one-mile radius of the project area, per the ASTM Standard. In addition, a records search of regulatory agency databases, including Department of Toxic Substance Control's (DTSC) Envirostor database, SWRCB's Geotracker database, California Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR), U.S. Department of Transportation National Pipeline Mapping System, and U.S. EPA records, was completed to identify known or suspected environmental concerns or RECs that may be associated with the project area. A full list of databases consulted appears in the ISA.

Historical aerial photographs, Sanborn insurance maps, and topographic maps of the project area were reviewed.

A reconnaissance-level site visit was performed on March 4, 2019 and a supplemental visit on July 23, 2019 to look for indicators of potential hazardous materials. The parcels for TCEs and right of way acquisition were evaluated during the site visit as well (see **Table 2.3-6**). During these site visits the following observations were made: guardrails exist at multiple locations, yellow striping is present along several of the roadways, and a wood utility pole was observed within the project area. No other evidence of storage tanks, drums, hazardous substances or petroleum products, unidentified substance containers, odors, or pools of liquid were observed within or adjacent to the project area.

Table 2.3-6. Parcel Acquisition Observed Concerns

APN	Type	Observed Concern
8563-008-800	Permanent Easement	REC – Presence of railroad
8564-007-008	TCE/ROW acquisition	Wooden pole adjacent to parcel
8564-007-800	Permanent Easement	REC – Presence of railroad
8564-007-901	TCE/ROW acquisition	One wood railroad tie
8564-012-003	TCE/ Maintenance Easement	Appeared to be evidence of vagrancy
8564-012-004	TCE/ Maintenance Easement/ Highway Easement	Appeared to be evidence of vagrancy

Table 2.3-6. Parcel Acquisition Observed Concerns

APN	Type	Observed Concern

Source: (Group Delta, 2019)

APN = Assessor's Parcel Number; TCE = Temporary Construction Easement; ROW = Right of Way;

In addition to the site visit, interviews were conducted with the property owners for each of these parcels. No response was received from the Union Pacific Railroad (APN: 8563-008-800 and 8564-007-800). The owners for parcels 8564-007-008 and 8564-007-901 responded they have no knowledge of Recognized Environmental Conditions (REC) associated with the property, including current or historic use of hazardous materials or petroleum products. The owner of parcels 8564-012-003 and 8564-012-004 responded they have no knowledge of RECs associated with the property, including current or historic use of hazardous materials or petroleum products; also stating that there is high vagrant activity on these properties. The properties with known or suspected contamination within the project limits are identified on **Figure 2.3-2** and include historical RECs, RECs, and properties that are not considered RECs, but may warrant further investigation.

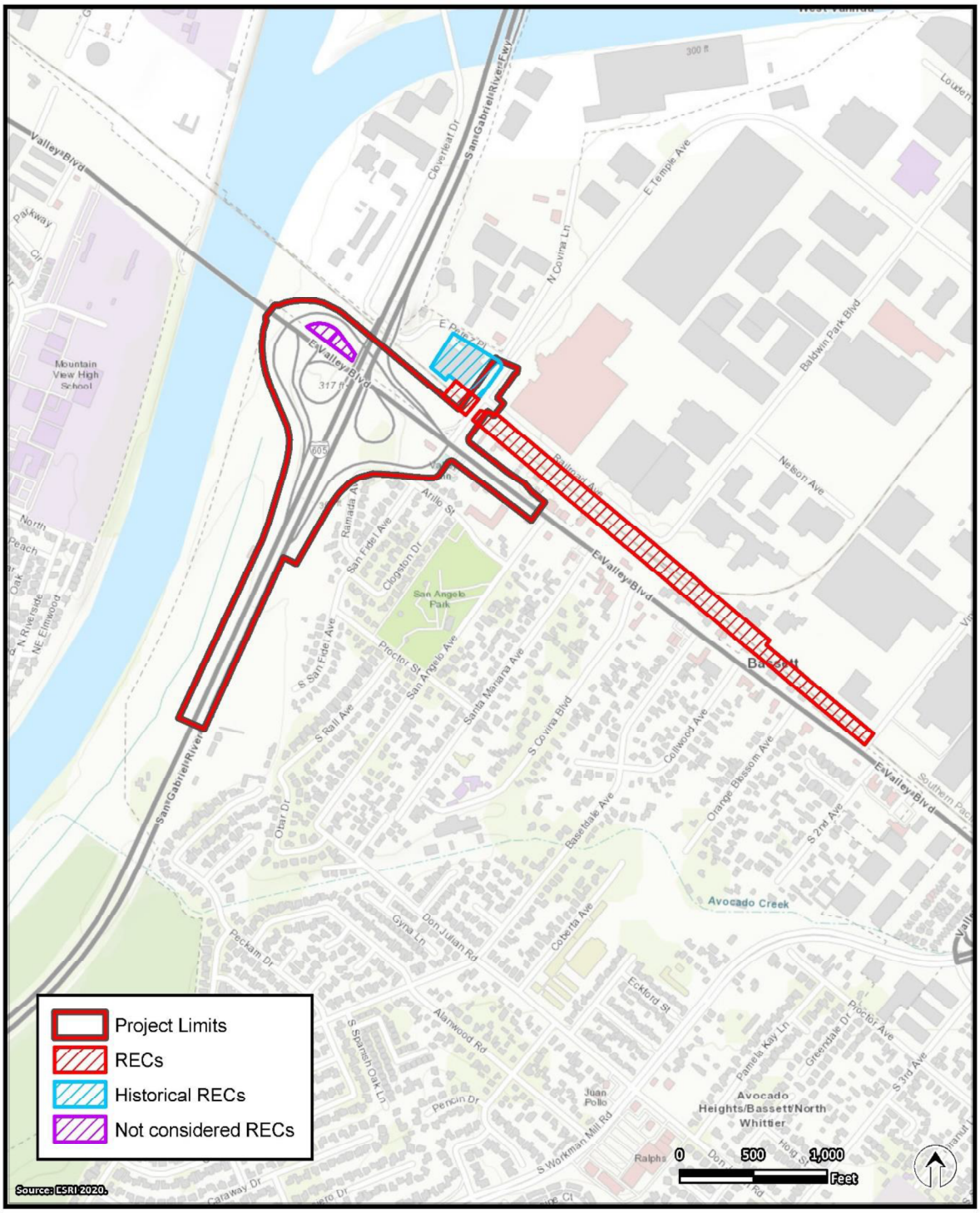


Figure 2.3-2. Properties with Known or Suspected Contamination

This page is intentionally left blank.

Results

Based on the field survey, database search, and historical research discussed above, the following results were found.

Acquisition

Acquisition of a small portion of land located on the southeast portion of APN 8564-007-008 (formerly Alcoa Fastening Systems/Fairchild Fasteners facility) is proposed as part of the project to accommodate widening of Temple Avenue. The underlying soil and groundwater at this facility have been impacted by a historic release of Stoddard and chlorinated solvents. Residual concentrations of solvents likely remain on the parcel, the portion of land that will be acquired was formerly used as a parking lot fronting Temple Avenue and was over 100 feet away from any facility operations. Considering this information, the property is not considered an environmental concern as it pertains to protection of the health for future construction workers.

Based on depth to groundwater within the project area (deeper than 50 feet below ground surface) and the deepest anticipated excavation depths for the project (approximately 35 feet for overhead signs), the groundwater table is not expected to be encountered in project excavations, and dewatering is not anticipated. Therefore, contaminated groundwater originating from former Alcoa Fastening Systems is not considered an environmental concern and is not anticipated to impact the project. Additionally, residual contaminant concentrations within the soil vapor underlying the project area are below human health regulatory thresholds, and therefore, do not present an environmental concern for future project construction workers. However, considering that a portion of this property will be acquired from Alcoa Fastening Systems and transferred to the City of Industry in support of the project, the release associated with Alcoa Fastening Systems is considered an Historical Recognized Environmental Condition (HREC).

In 2003, Fairchild Holdings entered into a Consent Decree with USEPA. In the agreement, Fairchild Holdings is identified as a “Settling Defendant” and APN 8564-007-008 is identified as part of the “Site” otherwise known as the San Gabriel Valley Area 1 Superfund Site Suburban Water Systems Operable Unit. The USEPA has communicated that future landowners or tenants of APN 8564-007-008 who wish to avoid CERCLA liability must comply with CERCLA’s Bona Fide Prospective Purchaser provisions. USEPA suggests that anyone looking to purchase or lease the former Fairchild Holding Corporation property seek legal counsel for additional assistance related to future liability.

USEPA Region 9 would be willing to consider recommending issuance of a Comfort Letter to local agencies assuming ownership of portions of the property (i.e., LA Metro and City of Industry). A Comfort Letter would apply only to the deeper drinking water aquifer where USEPA has jurisdiction. Comfort Letters must be approved by USEPA Headquarters so it is possible that a Comfort Letter drafted by USEPA Region 9 would require a lengthy approval process or not be approved by USEPA Headquarters. The first step in obtaining a Comfort Letter would be a formal request letter from LA Metro and/or the City of Industry legal counsel. Because Caltrans will never assume ownership of the parcel, USEPA Region 9 will not consider issuing a Comfort Letter to Caltrans.

A Covenant and Environmental Restriction on the property was recorded between Alcoa Global

Fastners, Inc. and Los Angeles RWQCB in May 2013. The covenant restricts the use of the property to commercial/industrial uses. Los Angeles RWQCB has stated that earthwork within the existing parcel boundaries would need to be conducted under the guidance of a Los Angeles RWQCB approved Health and Safety Plan and Soil Management Plan prepared for this project.

Acquisition of permanent easement from parcels (APN 8563-008-800 and APN 8564-007-800) occupied by UPRR/Metrolink rail facilities is proposed in support of the project. Railroads are commonly associated with a variety of contaminants, including herbicides, heavy metals, and petroleum products.

Aerially Deposited Lead

The project area has been utilized as the I-605 freeway since circa 1964. There is the potential for aerially deposited lead (ADL) to be present in undisturbed areas of soil within the project area originating from historic leaded gasoline emissions, including on the two proposed acquisition parcels located between Valley Boulevard and the I-605 southbound on-ramp (APN 8564-012-003 and APN 8564-012-004).

Treated Wood Waste

Guardrails and signs exist at multiple locations within the Project area. One wooden pole was identified on the northern side of Temple Boulevard fronting APN 8564-007-008 adjacent to a proposed acquisition area. In addition, wood railroad ties exist on APN 8563-008-800 and APN 8564-007-800. These structures are assumed to contain treated wood. Treated wood is typically treated with hazardous preserving chemicals that protect the wood from insect predation and fungal decay during its use.

Yellow Striping

Yellow striping (thermoplastic and paint) along the southbound loop off-ramp, northbound loop off-ramp, portions of Valley Boulevard, northbound Valley Boulevard off-ramp, northbound Valley Boulevard on-ramp, southbound Valley Boulevard on-ramp, and portions of Temple Avenue potentially contain hazardous levels of lead chromate.

Soil and/or Groundwater Contamination

As discussed earlier, soil and/or groundwater contamination has been identified at properties within the project area, including parcels proposed for TCEs and right of way acquisitions. However, groundwater is not likely to be encountered during construction activities, based on the depth to the groundwater table and the deepest anticipated excavations.

Asbestos-Containing Material and Lead-Based Paint

Metal beam guardrails and the I-605 River Grade Overhead could have asbestos-containing materials in their components. Additionally, lead-based paint may have been applied during construction or operation of these structures.

Environmental Consequences

No Build

Under the No Build Alternative, project related improvements would not be constructed within the

project area. Therefore, there would be no hazardous waste and materials impacts related to construction or operation of the project within the project area and the surrounding communities.

Build Alternative

Temporary Impacts

Construction activities could result in temporary impacts related to hazardous waste/materials within the project area. Hazardous wastes and materials may be encountered during excavation and construction activities, as described below. Hazardous materials (e.g. solvents, paints, fuels) anticipated to be used during construction and any hazardous waste generated would be handled in accordance with all applicable federal and state regulations. In addition, Caltrans policies regarding the use, storage, handling, disposal, and transport of hazardous waste/materials would be adhered to. **AVM-HW-1** through **AVM-HW-7** would be implemented to avoid and/or minimize impacts related to the construction of the Build Alternative.

Acquisition

The Build Alternative would include acquisition of full and partial right of way, temporary construction easements, permanent easements, and maintenance easements. Five sites were identified as sites of potential concern for the project. Limited shallow site investigations are recommended for the following five sites:

- APN 8563-008-800: Evaluate presence of potential contaminants originating from railroad use
- APN 8564-012-003: Evaluate soil to the depth it will be encountered during constructions for the presence of potential aerially deposited lead.
- APN 8564-012-004: Evaluate soil to the depth it will be encountered during constructions for the presence of potential aerially deposited lead.
- APN 8564-007-008: Evaluate presence of potential contaminants originating from historic aerospace manufacturing activities and historic unauthorized release at Alcoa Fastening Systems.
- APN 8564-007-800: Evaluate presence of potential contaminants originating from railroad use

Site investigations would extend to the total lateral and vertical extent of all proposed soil removals, including but not limited to the following depths:

- road construction: three feet;
- storm drains: eight feet;
- walls/sound walls: 14 feet;
- traffic signals/streetlights: 15 feet; and
- overhead signs: 35 feet.

Aerially Deposited Lead

Aerially deposited lead (ADL) from the historical use of leaded gasoline, exists along roadways throughout California. There is the likely presence of soils with elevated concentrations of lead as a result of ADL on the state highway system right of way within the limits of the project alternatives. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed

under the July 1, 2016, ADL Agreement between Caltrans, and the California Department of Toxic Substances Control. This ADL Agreement allows such soils to be safely reused within the project limits as long as all requirements of the ADL Agreement are met.

As previously discussed, there is potential for lead contamination in exposed soils within the project area because of ADL; therefore, an ADL investigation should be conducted prior to construction.

Treated Wood Waste

Treated wood is typically treated with preserving chemicals that protect the wood from insect attack and fungal decay during its use. During highway construction projects, treated wood waste may be generated when posts along metal beam guard railing, thrie-beam barrier, piles, utility poles, or roadside signs are removed. The DTSC requires that treated wood waste either be disposed of as a hazardous waste, or if not tested, the generator may presume that treated wood waste is a hazardous waste (to avoid the time and expense involved in completing laboratory testing) and manage the waste by Alternative Management Standards (AMS). The AMS are described in the California Code of Regulations, Title 22, Division 4.5, Chapter 34. The AMS lessen storage requirements, extend accumulation periods, allow shipments of presumed hazardous waste treated wood waste without manifests and registered hazardous waste haulers, and permit disposal at specific non-hazardous waste landfills. Management of treated wood waste, including removal and disposal, would be conducted in accordance with Caltrans Standard Special Provisions; therefore, the construction of the Build Alternative would not result in adverse impacts related to treated wood waste.

Yellow Striping

Historically, chrome yellow (containing lead-chromate) was used as the primary yellow pigment in traffic lane paints and thermoplastic striping. Lead-chromate varied from approximately 3.5 percent by weight in yellow waterborne paint to 25 percent by weight in yellow epoxy. In California, lead-chromate traffic striping was phased out in waterborne traffic paint between 1997 and 2000 and in thermoplastic striping by 2004. The concentrations of lead-chromate in the paints and thermoplastic striping applied to roadways would classify waste paints and thermoplastic striping as hazardous. Given the recent phase-out of lead-chromate-containing paints and thermoplastic striping, it is assumed that existing yellow paints and thermoplastic striping associated with roadway markings within a given Caltrans construction project area contain lead and chromium unless there is specific knowledge that lead or chromium are not present (i.e., analytical data or definitive identification of the paints and thermoplastic striping source material). Management of yellow striping, including removal and disposal, would be conducted in accordance with Caltrans Standard Special Provisions; therefore, the construction of the Build Alternative would not result in adverse impacts related to yellow striping.

Asbestos Containing Material and Lead-Based Paint

A hazardous materials survey is required for any structures proposed for demolition/modification. A Hazardous Materials SI Work Plan should be prepared detailing the investigative scope and methods. The survey should be conducted under the oversight of a Cal/OSHA Certified Asbestos Consultant and California Department of Public Health Lead Inspector/Assessor and will serve to

confirm the presence or absence of asbestos containing material and lead based paint through collection of bulk samples and laboratory analysis. If necessary, project special provisions should be prepared that direct the contractor on the management of hazardous building materials during construction. Therefore, the construction of the Build Alternative would not result in adverse impacts related to asbestos containing material or lead based paint.

Permanent Impacts

Following construction, the operation and maintenance of the project would not introduce new sources of hazardous wastes or materials. Routine maintenance activities would be required, which could potentially involve the use of hazardous chemicals and the transportation and disposal of hazardous waste. However, routine maintenance activities would be required to follow applicable regulations and requirements with respect to handling and disposing of potentially hazardous materials. Therefore, the operation of the Build Alternative would not result in adverse effects related to hazardous wastes and materials.

Avoidance, Minimization, and/or Mitigation Measures

- **AVM-HW-1**: Site Investigations. Limited shallow site investigations will be conducted for the following parcels:
    - APN 8563-008-800
    - APN 8564-012-003
    - APN 8564-012-004
    - APN 8564-007-008
    - APN 8564-007-800

    The site investigation work plan will include ADL and parcel-specific investigation. The site investigation will extend to the total lateral and vertical extent of all proposed soil removals.
- **AVM-HW-2**: Health and Safety Plan/Soil Management Plan. A Health and Safety/Soil Management Plan will be developed for earthwork conducted within the boundaries of parcel 8564-007-008 (formerly Alcoa Fastening Systems/Fairchild Fasteners facility) based on a Covenant and Environmental Restriction with the Los Angeles RWQCB. The plan must be approved by Los Angeles RWQCB prior to project construction.
- **AVM-HW-3:** Lead Compliance Plan. Prior to construction, a Lead Compliance Plan will be developed by a Certified Industrial Hygienist, to protect workers from exposure to lead associated with aerially deposited lead (ADL), and traffic stripe and pavement makings. The Lead Compliance Plan would include procedures for the handling, management, sampling, and disposal of material containing ADL and traffic stripe and pavement markings.
- **AVM-HW-4**: Aerially Deposited Lead. Soils located within Caltrans right of way have the potential to contain ADL. During the Final Design phase, soil sampling and analysis for ADL will be conducted in unpaved locations within the project area that have not been previously characterized, to determine the proper handling and disposal requirements. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed in accordance with Caltrans Standard Specifications, Section 14 11.08 Material Containing Hazardous Waste Concentrations of Aerially Deposited Lead (2015) and under the July 1,

2016, ADL Agreement between Caltrans and the DTSC. This ADL Agreement allows such soils to be safely reused within the project limits, as long as all requirements of the ADL Agreement are met.

- **AVM-HW-5**: Treated Wood Waste. Utility poles and railroad ties may contain creosote and pentachlorophenol. During construction, treated wood objects will be handled as treated wood waste and managed per Chapter 34, Title 22 California Code of Regulations Sections 67386.1 through 67386.12, "Alternative Management Standards for Treated Wood Waste." All treated wood waste will be properly disposed at a landfill permitted to accept treated wood waste.
- **AVM-HW-6**: Paint and Thermoplastic Striping. Paint used for traffic striping and pavement marking may contain lead chromate. During construction, sampling, analysis, removal, and disposal of any traffic striping and pavement materials will be completed in accordance with Construction Program Procedure Bulletin 99 2, and Caltrans Standard Specifications, Section 14 11.12. Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue and Section 36 4 Residue Containing Lead from Paint and Thermoplastic (2015) and be consistent with the requirements within Caltrans Construction Manual, Chapter 7 107E Removing Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue (2017). Before disposal, the contractor is required to sample the removed material for proper waste classification. Yellow traffic stripe and pavement marking that is characterized as hazardous waste requires disposal to a DTSC permitted Class I disposal facility.
- **AVM-HW-7**: Asbestos-Containing Materials and Lead-Based Paint. Asbestos-containing materials and lead-based paint may be present in structures disturbed by the project. Therefore, prior to any disturbance, structures and the surrounding soil will be sampled and analyzed for asbestos-containing material and lead-based paint.

2.3.5 Air Quality

Regulatory Setting

Federal and State Regulations

Federal and California 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 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 ($PM_{2.5}$), Lead (Pb), and sulfur dioxide (SO_2). In addition, 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 Code of Federal Regulations (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 4 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[6] that has not changed significantly from those in the RTP and TIP; project analyses have used the latest planning assumptions and EPA-

[6] "Design concept" means the type of facility that is proposed, such as a freeway or arterial highway. "Design scope" refers to those aspects of the project that would clearly affect capacity and thus any regional emissions analysis, such as the number of lanes and the length of the project.

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.

National Environmental Policy Act

NEPA requires that policies and regulations administered by the federal government are consistent with its environmental protection goals. NEPA also requires that federal agencies use an interdisciplinary approach to planning and decision making for any actions that could impact the environment. In addition, NEPA requires environmental review of federal actions including the creation of Environmental Documents that describe the environmental effects of a proposed project and its alternatives (including a section on air quality impacts).

California Environmental Quality Act

CEQA is a statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. CEQA documents address CCAA requirements for transportation projects. While state standards are often more strict than federal standards, the state has no conformity process.

Regional and Local Requirements

South Coast Air Quality Management District

The 1977 Lewis Air Quality Management Act created the South Coast Air Quality Management District (SCAQMD) to coordinate air quality planning efforts throughout Southern California. The 1977 Lewis Air Quality Management Act merged four county air pollution control agencies into one regional district to better address the issue of improving air quality in Southern California (South Coast Air Quality Management District, 1993). Under the 1977 Lewis Air Quality Management Act, renamed the Lewis-Presley Air Quality Management Act in 1988, the SCAQMD is the agency principally responsible for comprehensive air pollution control in the region. Specifically, the SCAQMD is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the district. Programs that were developed include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. The SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases.

Air Quality Management Plan

The FCAA requires areas not attaining the NAAQS to develop and implement an emission reduction strategy that will bring the area into attainment in a timely manner. The Air Quality Management Plan (AQMP) is the SCAQMD plan for improving regional air quality. The AQMP addresses FCAA requirements and demonstrates attainment with NAAQS and state standards. The AQMP is prepared by the SCAQMD in collaboration with the SCAG and the ARB. The AQMP provides policies and control measures that reduce emissions to attain both state and federal ambient air quality standards by their applicable deadlines. Environmental review of individual

projects within the South Coast Air Basin (SCAB) must demonstrate that daily construction and operational emissions thresholds, as established by the SCAQMD, would not be exceeded. The environmental review must also demonstrate that individual projects would not increase the number or severity of existing air quality violations.

The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017. It incorporates the latest scientific and technological information and planning assumptions, including the *2016-2040 RTP/SCS* and updated emission inventory methodologies for various source categories. The 2016 AQMP includes the integrated strategies and measures needed to meet the NAAQS (South Coast Air Quality Management District, 2017).

To ensure air quality goals will be met while maximizing benefits and minimizing adverse impacts to the regional economy, the following policy objectives guided the development of the 2016 AQMP:

- Eliminate reliance on future technology (CAA §182[e][5]) measures to the maximum extent feasible.
- Calculate and take credit for co-benefits from other planning efforts.
- Develop a strategy with fair-share emission reductions at the federal, state, and local levels.
- Invest in strategies and technologies meeting multiple objectives regarding air quality, climate change, air toxics exposure, energy, and transportation.
- Identify and secure significant funding for incentives to implement early deployment and commercialization of zero and near-zero technologies.
- Enhance the socioeconomic analysis and pursue the most efficient and cost-effective path to achieve multipollutant and multi-deadline targets.
- Prioritize enforceable regulatory measures as well as non-regulatory, innovative and "win-win" approaches for emission reductions.

Affected Environment

The following discussion incorporates the results of the Air Quality Report prepared for the project (AMBIENT Air Quality and Noise Consulting, 2019a). The Air Quality Report contains detailed methodology, modeling files, and calculation worksheets.

Climate, Meteorology, and Topography

The topography of a region can substantially impact airflow and the resulting pollutant concentrations. California is divided into 15 air basins with similar topography and meteorology to better manage air quality throughout the state. Each air basin has a local air district that is responsible for identifying and implementing air quality strategies to comply with ambient air quality standards.

The project area is in Los Angeles County, which is within the SCAB. The SCAB consists of an approximately 6,600-square mile area bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin 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 of Riverside County. The Basin's terrain and

geographical location (i.e., a coastal plain with connecting broad valleys and low hills) contribute to its distinctive climate. Primary factors known to influence air quality within the SCAB include topography and meteorology, which can affect pollutant transport and dispersion from sources located within and outside of the SCAB. These air quality-related issues are discussed in more detail in the following sections.

Regional Meteorology and Climate

Average wind speeds in the Basin are light and primarily from the west. Mild sea breezes slowly carry pollutants inland. In the general vicinity of the project area, historical wind flow is predominantly from the southwest with an average annual wind speed of approximately seven miles per hour. A wind rose depicting historical wind flows from June 1985 to January 2019 is depicted in **Figure 2.3-3**.

The annual average temperature varies little throughout the SCAB averaging approximately 62 degrees Fahrenheit (°F). Based on historical data for the Montebello monitoring station, average temperatures, in the general project area, range from a January low of approximately 48°F to an August high of approximately 90°F (Western Regional Climate Center, 2019).

Temperature Inversions

Under normal meteorological conditions, the temperature of the atmosphere decreases with increased altitude. However, when the temperature of the atmosphere increases with altitude, the phenomenon is termed an inversion. These inversions can restrict the vertical mixing of air and pollutants, which can contribute to increased ground-level pollutant concentrations.

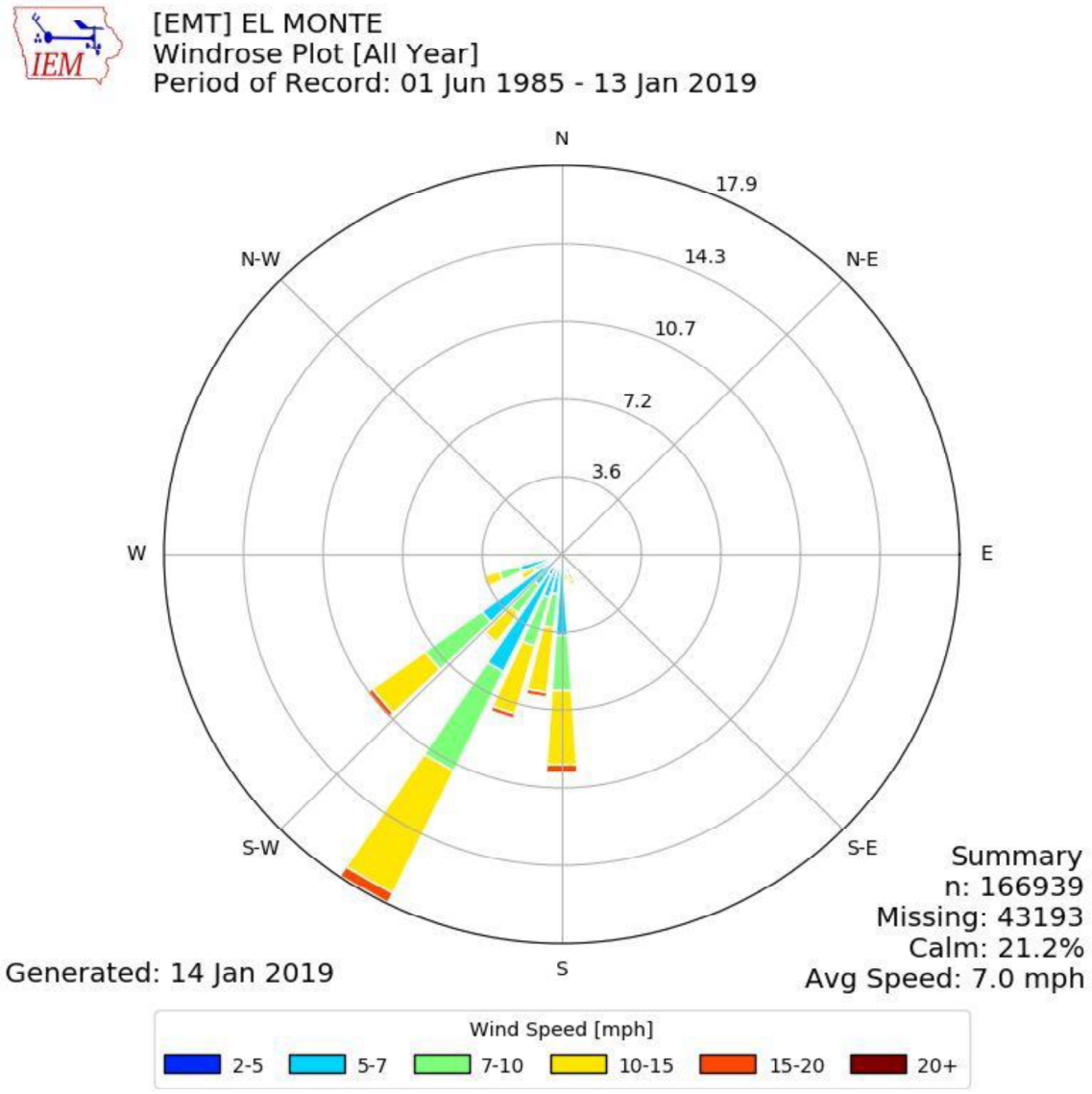


Figure 2.3-3. Predominant Wind Patterns Near the Project Area

In the SCAB, two distinct temperature inversion types commonly occur. The first type of inversion typically occurs during the warmer summer months when high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. The second inversion type primarily occurs in the winter, when nights are longer and onshore airflow is weakest. This inversion occurs in conjunction with the nighttime drainage of cool air from the surrounding mountains followed by the seaward drift of this pool of cool air. In general, inversions in the Basin are lower before sunrise than during the daylight hours. As the day progresses, the mixing height normally increases as the warming of the ground heats the surface air layer. The breakup of inversion layers frequently occurs during mid- to late afternoon on hot summer days. Winter inversions usually break up by mid-morning (South Coast Air Quality Management District, 1980).

Existing Air Quality

Ambient Air Quality Monitoring

Air pollutant concentrations are measured at several monitoring stations in the SCAB. The nearest representative ambient air quality monitoring station to the project area is the Pico Rivera-4144 San Gabriel monitoring station, which measures O_3, CO, $PM_{2.5}$, and NO_2. The nearest representative monitoring station providing ambient PM_{10} measurement data is the Anaheim-1630 Pampas Lane Monitoring Station. The locations of the two stations are shown in **Figure 2.3-4**. Ambient air quality monitoring data for these stations were obtained for the last five years of available measurement data (i.e., 2014 through 2018) and are summarized in **Table 2.3-7**. As depicted, state and federal O_3 standards were exceeded on numerous occasions during the past five years. The state and federal standards for suspended particulates (i.e., PM_{10} and $PM_{2.5}$) have also been exceeded on various occasions during the past five years.

Criteria Pollutants and Attainment Status

Under the CCAA, the ARB is required to designate areas of the state as "attainment," "nonattainment," or "unclassified" with respect to applicable standards. An "attainment" designation for an area signifies that pollutant concentrations did not violate the applicable standard in that area. A "nonattainment" designation indicates that a pollutant concentration violated the applicable standard at least once, excluding those occasions when a violation was caused by an exceptional event, as defined in the criteria. Depending on the frequency and severity of pollutants exceeding applicable standards, the nonattainment designation can be further classified as serious nonattainment, severe nonattainment, or extreme nonattainment, with extreme nonattainment being the most severe of the classifications. An "unclassified" designation signifies that the data do not support either attainment or nonattainment status. The CCAA divides districts into moderate, serious, and severe air pollution categories, with increasingly stringent control requirements mandated for each category.

The U.S. EPA designates areas for O_3, CO, and NO_2 as "does not meet the primary standards," "cannot be classified," or "better than national standards." For SO_2, areas are designated as "does not meet the primary standards," "does not meet the secondary standards," "cannot be classified," or "better than national standards." However, the ARB terminology of attainment, nonattainment, and unclassified is more frequently used. The U.S. EPA uses the same sub-categories for nonattainment status: serious, severe, and extreme. In 1991, U.S. EPA assigned new nonattainment designations to areas that had previously been classified as Group I, II, or III for PM_{10} based on the likelihood that they would violate national PM_{10} standards. All other areas are designated "unclassified."

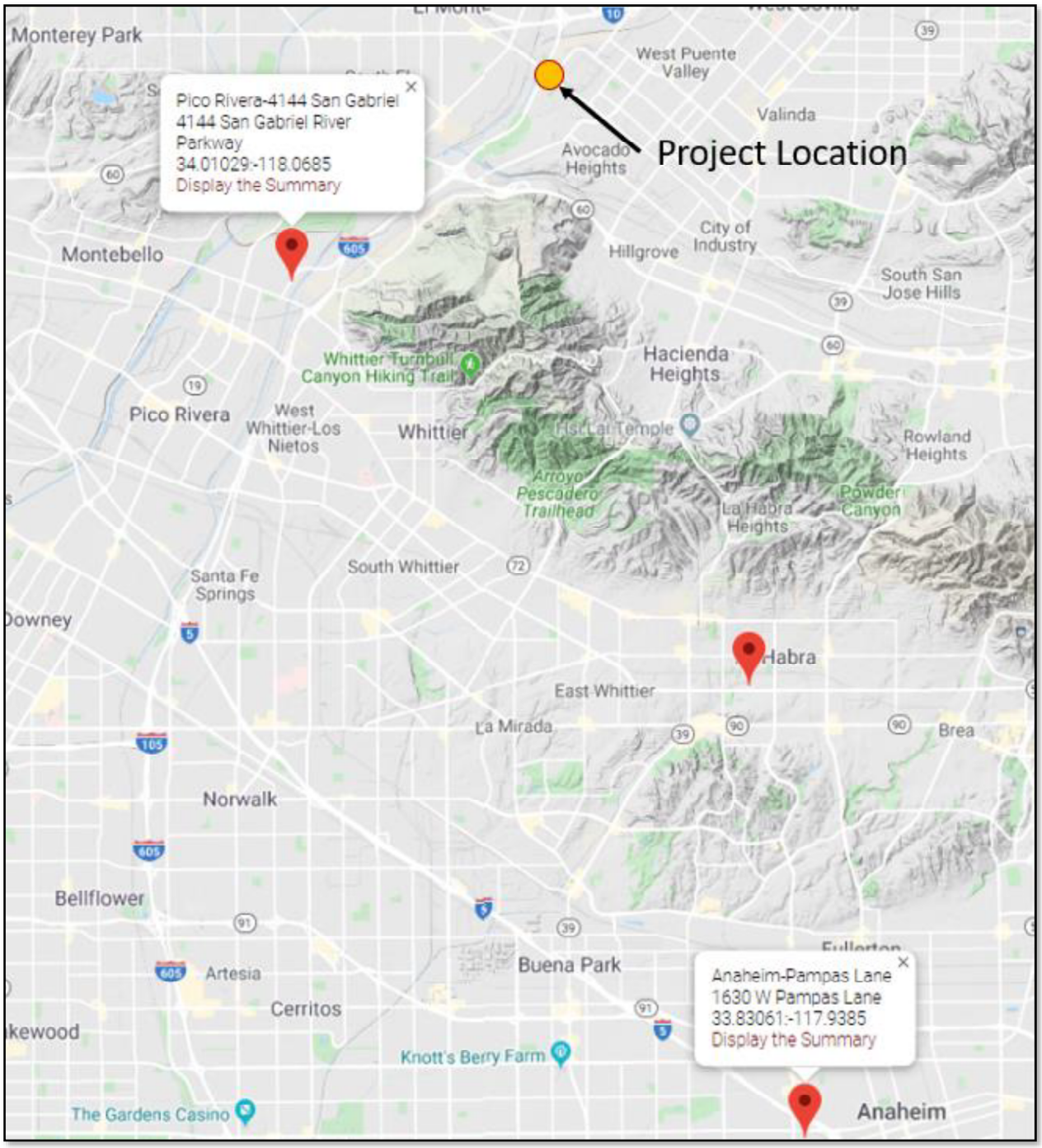


Figure 2.3-4. Map of Air Quality Monitoring Stations Located Near the Project Area

This page is intentionally left blank.

Table 2.3-7. Air Quality Concentrations for the Past 5 Years Measured at Pico Rivera-4144 San Gabriel and Anaheim-1630 Pampas Lane Monitoring Stations

Pollutant	Standard	2014	2015	2016	2017	2018
Ozone						
Max 1-hour Concentration		0.121	0.107	0.111	0.118	0.115
No. Days Exceeded:	0.09 ppm	7	6	9	7	3
Max 8-hour Concentration		0.092	0.081	0.081	0.086	0.082
No. Days Exceeded: State Federal	0.070 ppm 0.070 ppm	7 7	11 11	6 6	9 9	5 5
PM_{10}[a]						
Max 24-hour Concentration		85.0	59.0	74.0	95.7	94.6
No. Days Exceeded: State Federal	50 µg/m^3 150 µg/m^3	2 0	2 0	3 0	5 0	2 0
Annual Concentration Average		26.7	25.3	28.0	26.9	27.7
No. Days Exceeded: State	20 µg/m^3	N/A	N/A	N/A	N/A	N/A
$PM_{2.5}$						
Max 24-hour Concentration		35.1	52.7	46.5	49.5	56.3
No. Days Exceeded: Federal	35 µg/m^3	0	3	2	1	2
Annual Concentration Average		N/A	11.5	11.7	12.2	12.9
No. Days Exceeded: State Federal	12 µg/m^3 12 µg/m^3	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Nitrogen Dioxide						
Max 1-hour Concentration		86.7	70.4	63.2	75	76.8
No. Days Exceeded: State Federal	0.18 ppm 100 ppb	0 0	0 0	0 0	0 0	0 0
Annual Concentration Average		20	20	20	20	18
No. Days Exceeded: State Federal	0.030 ppm 53 ppb	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Carbon Monoxide						
Max 1-hour Concentration		3.9	2.8	2.8	2.5	2
No. Days Exceeded: State Federal	20 ppm 35 ppm	0 0	0 0	0 0	0 0	0 0
Max 8-hour Concentration		2.5	1.7	1.7	2.2	1.8
No. Days Exceeded: State Federal	9 ppm 9 ppm	0 0	0 0	0 0	0 0	0 0

Source: Air Quality Report (AMBIENT Air Quality and Noise Consulting, 2019a)

[a] PM_{10} is not monitored at the Pico Rivera-4144 San Gabriel Monitoring Station. Therefore, PM_{10} data was obtained from the Anaheim-1630 Pampas Lane Monitoring Station

ppm = parts per million; µg/m^3 = micrograms per cubic meter; N/A = not applicable; ppb = parts per billion

The state and national attainment status designations pertaining to the SCAB are summarized in **Table 2.3-8**. The SCAB is currently designated as a nonattainment area with respect to the state and federal O_3 and $PM_{2.5}$ standards and that state PM_{10} standards. In addition, based on monitoring data obtained near a lead acid battery reclamation facility, Los Angeles County is currently designated nonattainment for the federal lead standards. Except for Los Angeles County, the remainder of the SCAB is designated attainment for the lead standards. The Basin is designated attainment or unclassified for the remaining State and Federal standards. The SCAB federal O_3, $PM_{2.5}$ nonattainment areas, and PM_{10} nonattainment and maintenance areas, as well as other nonattainment areas within the SCAG region, are depicted in **Figure 2.3-5**, **Figure 2.3-6**, and **Figure 2.3-7**, respectively.

Table 2.3-8. State and Federal Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard	Federal Standard	Principal Health and Atmospheric Effect	Typical Sources	State Project Area Attainment Status	Federal Project Area Attainment Status
Ozone (O_3)[3]	1 hour	0.09 ppm[4]	---	High concentrations irritate lungs. Long-term exposure may cause lung tissue damage and cancer. Long-term exposure damages plant materials and reduces crop productivity. Precursor organic compounds include many known toxic air contaminants. Biogenic VOC may also contribute.	Low-altitude ozone is almost entirely formed from reactive organic gases/volatile organic compounds (ROG or VOC) and nitrogen oxides (NOx) in the presence of sunlight and heat. Common precursor emitters include motor vehicles and other internal combustion engines, solvent evaporation, boilers, furnaces, and industrial processes.	Nonattainment	---
	8 hours	0.070 ppm	0.070 ppm (4th highest in 3 years)				Extreme Nonattainment
Carbon Monoxide (CO)[5]	1 hour	20 ppm	35 ppm	CO interferes with the transfer of oxygen to the blood and deprives sensitive tissues of oxygen. CO also is a minor precursor for photochemical ozone. Colorless, odorless.	Combustion sources, especially gasoline-powered engines and motor vehicles. CO is the traditional signature pollutant for on-road mobile sources at the local and neighborhood scale.	Attainment	Attainment/ Maintenance
	8 hours	9.0 ppm	9 ppm				
	8 hours (Lake Tahoe)	6 ppm	---				---

Table 2.3-8. State and Federal Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard	Federal Standard	Principal Health and Atmospheric Effect	Typical Sources	State Project Area Attainment Status	Federal Project Area Attainment Status
Respirable Particulate Matter (PM_{10})[6]	24 hours	50 µg/m^3 [7]	150 µg/m^3 (expected number of days above standard < or equal to 1)	Irritates eyes and respiratory tract. Decreases lung capacity. Associated with increased cancer and mortality. Contributes to haze and reduced visibility. Includes some toxic air contaminants. Many toxic & other aerosol and solid compounds are part of PM_{10}.	Dust- and fume-producing industrial and agricultural operations; combustion smoke & vehicle exhaust; atmospheric chemical reactions; construction and other dust-producing activities; unpaved road dust and re-entrained paved road dust; natural sources.	Nonattainment	Attainment/ Maintenance
	Annual	20 µg/m^3	--- [6]				---
Fine Particulate Matter ($PM_{2.5}$)[8]	24 hours	---	35 µg/m^3 [6]	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and produces surface soiling. Most diesel exhaust particulate matter – a toxic air contaminant – is in the $PM_{2.5}$ size range. Many toxic & other aerosol and solid compounds are part of $PM_{2.5}$.	Combustion including motor vehicles, other mobile sources, and industrial activities; residential and agricultural burning; also formed through atmospheric chemical and photochemical reactions involving other pollutants including NOx, sulfur oxides (SOx), ammonia, and ROG.	---	Nonattainment
	Annual	12 µg/m^3	12.0 µg/m^3			Nonattainment	

Table 2.3-8. State and Federal Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard	Federal Standard	Principal Health and Atmospheric Effect	Typical Sources	State Project Area Attainment Status	Federal Project Area Attainment Status
Nitrogen Dioxide (NO_2)	1 hour	0.18 ppm	0.100 ppm[9]	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown. Contributes to acid rain & nitrate contamination of storm water. Part of the "NOx" group of ozone precursors.	Motor vehicles and other mobile or portable engines, especially diesel; refineries; industrial operations.	Attainment	Attainment/ Maintenance
Sulfur Dioxide (SO2)[10]	1 hour	0.25 ppm	0.075 ppm (99th percentile over 3 years)	Irritates respiratory tract; injures lung tissue. Can yellow plant leaves. Destructive to marble, iron, steel. Contributes to acid rain. Limits visibility.	Fuel combustion (especially coal and high-sulfur oil), chemical plants, sulfur recovery plants, metal processing; some natural sources like active volcanoes. Limited contribution possible from heavy-duty diesel vehicles if ultra-low sulfur fuel not used.	Attainment/ Unclassified	Attainment/ Unclassified
	3 hours	---	0.5 ppm[11]			---	
	24 hours	0.04 ppm	0.14 ppm (for certain areas)			Attainment/ Unclassified	
	Annual	---	0.030 ppm (for certain areas)			---	

Table 2.3-8. State and Federal Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard	Federal Standard	Principal Health and Atmospheric Effect	Typical Sources	State Project Area Attainment Status	Federal Project Area Attainment Status
Lead (Pb)[12]	Monthly	1.5 µg/m^3	---	Disturbs gastrointestinal system. Causes anemia, kidney disease, and neuromuscular and neurological dysfunction. Also, a toxic air contaminant and water pollutant.	Lead-based industrial processes like battery production and smelters. Lead paint, leaded gasoline. Aerially deposited lead from older gasoline use may exist in soils along major roads.	Attainment	---
	Calendar Quarter	---	1.5 µg/m^3 (for certain areas)			---	Nonattainment (Los Angeles County only)
	Rolling 3-month average	---	0.15 µg/m^3 [13]			---	
Sulfates	24 hours	25 µg/m^3	---	Premature mortality and respiratory effects. Contributes to acid rain. Some toxic air contaminants attach to sulfate aerosol particles.	Industrial processes, refineries and oil fields, mines, natural sources like volcanic areas, salt-covered dry lakes, and large sulfide rock areas.	Attainment/ Unclassified	N/A
Hydrogen Sulfide (H_2S)	1 hour	0.03 ppm	---	Colorless, flammable, poisonous. Respiratory irritant. Neurological damage and premature death. Headache, nausea. Strong odor.	Industrial processes such as: refineries and oil fields, asphalt plants, livestock operations, sewage treatment plants, and mines. Some natural sources like volcanic areas and hot springs.	Attainment/ Unclassified	N/A

Table 2.3-8. State and Federal Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard	Federal Standard	Principal Health and Atmospheric Effect	Typical Sources	State Project Area Attainment Status	Federal Project Area Attainment Status
Visibility Reducing Particles (VRP)[14]	8 hours	Visibility of 10 miles or more (Tahoe: 30 miles) at relative humidity less than 70%	---	Reduces visibility. Produces haze. NOTE: not directly related to the Regional Haze program under the Federal Clean Air Act, which is oriented primarily toward visibility issues in National Parks and other "Class I" areas. However, some issues and measurement methods are similar.	See particulate matter above. May be related more to aerosols than to solid particles.	Attainment/ Unclassified	N/A
Vinyl Chloride[12]	24 hours	0.01 ppm	---	Neurological effects, liver damage, cancer. Also considered a toxic air contaminant.	Industrial processes	Attainment/ Unclassified	N/A

Adapted from the California ARB Air Quality Standards chart (http://www.arb.ca.gov/research/aaqs/aaqs2.pdf).

Greenhouse Gases and Climate Change: Greenhouse gases do not have concentration standards for that purpose. Conformity requirements do not apply to greenhouse gases.

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, 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. Federal 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 PM_{10}, 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 $PM_{2.5}$, 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. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm. Transportation conformity applies in newly designated nonattainment areas for the 2015 national 8-hour ozone primary and secondary standards on and after August 4th, 2019 (see Transportation Conformity Guidance for 2015 Ozone NAAQS Nonattainment Areas).

Table 2.3-8. State and Federal Criteria Air Pollutant Standards, Effects, and Sources

Pollutant	Averaging Time	State Standard	Federal Standard	Principal Health and Atmospheric Effect	Typical Sources	State Project Area Attainment Status	Federal Project Area Attainment Status

4. ppm = parts per million

5. Transportation conformity requirements for CO no longer apply after June 1, 2018 for the following California Carbon Monoxide Maintenance Areas (see U.S. EPA CO Maintenance Letter).

6. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m3 to 12 µg/m3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

7. $\mu g/m^3$ = micrograms per cubic meter

8. The 65 $\mu g/m^3$ $PM_{2.5}$ (24-hr) NAAQS was not revoked when the 35 $\mu g/m^3$ NAAQS was promulgated in 2006. The 15 $\mu g/m^3$ annual $PM_{2.5}$ standard was not revoked when the 12 $\mu g/m^3$ standard was promulgated in 2012. Therefore, for areas designated nonattainment or nonattainment/maintenance for the 1997 and or 2006 $PM_{2.5}$ NAAQS, conformity requirements still apply until the NAAQS are fully revoked.

9. Final 1-hour NO_2 NAAQS published in the Federal Register on 2/9/2010, effective 3/9/2010. Initial area designation for California (2012) was attainment/unclassifiable throughout. Project-level hot spot analysis requirements do not currently exist. Near-road monitoring starting in 2013 may cause re-designation to nonattainment in some areas after 2016.

10. 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.

11. Secondary standard, the levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant rather than health. Conformity and environmental analysis address both primary and secondary NAAQS.

12. The ARB has identified vinyl chloride and the particulate matter fraction of diesel exhaust as toxic air contaminants. Diesel exhaust particulate matter is part of PM_{10} and, in larger proportion, $PM_{2.5}$. Both the ARB and U.S. EPA have identified lead and various organic compounds that are precursors to ozone and $PM_{2.5}$ as toxic air contaminants. There are no exposure criteria for adverse health effect due to toxic air contaminants, and control requirements may apply at ambient concentrations below any criteria levels specified above for these pollutants or the general categories of pollutants to which they belong.

13. Lead NAAQS are not considered in Transportation Conformity analysis.

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.

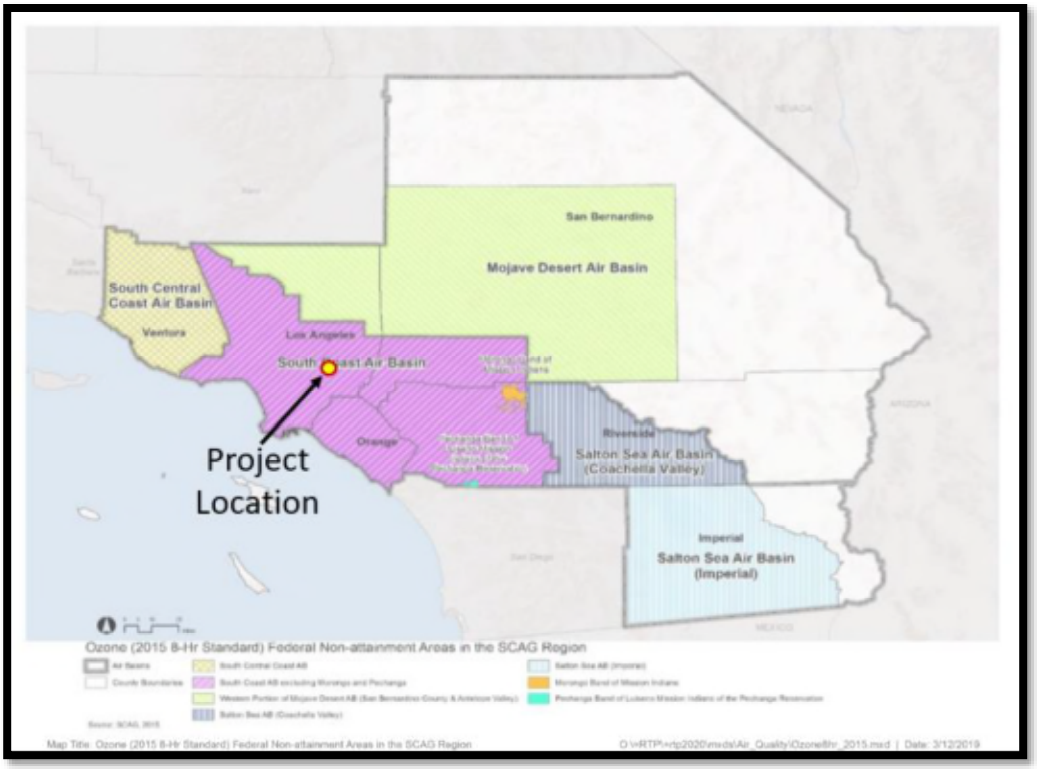


Figure 2.3-5. Federal 8-Hour Ozone Nonattainment Areas in the SCAG Region

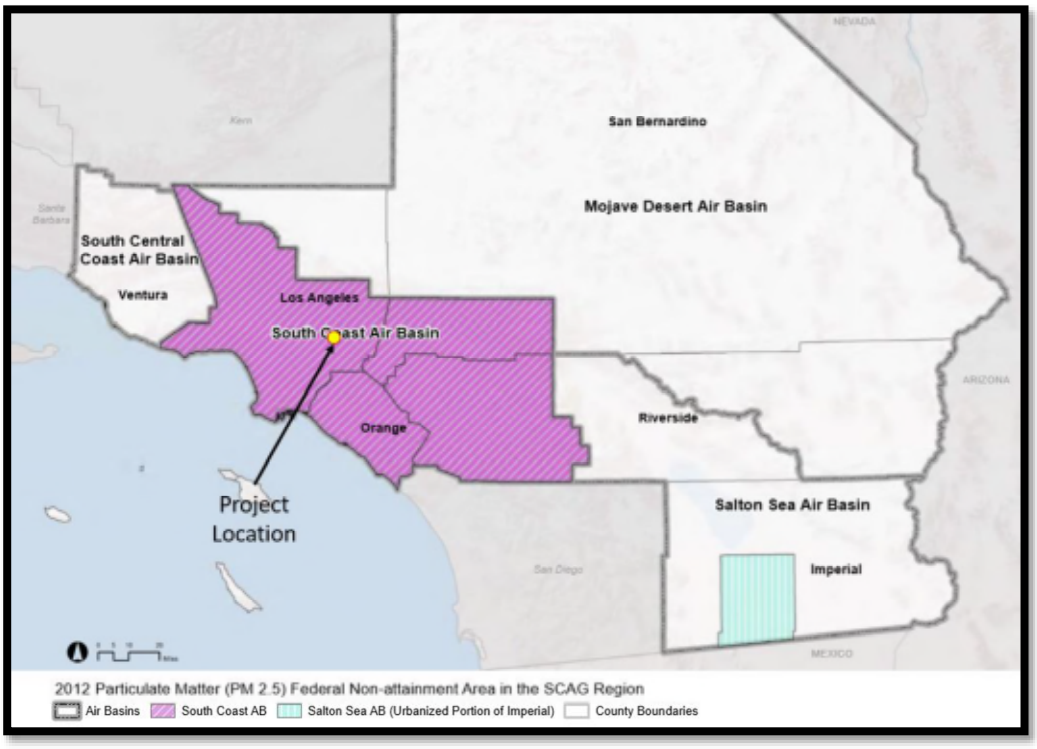


Figure 2.3-6. Federal $PM_{2.5}$ Nonattainment Areas in the SCAG Region

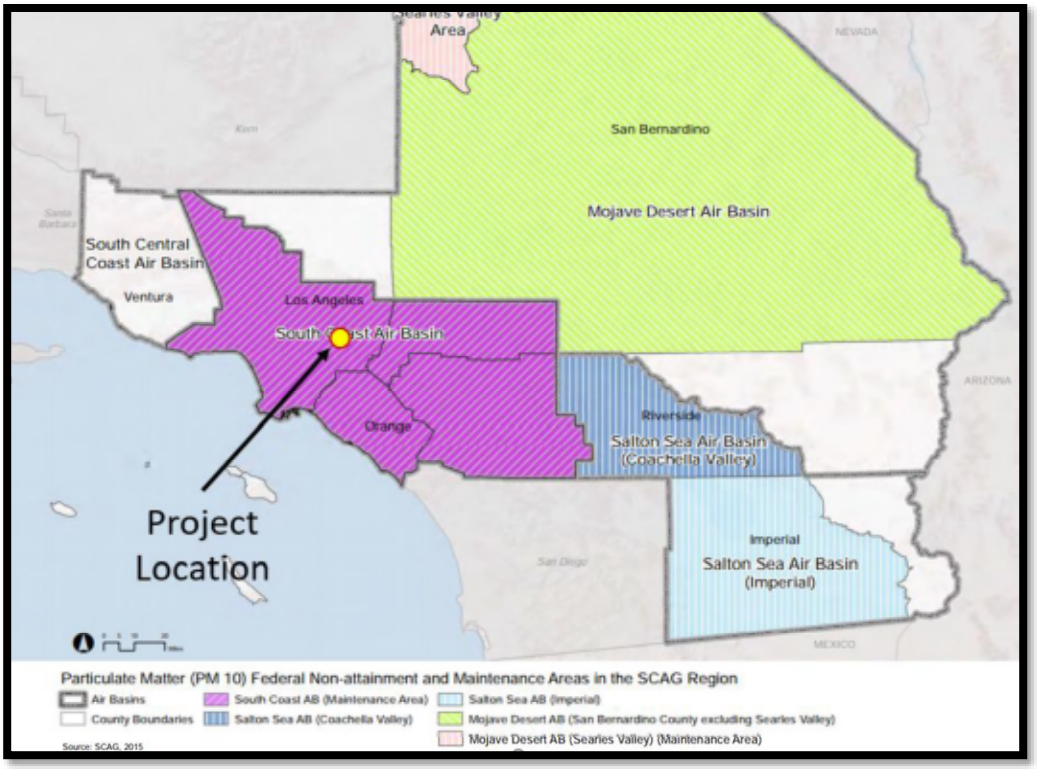


Figure 2.3-7. Federal PM_{10} Maintenance Areas in the SCAG Region

Mobile Source Air Toxics

The primary source of mobile source air toxics (MSAT) in the project area is traffic on I-605, Interstate 105 (I-105), Interstate 5 (I-5), SR-60, and I-10. Ambient MSAT data measured at nearby ambient air quality monitoring stations are available from ARB's website (http://www.arb.ca.gov/adam/toxics/toxics.html).

Sensitive Receptors

Sensitive land uses within the project area include schools, residences, and parks. **Figure 2.3-8** shows the locations of sensitive receptors relative to the project limits.

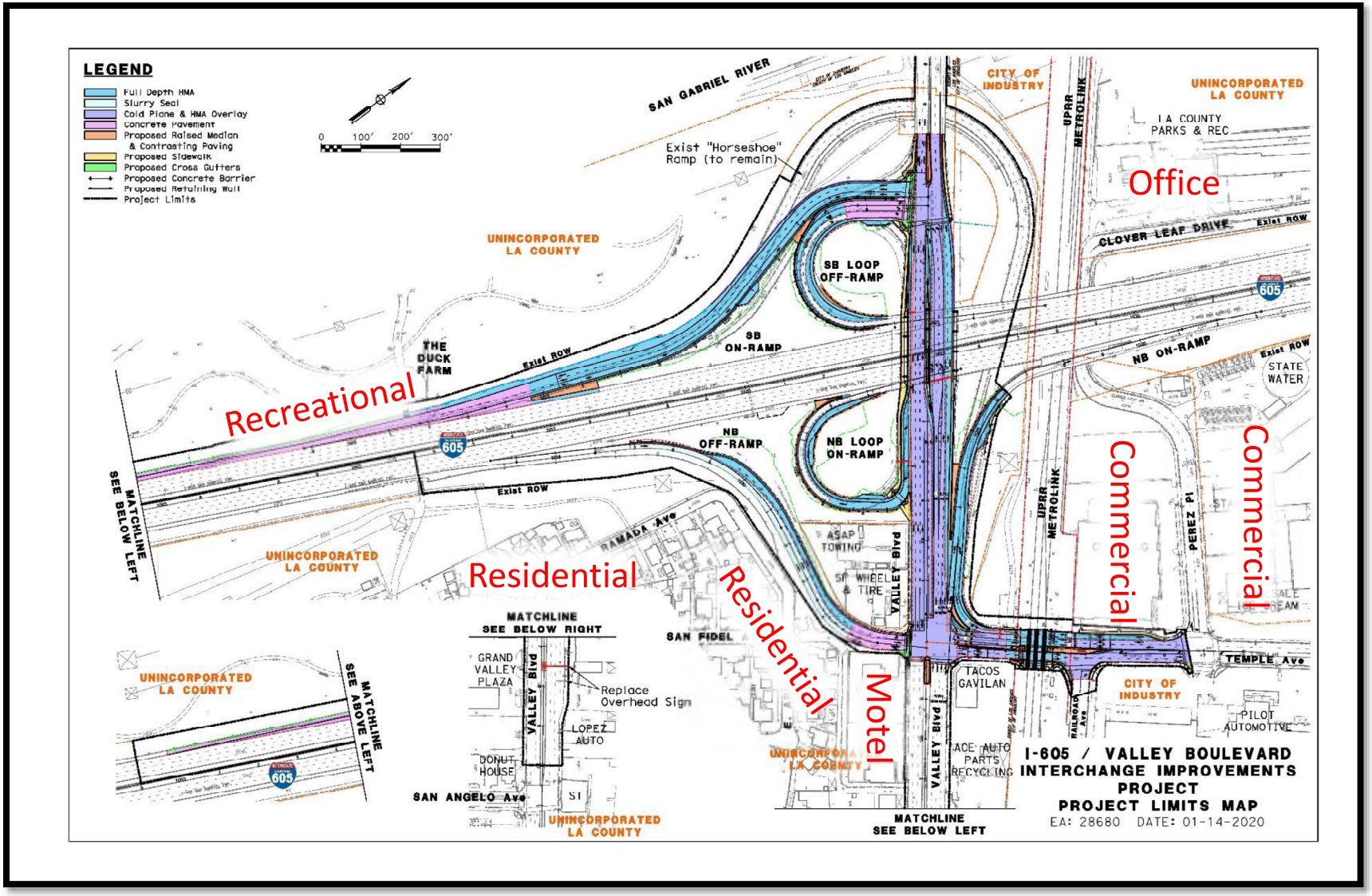


Figure 2.3-8. Sensitive Land Uses

This page is intentionally left blank.

Environmental Consequences

Conformity Status

Regional Conformity

The proposed project is listed in the financially constrained *2020-2045 RTP/SCS* which was found to conform by SCAG on May 7, 2020, and the FHWA and FTA made a regional conformity determination finding on June 5, 2020. The project is also included in the SCAG financially constrained *2019 FTIP*, page 11 of the State Highway Project Listings for Los Angeles County. The SCAG *2019 FTIP* was determined to conform by FHWA and FTA on June 5, 2020. The design concept and scope of the proposed project is consistent with the project description in the *2020-2045 RTP/SCS*, *2019 FTIP*, and the "open to traffic assumptions of the SCAG's regional emissions analysis. The project's "open to traffic" delivery date (2024) is within the same conformity analysis time period in the *2020-2045 RTP/SCS* and *2019 FTIP*.

The project is currently listed in the *2020-2045 RTP/SCS* under the following project number:

- RTP ID 1163S009: "Reconfigure the SB I-605 on-ramp by replacing the horseshoe on-ramp with a three lane on-ramp, widen the SB loop off-ramp to three lanes, widen the NB I-605 off-ramp, modify the NB I-605 loop on-ramp, and add a lane to directly connect the NB I-605 on-ramp to both Valley Blvd and Temple Ave. Add a WB through lane on Valley Blvd west of Temple Ave, add a three-lane left turn pocket for the SB I-605 on-ramp, widen SB Temple Ave to three lanes through the Valley Blvd signalized intersection."

The project is currently listed in the *2019 FTIP Amendment No. 19-12* under the following project number:

- Project No. LA0G1457: "Reconfigure the SB I-605 on-ramp by replacing the horseshoe on-ramp with a three lane on-ramp, widen the SB loop off-ramp to three lanes, widen the NB I-605 off-ramp, modify the NB I-605 loop on-ramp, and add a lane to directly connect the NB I-605 on-ramp to both Valley Blvd and Temple Ave. Add a WB through lane on Valley Blvd west of Temple Ave, add a three-lane left turn pocket for the SB I-605 on-ramp, widen SB Temple Ave to three lanes through the Valley Blvd signalized intersection."

The air quality conformity analysis prepared for these plans found that the plans, which account for regionally significant projects and financial constraints, would conform to the SIPs for attaining and maintaining the NAAQS as provided in Section 176(c) of the FCAA. FHWA determined that the *2020-2045 RTP/SCS* and the *2019 FTIP Amendment No. 19-12* conform to the SIP on June 5, 2020. Additional documentation related to the regional emissions analysis is contained in Appendix A of the Air Quality Report.

Project-Level Conformity

The project is located in Los Angeles County, which is designated nonattainment for the federal $PM_{2.5}$ and O_3 standards and maintenance for the federal CO and PM_{10} standards (refer to **Table 2.3-8)**. As a result, a project-level hot-spot analysis for PM_{10}, $PM_{2.5}$ and CO is required under 40 CFR 93.109. The project does not cause or contribute to any new localized CO, $PM_{2.5}$, and/or PM_{10} violations, or delay timely attainment of any NAAQS or any required interim emission reductions or other milestones during the timeframe of the transportation plan (or regional

emissions analysis).

On October 30, 2020, a request for project level conformity determination for this project was submitted to FHWA and on November 20, 2020, FHWA determined that the project-level transportation conformity requirements of 40 CFR Part 93 have been met. The FHWA Project Level Conformity Determination for this project is contained in Appendix E.

Carbon Monoxide Analysis

In 1997, the U.S. EPA approved the *Transportation Project-Level Carbon Monoxide Protocol* (CO Protocol)[7] for use as an alternative hot-spot analysis method in California. Statewide and regional interagency consultation groups also reviewed the CO Protocol and approved it for federal air quality conformity use. The CO Protocol provides a screening procedure for determining when a project may be of possible concern regarding potential exceedance of CO ambient air quality standards. For projects that do not pass the screening procedure, the CO Protocol provides additional guidance on conducting a more detailed analysis.

The CO Hot Spot Screening Flow Chart completed for the project is shown in **Figure 2.3-9**. Each CO Protocol Decision Flow Chart inquiry as they pertain to the project is evaluated in more detail in the Air Quality Report (AMBIENT Air Quality and Noise Consulting, 2019a).

Based on the screening criteria, the project area intersection would not be suspected of resulting in higher CO concentrations than those existing within the region at the time of attainment demonstration. Therefore, the project would not worsen violations of CO standards and no further analysis is necessary.

Particulate Matter Analysis

Emissions Analysis

PM emissions were estimated for Baseline, No Build Alternative, and the Build Alternative for Opening Year 2024 and Design Year 2044 conditions (refer to **Table 2.3-10**). In comparison to existing conditions, emissions of PM_{10} and $PM_{2.5}$ in the project area are projected to change. Under year 2024 conditions, emissions of PM_{10} and $PM_{2.5}$ for the No Build Alternative are projected to increase by roughly 1 percent and decrease by roughly 6 percent, respectively, relative to existing conditions. Under year 2044 conditions, emissions of PM_{10} and $PM_{2.5}$ for the No Build Alternative are projected to increase by approximately 15 and 5 percent, respectively, relative to existing conditions. In comparison to existing conditions, the proposed 2024 Build Alternative would result in an estimated decrease in PM_{10} and $PM_{2.5}$ emissions of approximately 2 percent and 7 percent respectively. In comparison to existing conditions, the proposed 2044 Build Alternative would result in an estimated increase in PM_{10} and $PM_{2.5}$ emissions of approximately 8 percent and 3 percent, respectively. Under Build 2024 conditions, PM_{10} and $PM_{2.5}$ are predicted to decrease by 3 percent each, relative to the No Build 2024 conditions. Under Build 2044 conditions, PM_{10} and $PM_{2.5}$ are predicted to decrease by 6 percent and 5 percent respectively, relative to No Build 2044 conditions.

[7] *Transportation Project-Level Carbon Monoxide Protocol, UCD-ITS-97-21*, University of California, Davis, December 1997

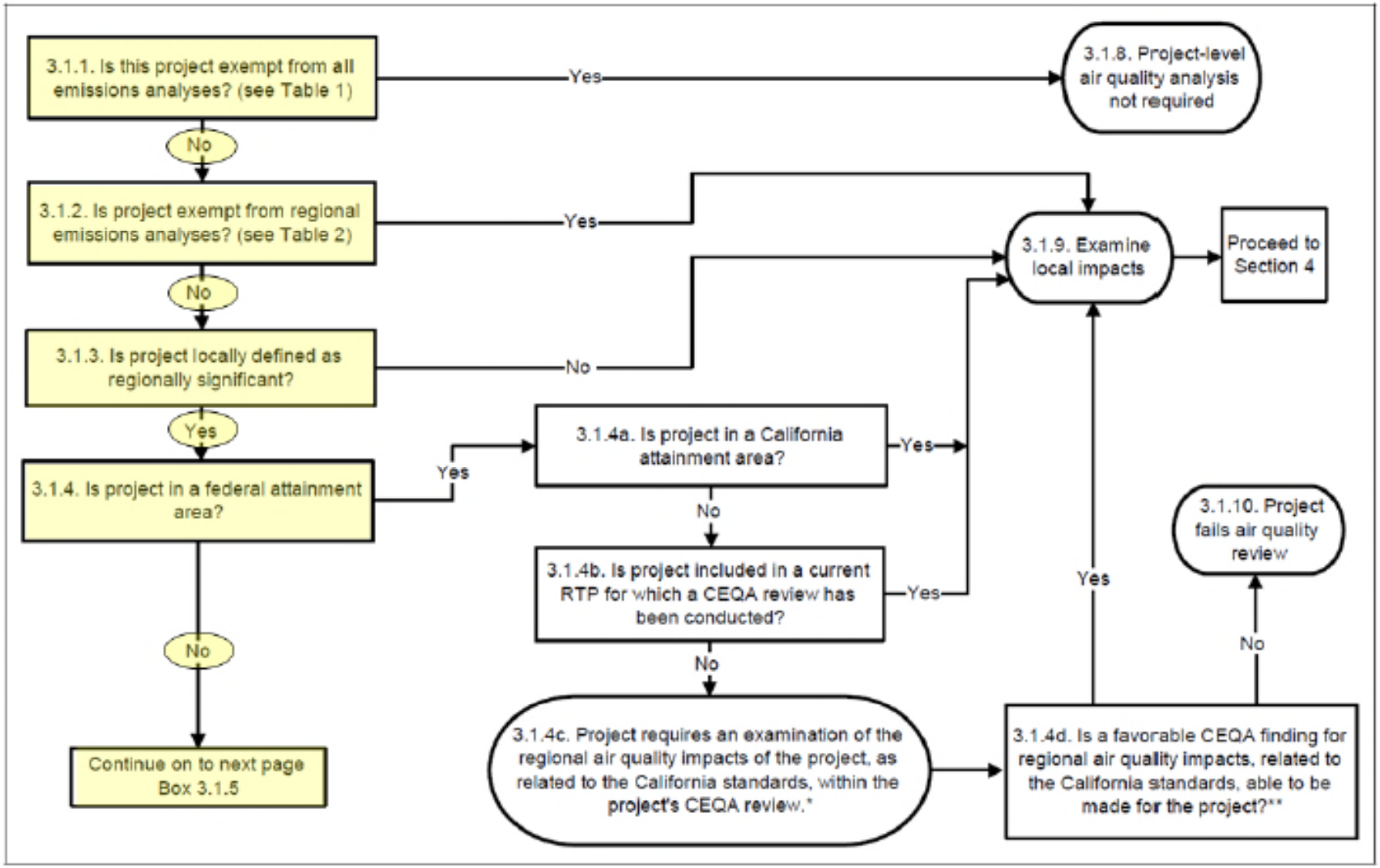


Figure 2.3-9. CO Hot Spot Screening Flow Chart (Sheet 1 of 4)

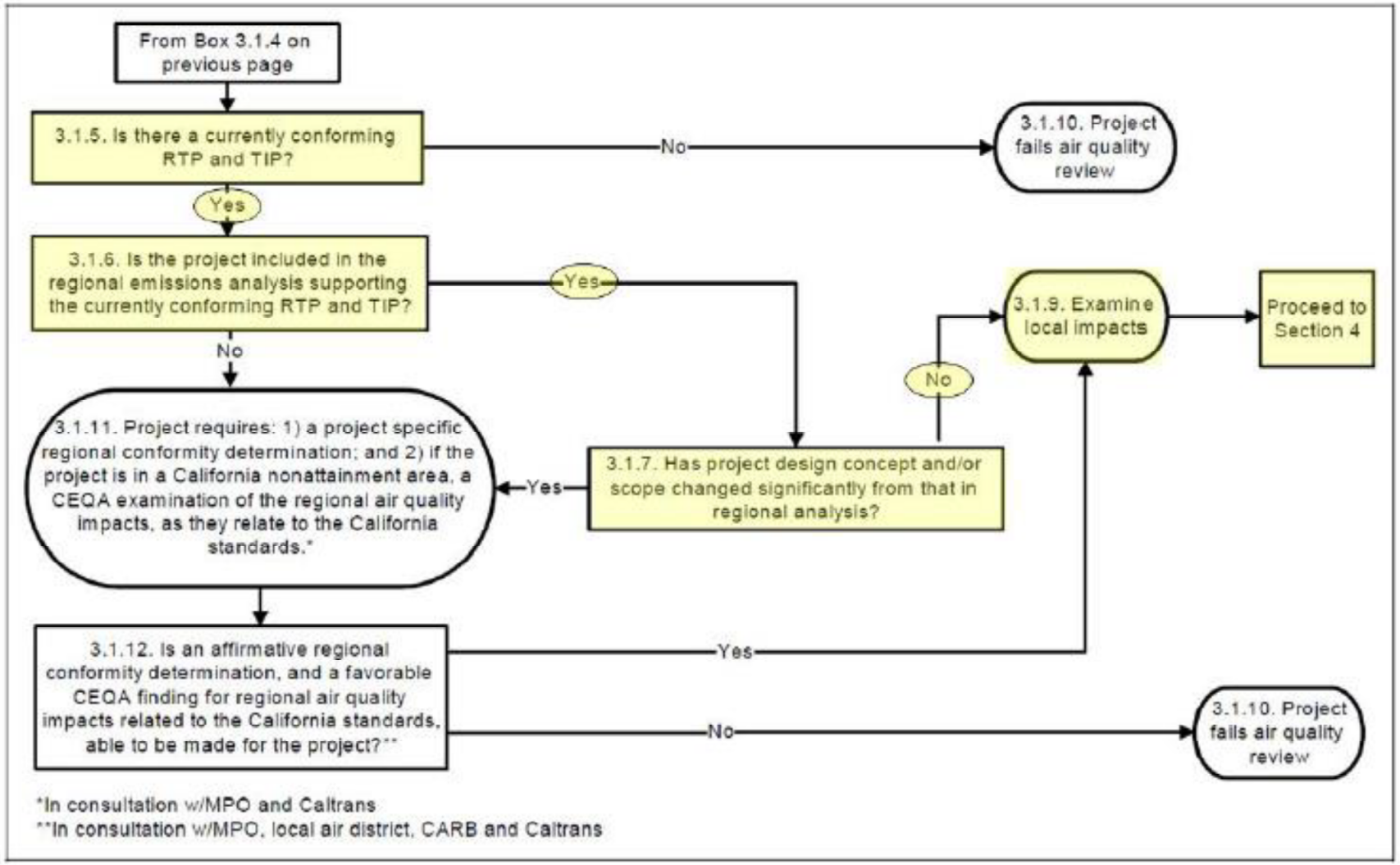


Figure 2.3-9. CO Hot Spot Screening Flow Chart (Sheet 2 of 4)

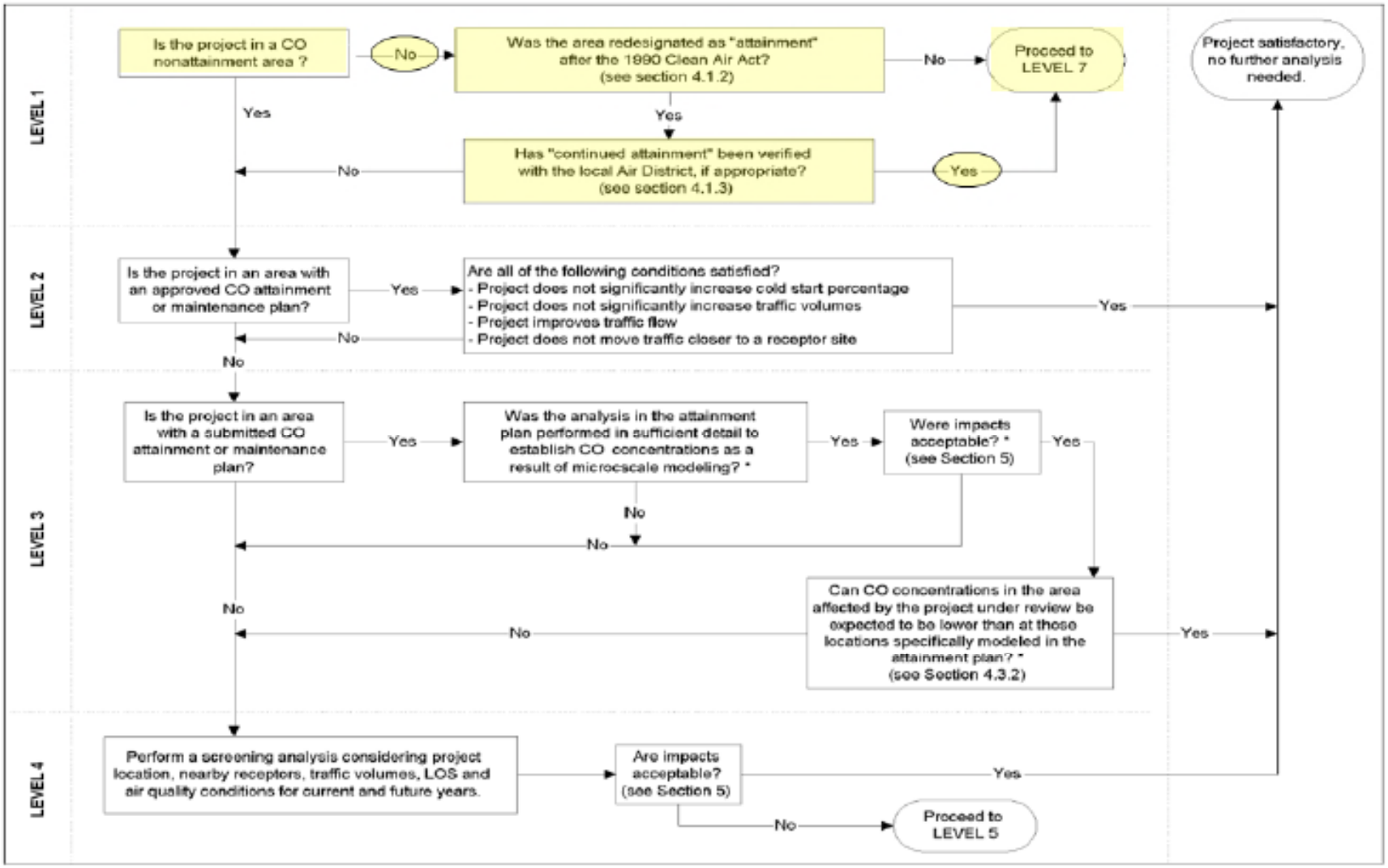


Figure 2.3-9. CO Hot Spot Screening Flow Chart (Sheet 3 of 4)

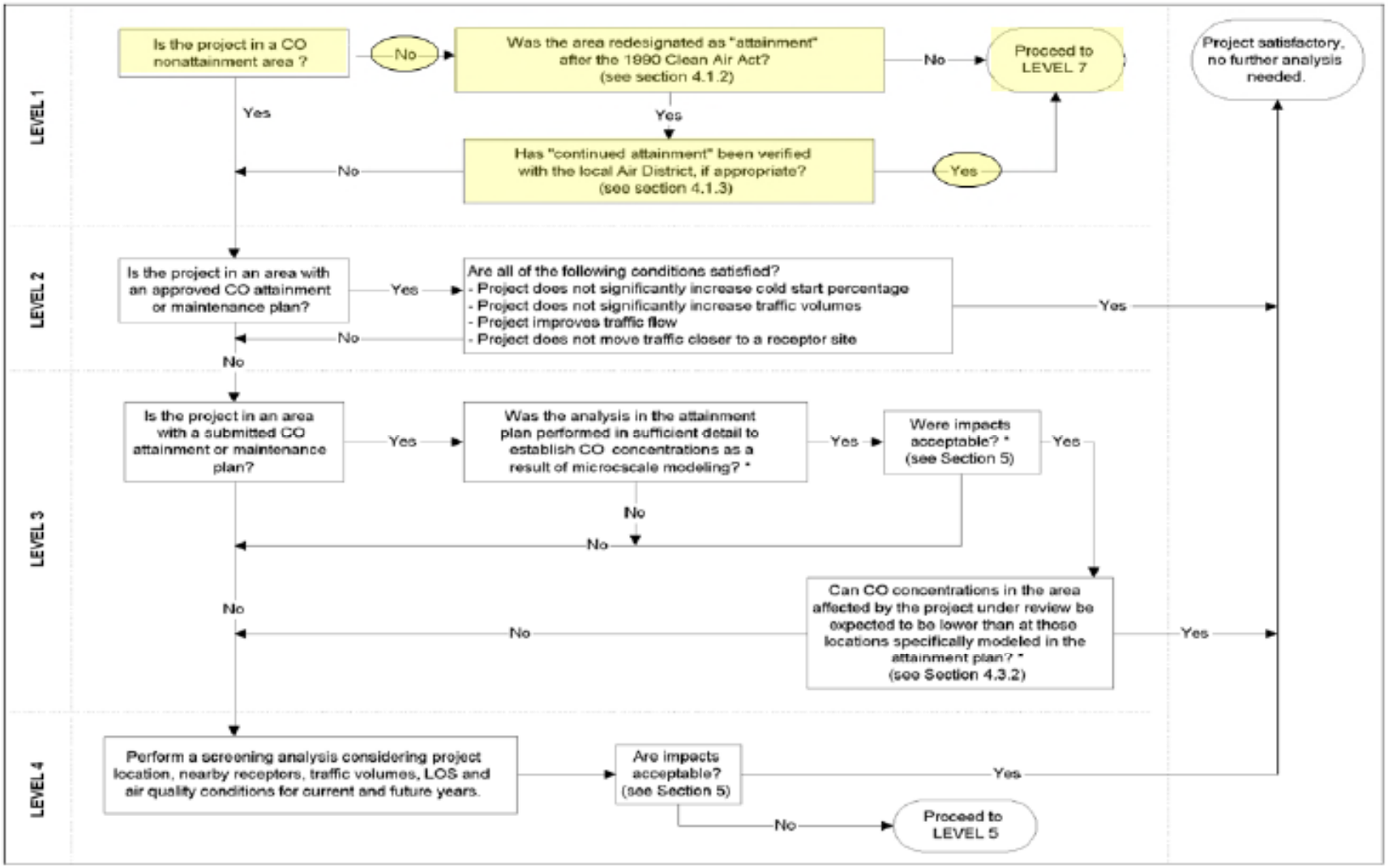


Figure 2.3-9. CO Hot Spot Screening Flow Chart (Sheet 4 of 4)

Hot-Spot Analysis

In November 2015, the U.S. EPA released an updated version of Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas (Guidance) for quantifying the local air quality impacts of transportation projects and comparing them to the PM NAAQS (75 FR 79370). The U.S. EPA originally released the quantitative Guidance in December 2010 and released a revised version in November 2013 to reflect the approval of EMFAC 2011 (i.e., model for on-road vehicle emissions) and U.S. EPA's 2012 PM NAAQS final rule. The November 2015 version reflects MOVES2014 (i.e., model for mobile source emissions) and its subsequent minor revisions such as MOVES2014a, to revise design value calculations to be more consistent with other U.S. EPA programs, and to reflect guidance implementation and experience in the field. Note that EMFAC, not MOVES, should be used for project hot-spot analysis in California. The Guidance requires a hot-spot analysis to be completed for a project of air quality concern (POAQC). The final rule in 40 CFR 93.123(b)(1) defines a POAQC as:

(i) New or expanded highway projects that have a significant number of or a significant increase in diesel vehicles;

(ii) Projects affecting intersections that are at Level-of-Service (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;

(iii) New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;

(iv) Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and

(v) Projects in or affecting locations, areas, or categories of sites which are identified in the $PM_{2.5}$ and PM_{10} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The project is not a new or expanded highway that would result in a significant increase in diesel vehicles. As noted in **Section 2.2.9**, the project would not result in significant increases in traffic volumes along area roadways nor would the project result in a significant increase in the number of diesel vehicles operating along area roadways. The proposed Build Alternative is not a new or expanded bus or rail terminal, and would not affect locations, areas, or categories of sites identified in PM implementation plans as sites of possible violation.

The project-level PM hot-spot analysis was presented to SCAG's Transportation Conformity Working Group (TCWG) for review on October 22, 2019. The TCWG determined that the project is not considered a POAQC for PM because it does not meet the definition of a POAQC as defined in U.S. EPA's Transportation Conformity Guidance. Therefore, the project would not worsen violations of PM standards and a PM hot-spot analysis is not required. The project TCWG review form submitted for inter-agency consultation is included in Appendix B of the Air Quality Report.

Construction Conformity

Construction activities will not last for more than 5 years at one general location, so construction-related emissions do not need to be included in regional and project-level conformity analysis (40 CFR 93.123(c)(5)).

No Build Alternative

Implementation of the No Build Alternative would maintain the existing configurations on Valley Boulevard and Temple Avenue, as well as the ramp connections to and from I-605. No improvements to these facilities would be made other than those already planned and programmed in the latest conforming RTP and FTIP. Therefore, this alternative would not result in temporary or permanent impacts on air quality. However, this alternative would potentially be inconsistent with regional plans and programs for the area because the project would not be constructed as approved in the *2020-2045 RTP/SCS* and *2019 FTIP*.

Table 2.3-10 in the Permanent Impacts section shows the No Build emissions for 2024 (Opening Year), 2044 (Design Year) conditions. In addition, **Table 2.3-10** shows the net change in emissions when compared to 2019 (Existing) conditions.

Build Alternative

Temporary Impacts

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other construction-related activities. Emissions from construction equipment also are expected and would include carbon monoxide (CO), nitrogen oxides (NO_x), volatile organic compounds (VOCs), directly-emitted particulate matter (PM_{10} and $PM_{2.5}$), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NO_x and VOCs in the presence of sunlight and heat.

Site preparation and roadway construction typically involves clearing, cut-and-fill activities, grading, removing, or improving existing roadways, building bridges, and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the site preparation phase because most engine emissions are associated with the excavation, handling, and transport of soils to and from the site. These activities could temporarily generate enough PM_{10}, $PM_{2.5}$, and small amounts of CO, SO_2, NO_x, and VOCs to be of concern. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site could deposit mud on local streets, which could be an added source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Construction activities for large development projects are estimated by the United States Environmental Protection Agency (U.S. EPA) to add 1.2 tons of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust, the

emissions can be reduced by up to 50 percent. The Department's Standard Specifications (Section 14) on dust minimization require use of water or dust palliative compounds and will reduce potential fugitive dust emissions during construction.

In addition to dust-related PM_{10} emissions, heavy-duty trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, VOCs, and some soot particulate (PM_{10} and $PM_{2.5}$) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

SO_2 is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Under California law and ARB regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel (not more than 15 ppm sulfur), so SO_2-related issues due to diesel exhaust will be minimal.

Some phases of construction, particularly asphalt paving, may result in short-term odors in the immediate area of each paving site(s). Such odors would quickly disperse to below detectable levels as distance from the site(s) increases.

Most of the construction impacts to air quality are short-term in duration and, therefore, will not result in long-term adverse conditions. Implementation of the following standardized measures, some of which may also be required for other purposes such as storm water pollution control, will reduce any air quality impacts resulting from construction activities:

- The construction contractor must comply with the Department's Standard Specifications in Section 14.
    - Section 14 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.
    - Section 14 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are described in Section 18.
- Water or dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions. Fugitive emissions generally must meet a "no visible dust" criterion either at the point of emissions or at the right of way line, depending on local regulations.
- Soil binder will be spread on any unpaved roads used for construction purposes, and on all project construction parking areas.
- Trucks will be washed as they leave the right of way as necessary to control fugitive dust emissions.
- Construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by California Code of Regulations Title 17, Section 93114.
- A dust control plan will be developed documenting sprinkling, temporary paving, speed limits,

and timely revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.

- Equipment and materials storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly.
- ESA (Environmentally Sensitive Area)-like areas or their equivalent will be established near sensitive air receptors. Within these areas, construction activities involving the extended idling of diesel equipment or vehicles will be prohibited, to the extent feasible.
- Track-out reduction measures, such as gravel pads at project access points to minimize dust and mud deposits on roads affected by construction traffic, will be used.
- All transported loads of soils and wet materials will be covered before transport, or adequate freeboard (space from the top of the material to the top of the truck) will be provided to minimize emission of dust (particulate matter) during transportation.
- Dust and mud that are deposited on paved, public roads due to construction activity and traffic will be promptly and regularly removed to decrease particulate matter.
- To the extent feasible, construction traffic will be scheduled and routed to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- Mulch will be installed, or vegetation planted as soon as practical after grading to reduce windblown particulate in the area.

Construction Emissions

Construction emissions were estimated using the Sacramento Metropolitan Air Quality Management District's (SMAQMD) *Road Construction Emissions Model, Version 9.0.0*. While the model was developed for Sacramento conditions in terms of fleet emission factors and other modeling assumptions, the model is considered adequate for estimating road construction emissions in the SCAB and is used for that purpose in this project analysis. Emissions modeling was conducted based on off-road equipment requirements and estimated areas to be paved, provided by the project engineer, as well as default assumptions contained in the model. The emissions presented are based on the best information available at the time of calculations. The emissions represent the peak daily construction emissions that would be generated by the Build Alternative. Refer to **Section 3.4** of this report for a discussion of construction-generated greenhouse gas (GHG) emissions.

As depicted in **Table 2.3-9**, construction of the proposed Build Alternative would generate maximum daily emissions of approximately 1.75 pounds (lbs)/day of reactive organic gases (ROG), 12.48 lbs/day of CO, 19.73 lbs/day of NO_X, 71.01 lbs/day of PM_{10}, and 15.43 lbs/day of $PM_{2.5}$. Total emissions generated during construction would be 0.14 tons of ROG, 1.18 tons of CO, 1.73 tons of NO_X, 7.78 tons of PM_{10}, and 1.66 tons of $PM_{2.5}$. As previously noted, construction of the project would occur over an approximately 1-year period.

Table 2.3-9. Construction Emissions of Criteria Air Pollutants and Precursors

Construction Phase	Emissions (lbs/day)				
	ROG	CO	NOx	PM_{10}	$PM_{2.5}$
Land Clearing/ Grubbing	1.75	12.48	19.73	71.01	15.43
Grading/Excavation	1.03	8.18	13.30	70.56	14.94
Drainage/Utilities/Sub-Grade	1.05	9.20	12.43	70.61	15.03
Paving	0.59	7.08	7.08	0.40	0.29
Maximum/Day:	1.75	12.48	19.73	71.01	15.43
Project Total (tons):	0.14	1.18	1.73	7.78	1.66

Construction emissions were estimated using the SMAQMD's Road Construction Emissions Model, Version 9.0.0 based, in part, on project-specific information provided by the project engineer. While the model was developed for Sacramento conditions in terms of fleet emission factors and other modeling assumptions, the model is considered adequate for estimating road construction emissions in the SCAB and is used for that purpose in this Project analysis.

Refer to Appendix F of the Air Quality Report for emissions modeling assumptions and results.

Implementation of measures described in the Temporary Impacts section above would reduce air quality impacts resulting from construction activities (see **AVM-AQ-1** through **AVM-AQ-4**). Although these measures are anticipated to reduce construction-related emissions, these reductions cannot be quantified at this time.

As noted above, Caltrans Standard Specifications, Section 14-9, specifically requires compliance with all applicable laws and regulations related to air quality, which would include applicable SCAQMD rules and regulations. Applicable rules and regulations may include, but are not limited to, the following:

- *Rule 403 – Fugitive Dust*. The purpose of this Rule is to reduce the amount of particulate matter in the ambient air resulting from anthropogenic fugitive dust sources by requiring projects to prevent, reduce, or mitigate fugitive dust emissions. Accordingly, construction activity sources are required to implement best available control measures for the control of fugitive dust.

Asbestos

Asbestos was used in many materials prior to 1978 and may have been used up until the early 1980s. Asbestos-containing materials (ACM) include fireproofing, acoustic ceiling material, transite pipe, roofing materials, thermal insulation, support piers, expansion joint material in bridges, asphalt, concrete, and other building materials. Asbestos is of primary concern when it is friable (i.e., material that can be easily crumbled).

The project area is located in Los Angeles County, which is among the counties listed as containing naturally-occurring asbestos (i.e., serpentine and ultramafic rock). However, the portion of Los Angeles County in which the project area lies is not known to contain serpentine or ultramafic rock. Therefore, the impact of naturally occurring asbestos during project construction would be minimal to none.

However, it is important to note that existing structures constructed prior to the early 1980s, such as bridges, may contain ACM. In addition, the soil surrounding railroad tracks within the project

area may also contain ACMs from disk brake pads used on trains. If not properly identified and mitigated, asbestos fibers could become airborne during the construction of the project, particularly during demolition and site preparation activities.

The ISA has recommended that structures, including buildings and bridges, be sampled and analyzed for ACM content prior to any demolition or disturbance activities. Soils surrounding the structures and soils surrounding railroad tracks that would be disturbed should also be sampled and analyzed for ACM content. ACM sampling and analysis should be conducted prior to any ground disturbing activity and completion of the Plans, Specifications, and Estimates phase. The ACM survey shall be conducted in conformance with the U.S. EPA National Emission Standard for Hazardous Air Pollutants 40 CFR regulation, SCAQMD Rule 1403, and Caltrans Standard Special Provisions 14-11.16 Asbestos Containing Construction Materials in Bridges (Group Delta 2019).

Lead

Lead is normally not an air quality issue for transportation projects unless the project involves disturbance of soils containing high levels of aerially deposited lead or painting or modification of structures with lead-based coatings. The project would not require the demolition of major onsite structures or buildings anticipated to contain lead-based coatings or materials. However, implementation of the proposed improvements may require the removal and disposal of yellow traffic striping and pavement marking materials (i.e., paint thermoplastic, permanent tape, and temporary tape). Yellow paints made prior to 1995 may exceed hazardous waste criteria under Title 22, California Code of Regulations, and require disposal in a Class I disposal site. In addition, the disturbance of lead paint must meet U.S. EPA and air district rules (Caltrans Standard Specifications 14-9.02 and Caltrans Standard Special Provision 14-11.07, 2018). Furthermore, the project is not located near an industrial lead emissions source. Therefore, exposure to lead in excess of applicable standards during construction would be unlikely.

Odors

Minor sources of odors would be present during construction. The predominant source of power for construction equipment is diesel engines. Exhaust odors from diesel engines, as well as emissions associated with asphalt paving, may be considered offensive to some individuals. However, because odors would be temporary and would disperse rapidly with distance from the source, construction-generated odors would not be anticipated to result in the frequent exposure of receptors to objectionable odorous emissions.

Permanent Impacts

Long-term operational emissions of criteria air pollutants associated with the Build Alternative would be associated with the operation of motor vehicles. However, as discussed in **Section 2.2.9**, implementation of the Build Alternative would not result in substantial changes in traffic operations for primarily affected roadways or intersections.

Long-term operational emissions were quantified using the CT-EMFAC2017 version 1.0.2 computer program based on traffic information provided by the project engineer. Estimated changes in operational emissions are summarized in **Table 2.3-10**. Operational emissions were quantified for existing/baseline conditions, No Build Alternative conditions, and Build Alternative

conditions for Opening Year 2024 and Design Year 2044 conditions.

Table 2.3-10. Summary of Comparative Operational Emissions Analysis

Scenario/Analysis Year	Emissions (Tons/Year)[1]				
	ROG	CO	NO_X[2]	PM_{10}	$PM_{2.5}$
Existing - Year 2019	1.31	16.27	2.89	1.22	0.36
No Build Alternative – Opening Year 2024	0.93	11.06	1.74	1.23	0.34
No Build Alt. 2024 Compared to Existing:	-0.38	-5.21	-1.15	0.01	-0.02
Percent Change:	-29%	-32%	-40%	1%	-6%
Build Alternative – Opening Year 2024	0.89	10.66	1.69	1.19	0.33
Build Alt. 2024 Compared to Existing:	-0.42	-5.61	-1.20	-0.03	-0.03
Percent Change:	-32%	-34%	-42%	-2%	-7%
Build Alt. 2024 Compared to No Build Alt. 2024:	-0.04	-0.40	-0.05	-0.04	-0.01
Percent Change:	-4%	-4%	-3%	-3%	-3%
No Build Alternative – Design Year 2044	0.54	7.76	1.69	1.40	0.37
No Build Alt. 2044 Compared to Existing:	-0.77	-8.52	-1.20	0.18	0.02
Percent Change:	-59%	-52%	-41%	15%	5%
Build Alternative – Design Year 2044	0.52	7.50	1.47	1.31	0.35
Build Alt. 2044 Compared to Existing:	-0.79	-8.78	-1.42	0.09	0.01
Percent Change:	-60%	-54%	-49%	8%	3%
Build 2044 Alt. Compared to No Build Alt. 2044:	-0.02	-0.26	-0.22	-0.08	-0.02
Percent Change:	-4%	-3%	-13%	-6%	-5%

1. Emissions were calculated using the CT-EMFAC computer program based, in part, on traffic data provided for this project (Intueor Consulting, Inc., 2019). Refer to Appendix F of the Air Quality Report for emissions modeling assumptions and results.

2. NO_x is surrogate for NO_2.

In comparison to the No Build Alternative, the Build Alternative would result in a decrease in long-term mobile-source emissions for both Opening Year 2024 and future Design Year 2044 conditions. In comparison to No Build Alternative Year 2024 conditions, the proposed Build Alternative would result in decreased emissions of approximately 4 percent for ROG, 4 percent for CO, 3 percent for NO_x, 3 percent for PM_{10}, and 3 percent for $PM_{2.5}$. In comparison to No Build Alternative Year 2044 conditions, the proposed Build Alternative would result in decreased emissions of approximately 4 percent for ROG, 3 percent for CO, 13 percent for NO_x, 6 percent for PM_{10}, and 5 percent for $PM_{2.5}$.

Nitrogen Dioxide Analysis

The U.S. EPA modified the NO_2 NAAQS to include a 1-hr standard of 100 parts per billion (ppb) in 2010. Currently, there is no federal project-level NO_2 analysis requirement. However, NO_2 is among the near-road pollutants of concern and project analysts will be expected to explain how transportation projects affect near-road NO_2.

NO_X emissions were estimated for Baseline, No Build Alternative, and the Build Alternative for Opening Year 2024 and Design Year 2044 conditions (refer to **Table 2.3-10**). In comparison to existing conditions, emissions of NO_X in the project area are projected to decrease by approximately 0.8 tons/year, or less, by year 2044. In comparison to No Build Alternative year 2024 and year 2044 conditions, overall decreases of NO_X associated with the implementation of the proposed Build Alternative would be negligible (i.e., 0.2 tons/year, or less). As discussed in **Section 2.2.9**, the proposed Build Alternative would not result in meaningful changes in traffic volumes or vehicle speeds along roadway segments within the project area. The project would not affect vehicle mix or result in increased heavy-duty truck operations within the project area. No meaningful change in NO_2 concentrations along area roadways would be anticipated to occur with the implementation of the proposed Build Alternative. As a result, the Build Alternative would not be anticipated to cause or result in a worsening of violations of the ambient air quality standards for NO_2.

Mobile Source Air Toxics Analysis

FHWA released updated guidance in October 2016 for determining when and how to address MSAT impacts in the NEPA process for transportation projects (Federal Highway Administration, 2016). FHWA identified the following three levels of analysis:

- No analysis for exempt projects or projects with no potential for meaningful MSAT effects;
- Qualitative analysis for projects with low potential MSAT effects; and
- Quantitative analysis to differentiate alternatives for projects with higher potential MSAT effects.

Projects with no impacts generally include those that (a) qualify as a categorical exclusion under 23 CFR 771.117, (b) qualify as exempt under the FCAA conformity rule under 40 CFR 93.126, and (c) are not exempt, but have no meaningful impacts on traffic volumes or vehicle mix.

Projects that have low potential MSAT effects are those that serve to improve highway, transit, or freight operations or movement without adding substantial new capacity or creating a facility that is likely to substantially increase emissions. Most projects fall into this category.

Projects with high potential MSAT effects include those that meet the following conditions:

- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of Diesel Particulate Matter in a single location; or
- Create new or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the annual average daily traffic (AADT) is projected to be in the range of 140,000 to 150,000, or greater, by the design year; and
- Are proposed to be located in proximity to populated areas or, in rural areas, in proximity to concentrations of vulnerable populations (i.e., schools, nursing homes, hospitals).

The proposed Build Alternative would not result in meaningful changes in traffic volumes or vehicle speeds along roadway segments within the project area. In addition, the proposed Build Alternative would result in overall reductions in vehicle delay at nearby intersections. The project

would not affect vehicle mix or result in increased heavy-duty truck operations within the project area. Existing AADT volumes for primarily affected roadways range from approximately 1,550 to 28,019 vehicles daily. Under Design Year 2044 conditions, AADT volumes for primarily affected roadways range from approximately 1,892 to 30,045 vehicles daily (refer to **Section 2.2.9** for traffic information). Estimated existing and future AADT volumes along affected roadways would be substantially lower than the FHWA criterion value of 140,000 AADT, which is identified as the minimum volume for higher potential MSAT effects. Under existing conditions, average peak hour speed is 5 miles per hour (mph) and average off peak speed ranges from 25 to 35 mph. Under Design Year 2044 conditions, average peak hour speeds are predicted to be 4 mph and average off peak speeds range from 23 to 33 mph.

The new ramp configurations under the Build Alternative would have the effect of moving some traffic closer to nearby land uses; therefore, under the Build Alternative there may be localized areas where ambient concentrations of MSAT could be higher relative to the No Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the new configuration of the SB on-Ramp. However, the magnitude and the duration of these potential increases compared to the No Build alternative cannot be reliably quantified due to incomplete or unavailable information in forecasting project-specific MSAT health impacts. In sum, when a highway is widened, the localized level of MSAT emissions for the Build Alternative could be higher relative to the No Build Alternative, but this could be offset due to increases in speeds and reductions in congestion (which are associated with lower MSAT emissions). Also, MSAT will be lower in other locations when traffic shifts away from them. However, on a regional basis, U.S. EPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

Based on this information, the project is identified as a Category (2) project; that is, the project would have a low potential for MSAT effects. As a result, it is expected that the proposed Build Alternative would not result in an appreciable difference in overall MSAT emissions when compared to the No Build Alternative. In addition, it is important to note that emissions would likely be lower than present levels in the design year as a result of U.S. EPA's national control programs that are projected to reduce annual MSAT emissions by over 90 percent between 2010 and 2050. As noted earlier, local conditions may differ from these national projections in terms of fleet mix and turnover, vehicle miles traveled (VMT) growth rates, and local control measures. However, the magnitude of the U.S. EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

For Incomplete or Unavailable Information

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action.

The U.S. EPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. It is the lead authority for administering the FCAA and its amendments and has specific statutory obligations with respect to hazardous air pollutants and MSAT. The U.S. EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. The U.S. EPA maintains the Integrated Risk Information System, which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects." Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute. Two Health Effects Institute studies are summarized in Appendix D of FHWA's Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA Documents (Federal Highway Administration, 2016). Among the adverse health effects linked to MSAT compounds at high exposures are cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious are the adverse human health effects of MSAT compounds at current environmental concentrations or in the future as vehicle emissions substantially decrease.

The methodologies for forecasting health impacts include emissions modeling, dispersion modeling, exposure modeling, and then a final determination of health impacts. Each step in the process builds on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70-year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame since such information is unavailable.

It is particularly difficult to reliably forecast 70-year lifetime MSAT concentrations and exposure near roadways; to determine the portion of time that people are actually exposed at a specific location; and to establish the extent attributable to a proposed action, especially given that some of the information needed is unavailable.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSATs, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by the Health Effects Institute. As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The U.S. EPA and the Health Effects Institute have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the U.S. EPA as provided by the FCAA to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards (e.g., benzene emissions from refineries). The decision

framework is a two-step process. The first step requires the U.S. EPA to determine a "safe" or "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks to less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the United States Court of Appeals for the District of Columbia Circuit upheld the U.S. EPA's approach to addressing risk in its two-step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than safe or acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decisionmakers, who would need to weigh this information against project benefits such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, which are better suited for quantitative analysis.

Avoidance, Minimization, and/or Mitigation Measures

The following avoidance and minimization measures would be implemented under the Build Alternative:

- **AVM-AQ-1**. During clearing, grading, earthmoving, or excavation operations, fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in South Coast Air Quality Management District (SCAQMD) Rule 403.
- **AVM-AQ-2.** All trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.
- **AVM-AQ-3.** The contractor will adhere to Caltrans Standard Specifications for Construction (Section 14.9-02).
- **AVM-AQ-4.** Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications.

Adverse impacts are not anticipated; therefore, no mitigation is proposed.

Climate Change

Neither the United States Environmental Protection Agency (U.S. EPA) nor the Federal Highway Administration (FHWA) has issued explicit guidance or methods to conduct project-level greenhouse gas analysis. FHWA emphasizes concepts of resilience and sustainability in highway planning, project development, design, operations, and maintenance. Because there have been

requirements set forth in California legislation and executive orders on climate change, the issue is addressed in the California Environmental Quality Act (CEQA) chapter of this document. The CEQA analysis may be used to inform the National Environmental Policy Act (NEPA) determination for the project.

2.3.6 Noise

Regulatory Setting

The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

California Environmental Quality Act

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless those measures are not feasible. The rest of this section will focus on the NEPA/Title 23 Part 772 of the Code of Federal Regulations (23 CFR 772) noise analysis; please see Chapter 3 of this document for further information on noise analysis under CEQA.

National Environmental Policy Act and 23 CFR 772

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 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). The following table lists the noise abatement criteria for use in the NEPA/23 CFR 772 analysis (see **Table 2.3-11**).

Table 2.3-11. Noise Abatement Criteria

Activity Category	NAC, Hourly A-Weighted Noise Level, dBA $L_{eq}(h)$	Description of Activities
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.
B[1]	67 (Exterior)	Residential.
C[1]	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

Table 2.3-11. Noise Abatement Criteria

Activity Category	NAC, Hourly A-Weighted Noise Level, dBA L_{eq}(h)	Description of Activities
		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.

NAC = noise abatement criteria; dBA = A-weighted decibels; L_{eg}(h) = one-hour A-weighted equivalent continuous noise levels

Figure 2.3-10 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.

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) or when the future noise level with the project approaches or exceeds the NAC. A noise level is considered to approach the NAC if it is 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.

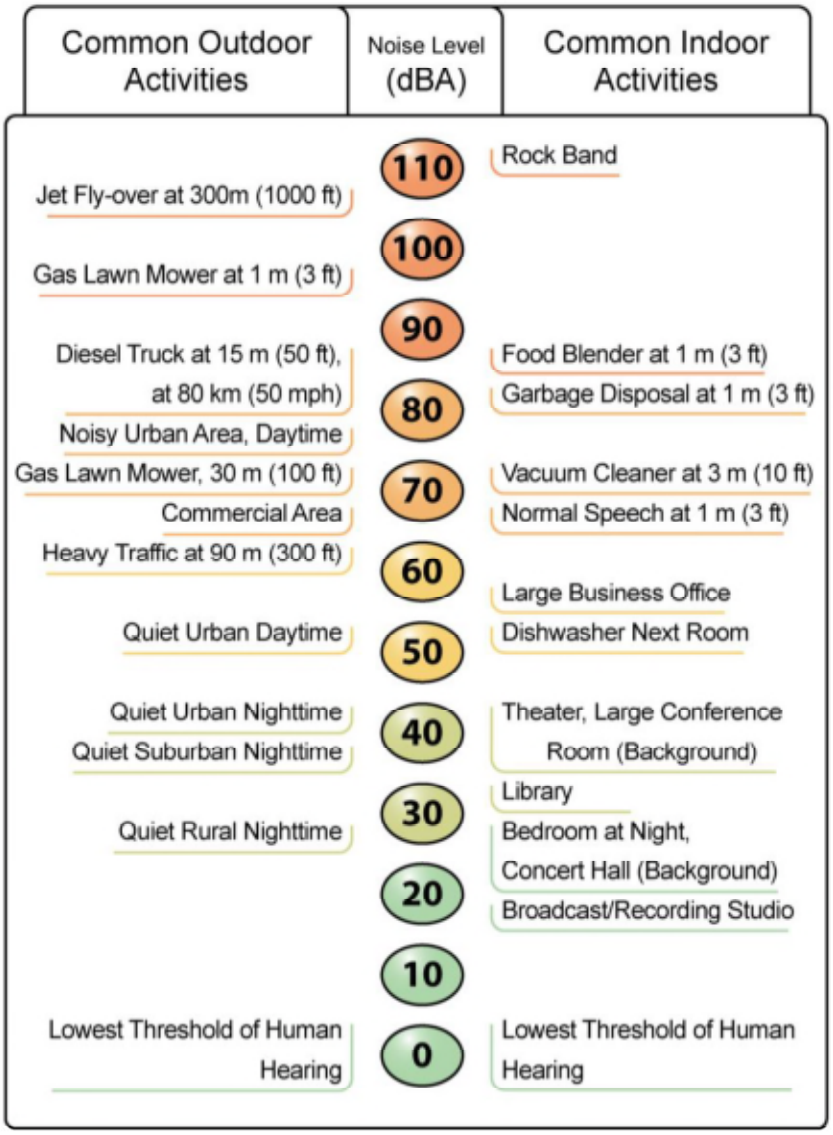


Figure 2.3-10. Noise Levels of Common Activities

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. Noise abatement must be predicted to reduce noise by at least 5 dB at an impacted receptor to be considered feasible from an acoustical perspective. It must also be possible to design and construct the noise abatement measure for it to be considered feasible. Factors that affect the design and constructability of noise abatement include, but are not limited to, safety, barrier height, topography, drainage, access requirements for driveways, presence of local cross streets, underground utilities, other noise sources in the area, and maintenance of the abatement measure. The overall reasonableness of noise abatement is determined by the following three factors: 1) the noise reduction design goal of 7 dB at one or more impacted receptors; 2) the cost of noise abatement; and 3) the viewpoints of benefited receptors (including property owners and residents of the benefited receptors).

Affected Environment

This section is based on the Noise Study Report (NSR) (AMBIENT Air Quality and Noise Consulting, LLC, 2019b) and the Noise Abatement Decision Report (NADR) (NCM Engineering Corporation, 2020) prepared for the project. The NSR and NADR followed the Caltrans Traffic Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barrier Project (Protocol) (California Department of Transportation, 2011).

Noise Analysis Area

A field investigation was conducted to identify land uses that could be subject to traffic noise impacts from the project. Residences were identified as Activity Category B land uses. Parks were identified as Activity Category C land uses. Motels and restaurants were identified as Activity Category E land uses. Commercial buildings were identified as Activity Category F land uses.

As required by the Protocol, noise abatement is considered for areas of frequent human use that would benefit from a lowered noise level. Accordingly, this impact analysis focuses primarily on locations with defined outdoor activity areas, such as residential backyards, recreation areas, and outdoor dining areas.

Traffic along the freeway and local arterial streets is the main source of noise in the project area, which was divided into four noise analysis areas (NAA). Land uses within the NAAs are described, as below (see **Figure 2.3-11**).

NAA A. Westside of I-605 and South of Valley Boulevard

Land uses in this project area include a former duck farm (Woodland Duck Farm) that will be converted to a 31-acre public park (Duck Farm River Park) in the future and include a 1.5-mile trail loop, river overlook, native planting, demonstration garden, dry-stream, picnic area, and interpretation. The land use ranges from 5 to 30 feet lower in elevation than I-605. The future public park was evaluated under Activity Category C, which has an exterior NAC of 67 dBA L_{eq}.

NAA B. Eastside of I-605 and South of Valley Boulevard

Land uses in this area include single-family residences, commercial buildings, restaurants, Duck Farm River Park, and motels. The land uses are up to 30 feet lower in elevation than I-605. The residences were evaluated under Activity Category B, which has an exterior NAC of 67 dBA L_{eq}. The future public park was evaluated under Activity Category C, which has an exterior NAC of 67 dBA L_{eq}. Restaurants and motels were evaluated under Activity Category E, which has an exterior NAC of 72 dBA L_{eq}. Restaurants without outdoor dining areas were modeled for documentation purposes. Commercial buildings were classified under Activity Category E which has no exterior NAC. There are two existing noise barriers along the shoulder of the I-605 in NAA B. Existing Noise barrier NB1 is 14 feet tall and shields the adjacent residences. Existing noise barrier NB3 ranges from 12 feet to 14 feet and shields a portion of the future park, along with the adjacent residences.

This page is intentionally left blank.

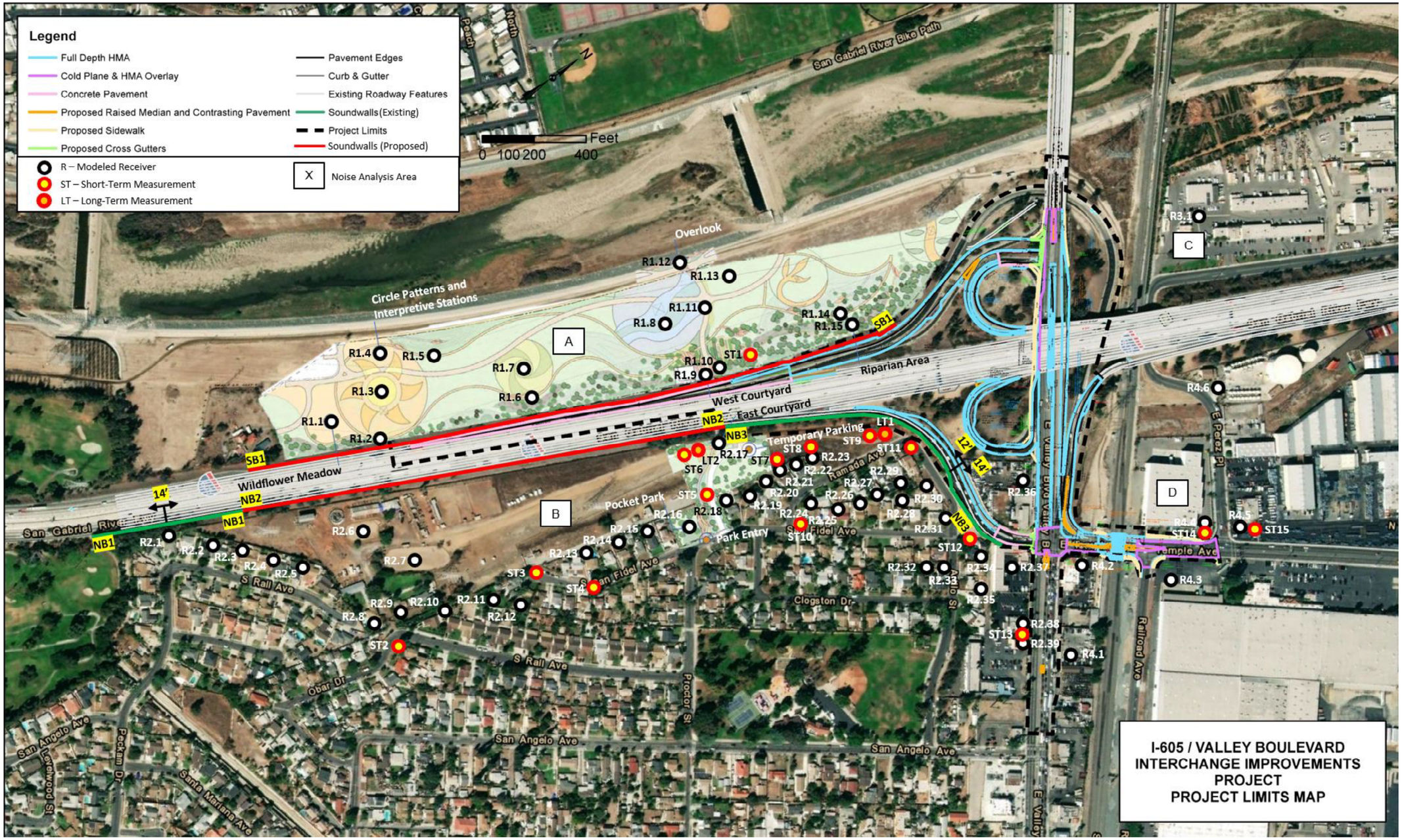


Figure 2.3-11. Noise Measurement, Modeled Receiver, Noise Barrier, and Noise Analysis Area Locations

This page is intentionally left blank.

NAA C. Westside of I-605 and North of Valley Boulevard

Land uses in this area include commercial buildings. The land use ranges from 10 to 40 feet lower in elevation than I-605. Land uses in this NAA have no frequent outdoor human use areas and are classified under Activity Category F for documentation purposes.

NAA D. Eastside of I-605 and North of Valley Boulevard

Land uses in this area include restaurants and commercial buildings. The land uses are up to 30 feet lower in elevation than I-605. Land uses in this NAA have no frequent outdoor human use areas and are classified under Activity Category E and F, respectively.

Existing Noise Level Measurements

The existing noise environment in the project area was evaluated based on short- and long-term monitoring conducted at representative receptor locations. In addition, six of the short-term sites were used to calibrate the traffic noise model.

Short-Term Noise Measurement

Short-term noise measurement surveys were conducted at fifteen locations (ST1 to ST15) on Thursday, February 21, 2019; Monday, June 17, 2019; and Tuesday, June 18, 2019. Short-term noise measurements were conducted on various dates depending on numerous factors, including site access and noise conditions at the site. Noise measurements were conducted using a Larson Davis Model Sound Expert LxT Precision Type 1 sound level meter and Larson-Davis Model 820 Type 1 sound level meter. The calibration of the meter was checked before and after the measurements using a Larson Davis Model CAL200 calibrator. Noise measurement surveys were taken over a 10-minute period at each location.

Daytime noise levels in the project area generally range from approximately 58 to 76 dBA L_{eq} (see **Table 2.3-12**). Ambient noise levels were largely influenced by vehicle traffic on I-605 and local arterial streets. Traffic noise levels vary depending on various factors including distance from the roadway and time of day.

This page is intentionally left blank.

Table 2.3-12. Short-Term Noise Measurement Results

Site No.	Location Description	NAA	Land Use	Measurement Date	Start Time	Measured L_{eq}(h), dBA
ST1	Duck Farm River Park, La Puente, CA 91746	A	Park	June 17, 2019	1:40 p.m.	65.7
ST2	Sidewalk in front of 502 Obar Drive, La Puente CA 91746	B	Residential	June 17, 2019	2:50 p.m.	58.0
ST3	Sidewalk in front of 347 San Fidel Avenue, Bassett, CA 91746	B	Residential	June 18, 2019	9:45 a.m.	64.2
ST4	Sidewalk in front of 340 San Fidel Avenue, La Puente, CA 91746	B	Residential	June 17, 2019	2:00 p.m.	59.3
ST5	Adjacent to 255 San Fidel Avenue, La Puente, CA 91746	B	Park	June 18, 2019	7:35 a.m.	72.0
ST6	Adjacent to 255 San Fidel Avenue, La Puente, CA 91746	B	Park	June 17, 2019	11:30 a.m.	75.5
ST7	Adjacent to 215 Ramada Avenue, La Puente, CA 91746	B	Residential	June 17, 2019	1:33 p.m.	68.8
ST8	Adjacent to 203 Ramada Avenue, La Puente, CA 91746	B	--	June 17, 2019	10:55 a.m.	66.1
ST9	Adjacent to 203 Ramada Avenue, La Puente, CA 91746	B	--	June 17, 2019	9:40 p.m.	66.4
ST10	Sidewalk in front of 220 Ramada Avenue, La Puente, CA 91746	B	Residential	June 17, 2019	10:33 a.m.	59.1
ST11	Sidewalk in front of 154 Ramada Avenue, La Puente, CA 91746	B	Residential	June 17, 2019	2:25 p.m.	62.6
ST12	Adjacent to 13003 East Arillo Street, Bassett, CA 91746	B	Residential	June 17, 2019	2:30 p.m.	58.5
ST13	Sidewalk in front of 13032 Valley Boulevard, La Puente, CA 91746	B	Residential	June 17, 2019	9:53 a.m.	76.0
ST14	Parking lot in front of 13001 Temple Avenue, City of Industry, CA 91746	D	Commercial	February 21, 2019	8:00 a.m.	66.9
ST15	Parking lot in front of 12955 Perez Place, La Puente, CA 91746	D	Commercial	June 17, 2019	9:29 a.m.	71.0

Source: *Noise Study Report* (AMBIENT Air Quality and Noise Consulting, LLC, 2019b)

NAA = Noise Analysis Area; L_{eq}(h) = one-hour A-weighted equivalent continuous noise levels; dBA = A-weighted decibels

This page is intentionally left blank.

Long-Term Noise Measurement

Long-term noise measurement surveys were conducted at two locations (LT1 and LT2). The noise measurement surveys were conducted using a Larson Davis Model Sound Expert LxT Precision Type 1 sound level meter. The calibration of the meter was checked before and after the measurement using a Larson-Davis Model CAL200 calibrator. The purpose of the long-term measurements was to identify variations in sound levels throughout the day. The long-term sound level data were collected over 24-hour periods. The loudest average-hourly traffic noise level measured at these locations was 67.9 dBA L_{eq}(h) at 6:00am for LT1 and 72.5 dBA L_{eq}(h) at 5:00 am for LT2 (see **Table 2.3-13**).

Table 2.3-13. Long-Term Noise Measurement Results

Beginning Hour	Long-Term Monitoring Location 1 (LT1)[a]		Long-Term Monitoring Location 2 (LT2)[b]	
	Average L_{eq}(h) (dBA)	Difference from Loudest Hour (dB)[c]	Average L_{eq}(h) (dBA)	Difference from Loudest Hour (dB)[d]
0:00	62.8	5.1	67.9	4.6
1:00	61.9	6.0	66.9	5.6
2:00	61.5	6.4	67.1	5.4
3:00	63.8	4.1	68.2	4.3
4:00	65.5	2.4	70.6	1.9
5:00	67.3	0.6	72.5	0.0
6:00	67.9	0.0	71.9	0.6
7:00	65.9	2.0	69.7	2.8
8:00	66.0	1.9	69.6	2.9
9:00	65.2	2.7	71.1	1.4
10:00	66.3	1.6	71.5	1.0
11:00	65.7	2.2	70.1	2.4
12:00	65.4	2.5	69.8	2.7
13:00	65.1	2.8	66.7	5.8
14:00	64.1	3.8	68.5	4.0
15:00	66.6	1.3	68.1	4.4
16:00	65.9	2.0	66.6	5.9
17:00	63.9	4.0	65.3	7.2
18:00	63.2	4.7	68.1	4.4
19:00	64.2	3.7	71.0	1.5
20:00	65.4	2.5	70.6	1.9
21:00	65.5	2.4	70.5	2.0
22:00	64.8	3.1	69.6	2.9

Table 2.3-13. Long-Term Noise Measurement Results

Beginning Hour	Long-Term Monitoring Location 1 (LT1)[a]		Long-Term Monitoring Location 2 (LT2)[b]	
	Average L_{eq}(h) (dBA)	Difference from Loudest Hour (dB)[c]	Average L_{eq}(h) (dBA)	Difference from Loudest Hour (dB)[d]
23:00	63.5	4.4	68.7	3.8

Source: *Noise Study Report* (AMBIENT Air Quality and Noise Consulting, LLC, 2019b)

[a] Based-on measurements collected on February 20-21, 2019

[b] Based-on measurements collected on June 17-18, 2019

[c] The worst noise hour for LT1 is 6:00, 67.9 dBA

[d] The worst noise hour for LT2 is 5:00, 72.5 dBA

L_{eq}(h) = one-hour A-weighted equivalent continuous noise levels; dBA = A-weighted decibels; dB = decibels

Traffic Noise Prediction Model

Traffic Noise Model (TNM) Version 2.5 was used for noise computations. TNM 2.5 input is based on a three-dimensional grid created for the study area to be modeled. The modeled noise levels were compared to measured levels to determine whether a calibration factor (K-factor) was appropriate. To validate the accuracy of the model calculations, the model was calibrated comparing measured traffic noise levels to the model's estimate of existing noise levels at field measurement locations. Six short-term noise measurements were used for model calibration. Due to the complexity of the topography within the project area, K-factors of any deviation between modeled and measured noise levels were applied to monitoring locations.

Environmental Consequences

The project is considered a Type I project because it would use federal aid; therefore, a noise analysis is required.

No Build

The No Build Alternative would not result in the construction of improvements in the project area; therefore, the project would not result in noise impacts.

Build Alternative

Temporary Impacts

During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area. Construction equipment can generate intermittent noise levels ranging from 77 to 90 dBA L_{max} (maximum sound level) at a distance of 50 feet (see **Table 2.3-14**). At this same distance, average hourly equipment noise levels range from approximately 73 to 82 dBA L_{eq} (equivalent noise level). Noise produced by construction equipment typically decreases at a rate of approximately 6 dB per doubling of distance from the source.

Table 2.3-14. Representative Construction Equipment Noise

Construction Equipment	Noise Level (dBA at 50 feet)	
	L_{max}	L_{eq}
Bulldozers	82	78
Concrete Truck	79	75
Dump Trucks	77	73
Backhoe	78	74
Pneumatic Tools	85	82
Concrete Pump	81	78
Loader	79	75
Roller	80	73
Compressors	78	74
Crane	81	73
Paver	77	74
Hoe Ram	90	80
Excavators	81	77
Grader	85	81
Scrapers	84	80

Source: *Construction Noise Handbook* (Federal Highway Administration, 2006)
dBA = A-weighted decibels; L_{max} = maximum sound level; L_{eq} = equivalent sound level

Construction noise can vary depending on the construction activity, type, number, and condition of equipment used, and layout of construction site. Construction noise estimates are approximate because of the lack of specific information available at the time of assessment. No adverse impacts from construction are anticipated because construction would be conducted in accordance with Caltrans Standard Specification Section 14.8-02 (**AVM-N-1**) and implementation of **AVM-N-2**. The criteria for Section 14.8-02 states," Do not exceed 86 dBA Lmax at 50 feet from the job site from 9:00 p.m. to 6:00 a.m." by controlling and monitoring noise resulting from work activities. Additionally, construction noise would be short-term, intermittent, and largely overshadowed by local traffic noise.

Permanent Impacts

Potential permanent impacts associated with project operations are from traffic noise. Projected design year 2044 traffic volumes, which represent the worst-case traffic condition, were used to predict traffic noise levels and analyze noise impacts at receivers within the project study area. A total of 76 receptor locations were evaluated in the noise model. Locations of the model receptors were primarily associated with frequent outdoor use areas such as residential backyards, recreation areas, and outdoor dining areas.

Predicted design-year traffic noise levels with Build Alternative are compared to existing conditions and to the design-year No Build conditions. The comparison to existing conditions is

included in the analysis to identify "substantial" traffic noise impacts under Title 23 CFR 772. The comparison to No Build conditions indicates the direct impact of noise resulting from the project. Traffic noise modeling results are summarized in **Table 2.3-15**.

Modeling results indicate that predicted worst-hour traffic noise levels for design-year Build Alternative conditions approach or exceed the NAC of 67 dBA for Activity Categories B and C land uses throughout the project study area. Traffic noise impacts are also predicted to occur at Activity Category E land uses within the project study area. Accordingly, noise abatement must be considered at those locations; however, in some cases, noise abatement has not been considered for Activity Category E land uses where there are no discernible frequent human use areas.

Noise barriers were analyzed with heights ranging from 8 to 18 feet along the edge of shoulders to determine feasible noise abatement for the Build Alternative. Feasible noise barriers occur when at least 5 decibels (dB) of noise is reduced. To determine whether a noise barrier is reasonable, one method is that it provides a noise reduction of at least 7 dB at one or more benefited receptors. The height of this barrier would be considered the noise reduction design goal.

The preliminary noise abatement decision for the barriers was made by investigating the following factors: acoustic feasibility, number of benefited receptors, total reasonable allowance, construction cost estimate, and the comparison of the reasonable allowance to the construction cost estimate to determine reasonableness from the cost perspective. This decision is based on preliminary project alignments and profiles, which may be subject to change. As such, the physical characteristics of noise abatement described herein also may be subject to change. If pertinent parameters change substantially during the final project design, the preliminary noise abatement decision may be changed or eliminated from the final project design. A final decision to construct noise abatement will be made upon completion of the project design.

Two noise barriers were found to be feasible, providing a minimum reduction of 5 dB, at heights ranging from 8 to 18 feet. Additionally, the two barriers achieved the design goal of a 7 dB reduction at heights ranging from 10 to 18 feet. However, only one of these noise barriers was recommended because the total construction cost would be less than the total reasonable allowance. A summary of noise abatement recommendations is provided in the following sections.

NAA A. WESTSIDE OF I-605, SOUTH OF VALLEY BOULEVARD

Existing exterior traffic noise levels in NAA A range from 61 to 73 dBA. The future predicted exterior traffic noise levels range from 65 to 77 dBA where most receivers would exceed the NAC for Activity Category C; therefore, consideration of noise abatement is required.

Areas with Noise Abatement

Noise Barrier SB1: Noise barrier SB1 would be a proposed noise barrier located along the edge of the shoulder of southbound I-605 from PM R18.820 to PM 19.294 along the on-ramp from Valley Boulevard. Noise barrier SB1 would achieve the needed Caltrans acoustical design goal of 7-dB noise reduction to be considered reasonable at five benefitted receptors with an 8-foot barrier.

Table 2.3-15. Predicted Future Noise and Barrier Analysis

Receptor ID	Noise Analysis Area	Barrier ID	Land Use	Number of Dwelling Units	Existing Noise Level $L_{eq}(h)$ dBA	Future Worst Hour Noise Levels - $L_{eq}(h)$, dBA																							
						Design Year Noise Level without Project $L_{eq}(h)$, dBA	Design Year Noise Level with Project Leq(h), dBA	Design Year Noise Level without Project minus Existing Conditions Leq(h), dBA	Design Year Noise Level with Project Minus No Project Conditions Leq(h), dBA	Activity Category (NAC)[a]	Impact Type	Noise Prediction with Barrier, Barrier Insertion Loss, and Number of Benefitted Receptors																	
												8 Feet			10 Feet			12 Feet			14 Feet			16 Feet			18 Feet		
												$L_{eq}(h)$	IL	NBR	$L_{eq}(h)$	IL	NBR	$L_{eq}(h)$	IL	NBR	$L_{eq}(h)$	IL	NBR	$L_{eq}(h)$	IL	NBR	$L_{eq}(h)$	IL	NBR
R1.1	A	SB1	Park	1	69	72	73	3	1	C (67)	A/E	68	5	1	68	6	1	65	8	1	64	9	1	63	10	1	63	11	1
R1.2			Park	1	73	77	77	4	-1	C (67)	A/E	69	7	1	67	10	1	66	11	1	65	12	1	64	13	1	63	13	1
R1.3			Park	1	69	71	71	3	0	C (67)	A/E	68	4	0	66	5	1	64	7	1	63	9	1	62	10	1	61	10	1
R1.4			Park	1	64	67	67	3	0	C (67)	A/E	64	2	0	63	4	0	61	5	1	60	7	1	60	7	1	59	8	1
R1.5			Park	1	65	68	68	3	0	C (67)	A/E	65	3	0	64	4	0	62	6	1	61	7	1	60	8	1	60	9	1
R1.6			Park	1	69	73	70	3	-2	C (67)	A/E	66	5	1	65	6	1	64	7	1	63	7	1	62	8	1	62	9	1
R1.7			Park	1	67	70	68	3	-1	C (67)	A/E	66	2	0	63	5	1	62	6	1	62	7	1	61	7	1	60	8	1
R1.8			Park	1	67	69	68	2	0	C (67)	A/E	65	4	0	64	5	1	62	6	1	61	7	1	61	8	1	60	8	1
R1.9			Park	1	69	72	71	2	-1	C (67)	A/E	66	5	1	65	6	1	64	7	1	63	8	1	63	9	1	62	9	1
R1.10			Park	1	70	72	72	2	0	C (67)	A/E	66	6	1	65	7	1	64	8	1	64	8	1	63	9	1	62	10	1
R1.11			Park	1	64	67	67	3	0	C (67)	A/E	64	4	0	63	5	1	61	6	1	61	7	1	60	7	1	60	8	1
R1.12			Park	1	61	65	65	4	0	C (67)	None	62	3	0	61	4	0	60	5	1	59	6	1	59	6	1	58	7	1
R1.13			Park	1	61	65	65	3	0	C (67)	None	62	3	0	61	4	0	60	5	1	60	6	1	59	6	1	59	6	1
R1.14			Park	1	65	68	65	3	-3	C (67)	None	62	2	0	62	3	0	62	3	0	61	4	0	61	4	0	60	4	0
R1.15			Park	1	66	69	65	3	-4	C (67)	None	63	2	0	62	3	0	62	3	0	61	4	0	61	4	0	61	5	1
ST1			Park	1	66	69	66	3	-3	C (67)	A/E	64	3	0	63	3	0	63	4	0	62	4	0	62	5	1	61	5	1

Table 2.3-15. Predicted Future Noise and Barrier Analysis

Receptor ID	Noise Analysis Area	Barrier ID	Land Use	Number of Dwelling Units	Existing Noise Level $L_{eq}(h)$ dBA	Future Worst Hour Noise Levels - $L_{eq}(h)$, dBA																							
						Design Year Noise Level without Project $L_{eq}(h)$, dBA	Design Year Noise Level with Project Leq(h), dBA	Design Year Noise Level without Project minus Existing Conditions Leq(h), dBA	Design Year Noise Level with Project Minus No Project Conditions Leq(h), dBA	Activity Category (NAC)[a]	Impact Type	Noise Prediction with Barrier, Barrier Insertion Loss, and Number of Benefitted Receptors																	
												8 Feet			10 Feet			12 Feet			14 Feet			16 Feet			18 Feet		
												$L_{eq}(h)$	IL	NBR	$L_{eq}(h)$	IL	NBR	$L_{eq}(h)$	IL	NBR	$L_{eq}(h)$	IL	NBR	$L_{eq}(h)$	IL	NBR	$L_{eq}(h)$	IL	NBR
R2.1	B	NB2	Residential	3	64	68	68	4	0	B (67)	A/E	66	2	0	66	2	0	66	2	0	66	2	0	66	2	0	66	2	0
R2.2			Residential	2	67	71	71	4	0	B (67)	A/E	68	3	0	67	3	0	67	4	0	66	5	2	66	5	2	66	5	2
R2.3			Residential	2	69	72	72	3	0	B (67)	A/E	69	4	0	68	4	0	67	5	2	66	6	2	65	7	2	65	8	2
R2.4			Residential	2	69	72	72	3	0	B (67)	A/E	68	4	0	68	4	0	67	5	2	65	7	2	64	8	2	63	9	2
R2.5			Residential	2	68	71	71	4	0	B (67)	A/E	68	4	0	67	4	0	66	5	2	64	7	2	62	9	2	62	9	2
R2.6			Residential	1	69	72	73	4	0	B (67)	A/E	69	4	0	68	5	1	66	7	1	63	9	1	62	11	1	61	11	1
R2.7			Residential	2	66	70	70	4	0	B (67)	A/E	67	3	0	66	4	0	63	7	2	62	8	2	61	9	2	60	10	2
R2.8			Residential	1	63	66	66	3	0	B (67)	A/E	63	3	0	63	3	0	62	4	0	60	6	1	58	8	1	58	8	1
R2.9			Residential	1	62	65	65	3	0	B (67)	None	63	3	0	62	3	0	61	5	1	59	7	1	57	8	1	57	8	1
R2.10			Residential	3	64	67	67	3	0	B (67)	A/E	64	3	0	64	3	0	62	4	0	60	7	3	59	8	3	58	9	3
R2.11			Residential	1	63	66	66	3	0	B (67)	A/E	63	3	0	63	3	0	61	5	1	59	7	1	58	8	1	58	8	1
R2.12			Residential	1	60	63	63	3	0	B (67)	None	61	3	0	60	3	0	58	5	1	57	6	1	56	7	1	55	8	1
R2.13			Residential	2	64	67	67	4	0	B (67)	A/E	65	2	0	65	2	0	62	5	2	61	7	2	60	7	2	59	8	2
R2.14			Residential	2	62	66	66	4	0	B (67)	A/E	65	1	0	64	2	0	62	4	0	61	5	2	60	6	2	60	6	2
R2.15			Residential	3	60	64	63	4	0	B (67)	None	61	2	0	61	2	0	59	4	0	58	5	3	58	6	3	58	6	3
R2.16			Park	1	61	64	64	3	0	C (67)	None	61	2	0	61	3	0	60	4	0	59	5	1	58	5	1	58	6	1
R2.17			Park	1	71	75	73	4	-3	C (67)	A/E	68	5	1	66	7	1	65	8	1	65	8	1	64	9	1	64	9	1
R2.18			Residential	3	61	64	64	3	0	B (67)	None	62	2	0	61	3	0	60	4	0	59	5	3	58	6	3	58	6	3
R2.19			Residential	6	63	67	66	3	0	B (67)	A/E	65	2	0	64	2	0	63	3	0	61	5	6	61	5	6	61	6	6
R2.20			Residential	1	67	70	69	3	-1	B (67)	A/E	66	3	0	65	4	0	64	5	1	63	7	1	62	7	1	61	8	1
R2.21			Residential	1	59	62	62	3	0	B (67)	None	61	1	0	60	2	0	60	2	0	60	2	0	60	2	0	59	3	0
R2.22			Residential	1	57	60	60	3	0	B (67)	None	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0

Table 2.3-15. Predicted Future Noise and Barrier Analysis

Receptor ID	Noise Analysis Area	Barrier ID	Land Use	Number of Dwelling Units	Existing Noise Level L_{eq}(h) dBA	Future Worst Hour Noise Levels - L_{eq}(h), dBA																							
						Design Year Noise Level without Project L_{eq}(h), dBA	Design Year Noise Level with Project Leq(h), dBA	Design Year Noise Level without Project minus Existing Conditions Leq(h), dBA	Design Year Noise Level with Project Minus No Project Conditions Leq(h), dBA	Activity Category (NAC)[a]	Impact Type	Noise Prediction with Barrier, Barrier Insertion Loss, and Number of Benefitted Receptors																	
												8 Feet			10 Feet			12 Feet			14 Feet			16 Feet			18 Feet		
												L_{eq}(h)	IL	NBR	L_{eq}(h)	IL	NBR	L_{eq}(h)	IL	NBR	L_{eq}(h)	IL	NBR	L_{eq}(h)	IL	NBR	L_{eq}(h)	IL	NBR
R2.23	B	NB2	Residential	1	60	63	63	3	0	B (67)	None	63	0	0	63	0	0	63	0	0	63	0	0	63	0	0	63	0	0
R2.24			Residential	1	60	63	63	4	0	B (67)	None	62	1	0	62	1	0	62	1	0	61	2	0	61	2	0	61	2	0
R2.25			Residential	1	54	57	57	3	0	B (67)	None	57	0	0	57	0	0	57	0	0	57	0	0	56	0	0	56	0	0
R2.26			Residential	2	53	56	56	3	0	B (67)	None	56	0	0	56	0	0	56	0	0	56	0	0	56	0	0	56	0	0
R2.27			Residential	4	56	59	59	3	0	B (67)	None	60	0	0	60	0	0	59	0	0	59	0	0	59	0	0	59	0	0
R2.28			Residential	2	57	60	60	3	0	B (67)	None	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0
R2.29			Residential	2	54	57	57	3	0	B (67)	None	57	0	0	57	0	0	57	0	0	57	0	0	57	0	0	57	0	0
R2.30			Residential	2	51	54	54	3	0	B (67)	None	54	0	0	54	0	0	54	0	0	54	0	0	54	0	0	54	0	0
R2.31			Residential	1	57	60	60	3	0	B (67)	None	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0
R2.32			Residential	2	54	57	57	3	0	B (67)	None	57	0	0	57	0	0	57	0	0	57	0	0	57	0	0	57	0	0
R2.33			Residential	1	56	59	59	3	0	B (67)	None	59	0	0	59	0	0	59	0	0	59	0	0	59	0	0	59	0	0
R2.34			Residential	2	48	50	50	3	0	B (67)	None	50	0	0	50	0	0	50	0	0	50	0	0	50	0	0	50	1	0
R2.35			Residential	2	53	56	56	3	0	B (67)	None	56	0	0	56	0	0	56	0	0	56	0	0	55	0	0	55	0	0
ST2			Residential	1	61	64	64	3	0	B (67)	None[b]	61	3	0	61	3	0	60	4	0	57	7	1	55	8	1	55	9	1
ST3			Residential	1	62	64	64	3	0	B (67)	None[b]	62	2	0	62	3	0	59	5	1	58	7	1	57	7	1	57	8	1
ST4			Residential	1	54	57	57	4	0	B (67)	None[b]	56	1	0	56	1	0	54	3	0	54	4	0	53	4	0	53	4	0
ST5			Park	1	69	71	71	3	0	C (67)	A/E	67	4	0	66	5	1	65	6	1	63	9	1	62	10	1	61	10	1
ST6			Park	1	73	78	76	5	-3	C (67)	A/E	72	4	0	68	8	1	67	9	1	66	10	1	65	11	1	65	11	1
ST7			Residential	1	68	71	70	3	-1	B (67)	None[b]	67	3	0	66	4	0	65	5	1	63	7	1	63	8	1	62	8	1
ST8			--	1	62	66	65	3	0	--	None[b]	64	1	0	64	1	0	64	2	0	63	2	0	63	2	0	63	2	0
ST9			--	1	62	66	65	4	0	--	None[b]	65	1	0	65	1	0	65	1	0	64	1	0	64	1	0	64	1	0
ST10			Residential	1	58	60	60	3	0	B (67)	None[b]	60	0	0	60	0	0	60	1	0	60	1	0	60	1	0	60	1	0

Table 2.3-15. Predicted Future Noise and Barrier Analysis

Receptor ID	Noise Analysis Area	Barrier ID	Land Use	Number of Dwelling Units	Existing Noise Level L_{eq}(h) dBA	Future Worst Hour Noise Levels - L_{eq}(h), dBA																							
						Design Year Noise Level without Project L_{eq}(h), dBA	Design Year Noise Level with Project Leq(h), dBA	Design Year Noise Level without Project minus Existing Conditions Leq(h), dBA	Design Year Noise Level with Project Minus No Project Conditions Leq(h), dBA	Activity Category (NAC)[a]	Impact Type	Noise Prediction with Barrier, Barrier Insertion Loss, and Number of Benefitted Receptors																	
												8 Feet			10 Feet			12 Feet			14 Feet			16 Feet			18 Feet		
												L_{eq}(h)	IL	NBR	L_{eq}(h)	IL	NBR	L_{eq}(h)	IL	NBR	L_{eq}(h)	IL	NBR	L_{eq}(h)	IL	NBR	L_{eq}(h)	IL	NBR
ST11	B	NB2	Residential	1	61	64	64	3	0	B (67)	None[b]	63	1	0	63	1	0	63	1	0	63	1	0	63	1	0	63	1	0
ST12			Residential	1	56	59	59	3	0	B (67)	None[b]	59	0	0	59	0	0	59	0	0	59	0	0	59	0	0	59	0	0
R2.36		--	Commercial	1	71	72	72	1	0	F (None)	None	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
R2.37			Motel	1	72	75	75	3	0	E (72)	None[b]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
R2.38			Restaurant	1	72	75	75	3	0	E (72)	A/E	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
R2.39			Restaurant	1	72	75	74	3	0	E (72)	None[b]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ST13			Restaurant	1	74	77	77	3	0	E (72)	None[b]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
R3.1	C	--	Commercial	1	69	71	72	3	0	F (None)	None	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
R4.1	D	--	Commercial	4	70	72	72	3	0	F (None)	None	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
R4.2			Restaurant	1	71	73	72	3	-1	E (72)	None[b]	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
R4.3			Commercial	1	61	65	63	4	-2	F (None)	None	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
R4.4			Commercial	1	62	71	66	9	-5	F (None)	None	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
R4.5			Commercial	1	61	70	66	9	-4	F (None)	None	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
R4.6			Commercial	1	67	71	71	4	0	F (None)	None	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ST14			Commercial	1	65	75	69	10	-6	F (None)	None	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
ST15			Commercial	1	64	75	69	11	-5	F (None)	None	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Source: (AMBIENT Air Quality and Noise Consulting, LLC, 2019b)

dBA = A-weighted decibels

[a] All NAC are exterior unless noted.

[b] Receiver location has no exterior area where frequent human use occurs.

L_{eq}(h)=A-weighted, peak hour noise levels in decibels; dBA=A-weighted decibels; NAC=Noise Abatement Criteria; NBR=Number of Benefitted Receptors; IL=Insertion Loss; A/E= Future noise conditions approach or exceed the Noise Abatement Criteria

NAA B. EASTSIDE OF I-605, SOUTH OF VALLEY BOULEVARD

Existing exterior traffic noise levels in NAA B range from 48 to 74 dBA. The future predicted exterior traffic noise levels range from 50 to 77 dBA where some receivers would exceed the NAC for Activity Category B, C, and E; therefore, consideration of noise abatement is required.

Areas with Noise Abatement

Noise Barrier NB1: Noise barrier NB1 is an existing noise barrier located along the edge of the shoulder of northbound I-605 from PM R18.708 to PM R18.819. The existing noise barrier is 14 feet tall and would remain in place with the Build Alternative. The project would not disturb the configuration of the existing noise barrier.

Noise Barrier NB2: Noise barrier NB2 would be a proposed noise barrier located along the edge of the shoulder of northbound I-605 from PM R18.819 to PM R19.166, which would connect to existing Noise Barrier NB3. Noise barrier NB2 would achieve the needed Caltrans acoustical design goal of 7-dB noise reduction at four benefitted receptors with a 10-foot barrier.

Noise Barrier NB3: Noise barrier NB3 is an existing noise barrier located along the edge of the shoulder of northbound I-605 off-ramp to Valley Boulevard from PM 19.166 to PM 19.367. The existing noise barrier ranges from 12 feet to 14 feet tall and would remain in place with the Build Alternative. The project would not disturb the configuration of the existing noise barrier.

NAA C. WESTSIDE OF I-605, NORTH OF VALLEY BOULEVARD

There are no outdoor areas of frequent human use within NAA C; therefore, consideration of noise abatement is not required.

NAA D. EASTSIDE OF I-605, NORTH OF VALLEY BOULEVARD

There are no outdoor areas of frequent human use within NAA D; therefore, consideration of noise abatement is not required.

Feasibility and Reasonable Allowance

Caltrans' Traffic Noise Analysis Protocol sets forth the criteria for determining when an abatement measure is feasible and reasonable. Noise abatement measures must reduce the noise at affected receptors by at least 5 dB to be considered feasible. In addition, barriers should be designed to intercept the line-of-sight from the exhaust stack of a truck to the first tier of receptors, as suggested by the Highway Design Manual (California Department of Transportation [Caltrans], 2017a). Other considerations for feasibility of a noise barrier include topography, access requirements, other noise sources, and safety considerations. The Caltrans acoustical design goal must be met for a noise barrier to be considered reasonable. The design goal is that a barrier must be predicted to provide at least 7 dB of noise reduction at one or more benefitted receivers. The reasonableness determination is a cost-benefit analysis. The estimated cost to build the noise barrier should be equal to or less than the total cost allowance of benefited receivers calculated for the barrier to be considered reasonable from a cost perspective.

Each noise barrier has been evaluated for feasibility based on achievable noise reduction (5 dB or more) at the outdoor frequent use areas of the representative receivers. For each noise barrier determined to be acoustically feasible, it was determined if the Caltrans acoustical design goal (7

dB) could be achieved, then reasonable cost allowances were calculated.

Table 2.3-16 summarizes the range of reasonable allowances for the feasible noise abatement measure considered. As shown in **Table 2.3-16**, noise barrier SB1 would not be considered reasonable as the total construction cost exceeds the total reasonable allowance for all wall heights, and is thus not recommended to be constructed. Noise barrier NB2 would be considered reasonable as the total construction cost is less than the total reasonable allowance, for wall heights 12 feet and above. A new 14-foot tall wall, matching the height of the existing wall (NB1) to the south, is recommended.

Based on the studies completed to date, the Department intends to incorporate noise abatement in the form of (a) barriers(s) at: the edge of the shoulder of northbound I-605 from PM R18.819 to PM R19.166, with respective lengths and average heights of 0.5 mile and 14 feet. Calculations based on preliminary design data show that the barrier(s) will reduce noise levels by 5 to 7 dBA for 39 residences at a cost of $1,566,093. These measures may change based on input received from the public. If conditions have substantially changed during final design, noise abatement may not be constructed. The final decision on noise abatement will be made upon completion of the project design.

Table 2.3-16. Summary of Preliminary Noise Abatement Decision

Barrier No.	Height (ft)	Acoustically Feasible?	Number of Benefited Receptors	Design Goal Achieved?	Total Reasonable Allowance	Estimated Construction Cost	Cost Less than Allowance?
SB1	8	YES	5	YES	$535,000	$1,368,306	NO
	10	YES	9	YES	$963,000	$1,567,287	NO
	12	YES	13	YES	$1,391,000	$1,766,268	NO
	14	YES	13	YES	$1,391,000	$1,961,968	NO
	16	YES	14	YES	$1,498,000	$2,145,287	NO
	18	YES	15	YES	$1,605,000	$2,850,650	NO
NB2	8	NO	1	NO	$107,000	$1,090,181	NO
	10	YES	4	YES	$428,000	$1,251,068	NO
	12	YES	18	YES	$1,926,000	$1,408,581	**YES**
	14	YES	39	YES	$4,173,000	$1,566,093	**YES**
	16	YES	39	YES	$4,173,000	$1,707,287	**YES**
	18	YES	39	YES	$4,173,000	$2,262,493	**YES**

Source: *Noise Abatement Decision Report* (NCM Engineering Corporation, 2020)

Avoidance, Minimization, and/or Mitigation Measures

The following measures will be implemented to minimize impacts related to noise:

- **AVM-N-1**. Sound control will conform to the provisions in Section 14-8.02, Noise Control, of

the Caltrans Standard Specifications (2018). According to requirements of these specifications, construction noise cannot exceed 86 dBA L_{max} at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m.

- **AVM-N-2**. All equipment will have sound-control devices no less effective than those provided on the original equipment. Each internal combustion engine used for any purpose on the job or related to the job will be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine will be operated on the job site without an appropriate muffler. Additionally, construction methods or equipment that will provide the lowest level of noise impact will be used and idling equipment will be turned off.

In addition to the measures identified above, the following measure will be implemented to mitigate impacts from operation of the project.

- **N-1**. Based on the studies completed to date, the Department intends to incorporate noise abatement in the form of (a) barriers(s) at: the edge of the shoulder of northbound I-605 from PM R18.819 to PM R19.166, with respective lengths and average heights of 0.5 mile and 14 feet. Calculations based on preliminary design data show that the barrier(s) will reduce noise levels by 5 to 7 dBA for 39 residences at a cost of $1,566,093. These measures may change based on input received from the public. If conditions have substantially changed during final design, noise abatement may not be constructed. The final decision on noise abatement will be made upon completion of the project design.

2.3.7 Energy

A Traffic Operations Analysis Report (TOAR) (Intueor Consulting, Inc., 2019) and Air Quality Report (AMBIENT Air Quality and Noise Consulting, 2020) were completed for the project. The reports support the discussion included below.

Regulatory Setting

National Environmental Policy Act

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires the identification of all potentially significant impacts to the environment, including energy impacts.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines section 15126.2(b) and Appendix F, Energy Conservation, require an analysis of a project's energy use to determine if the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary use of energy, or wasteful use of energy resources.

Southern California Association of Governments Regional Comprehensive Plan and 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

The SCAG serves as the metropolitan planning organization for the region. The Regional Comprehensive Plan (Southern California Association of Governments, 2008) and *2020-2045 RTP/SCS* adopted May 2020 (Southern California Association of Governments, 2020), are tools used for identifying the transportation priorities of the Southern California region. The policies and

goals of both plans focus on the need to coordinate land use and transportation decisions to manage travel demand within the region.

The Regional Comprehensive Plan was never formally adopted but serves as an advisory document that defines solutions to interrelated housing, traffic, water, air quality, energy, and other regional challenges, and is intended to provide a framework for local government decision-makers regarding growth and development. The Regional Comprehensive Plan lays out a strategy to reverse the current energy trends and diversify energy supplies to create clean, stable, and sustainable sources of energy. This strategy includes the reduction of fossil fuel consumption and an increase in the use of clean, renewable technologies. Regional Comprehensive Plan policies that are applicable to the project include:

- **Policy EN-14** - Developers and local governments should explore programs to reduce single occupancy vehicle trips such as telecommuting, ridesharing, alternative work schedules, and parking cash-outs (a state law to reduce vehicle commute trips and emissions by offering employees the option of "cashing out" their subsidized parking space and taking transit, biking, walking, or carpooling to work).
- **Policy EN-16** - Local governments and project implementation agencies should consider various best practices and technological improvements that can reduce the consumption of fossil fuels such as:
    - Developing infrastructure for alternative fuel vehicles.

The *2020-2045 RTP/SCS* provides a framework for the future development of the regional transportation system through the year 2045 and addresses all modes of transportation within the region (Southern California Association of Governments, 2021). The *2020-2045 RTP/SCS* goal that are applicable to the I-605/Valley Boulevard Interchange Improvement Project include:

- Improve mobility, accessibility, reliability, and travel safety for people and goods
- Enhance the preservation, security, and resilience of the regional transportation system

These goals are implemented through the seven guiding principles established by SCAG in the *2020-2045 RTP/SCS*. Principles include prioritizing transportation funding on projects and programs that improve mobility, accessibility, reliability and safety, and that preserve the existing transportation system.

Metropolitan Transportation Authority Energy and Sustainability Policy

In June 2007, the Metro Board adopted an Energy and Sustainability Policy (Los Angeles County Metropolitan Transportation Authority 2007). The purpose of this policy is to control energy consumption and embrace energy efficiency, energy conservation, and sustainability to:

- Avoid unnecessary expenditure.
- Help in protecting the environment.
- Improve cost effectiveness, productivity, and working conditions.
- Prolong the useful life of fossil fuels by using resources more efficiently.

City of Industry General Plan

The Land Use and Circulation Elements in the City of Industry General Plan include the following

applicable policies (City of Industry, 2014):

- **Policy LU2-6 -** Support the use of energy-saving designs and equipment in all new development and rehabilitation or reconstruction projects.
- **Policy C3-2 -** Help identify and implement feasible solutions to long-term regional transportation problems.

Affected Environment

The project is located in an urbanized portion of Los Angeles County, and encompasses portions of the City of Industry and the unincorporated community of Avocado Heights, located in unincorporated Los Angeles County.

Existing Traffic Conditions

According to the Transportation Operation Analysis Report (TOAR) prepared for the project, traffic counts were conducted in the project area on Thursday, February 7, 2019 from 6:30 to 9:30 AM and from 3:30 to 6:30 PM. In addition, 24-hour average daily traffic (ADT) counts were collected at the six I-605/Valley Boulevard interchange ramps on Thursday, February 7, 2019. Additionally, freeway mainline and HOV lane volumes were collected from the Caltrans Performance Measurement System (PeMS) database for the month of April 2019.

As shown in **Table 2.3-17**, the Valley Boulevard direct on-ramp to I-10 off-ramp has the highest AM and PM peak hour traffic volumes for the northbound I-605. For the southbound I-605, the South of Valley Boulevard On-Ramp has the highest AM peak hour traffic volume, and the I-10 on-ramp to Valley Boulevard loop off-ramp has the highest PM peak hour traffic volumes (Intueor Consulting, Inc., 2019).

Table 2.3-17. Existing Freeway Mainline and Ramp Volumes

Segment Location	AM Peak Hour		PM Peak Hour	
	Mixed-Flow	HOV	Mixed-Flow	HOV
Northbound I-605				
South of Valley Boulevard off-ramp	6,167	855	6,445	1,221
Valley Boulevard off-ramp	672	-	723	-
Valley Boulevard off-ramp to Valley Boulevard loop on-ramp	5,495	855	5,722	1,221
Valley Boulevard loop on-ramp	117	-	109	-
Valley Boulevard loop on-ramp to Valley Boulevard direct on-ramp	5,612	855	5,831	1,221
Valley Boulevard direct on-ramp	866	-	788	-
Valley Boulevard direct on-ramp to I-10 off-ramp	6,478	855	6,619	1,221
I-10 off-ramp	3,210	-	2,446	-
Southbound I-605				
I-10 on-ramp	2,797	-	2,846	-

Table 2.3-17. Existing Freeway Mainline and Ramp Volumes

Segment Location	AM Peak Hour		PM Peak Hour	
	Mixed-Flow	HOV	Mixed-Flow	HOV
I-10 on-ramp to Valley Boulevard loop off-ramp	6,237	1,174	6,535	960
Valley Boulevard loop off-ramp	746	-	897	-
Valley Boulevard loop off-ramp to Valley Boulevard on-ramp	5,491	1,174	5,638	960
Valley Boulevard on-ramp	1,206	-	704	-
South of Valley Boulevard on-ramp	6,697	1,174	6,342	960

Source: (Intueor Consulting, Inc., 2019)

Note: The units in this table are the number of cars that were counted as they were traveling along the roadway. a.m. peak hour is defined as 6:30 to 9:30 AM. PM peak hour is defined as 3:30 to 6:30 PM.

a.m. = ante meridiem; HOV = High Occupancy Vehicle; I-605 = Interstate 605; I-10 = Interstate 10; p.m. = post meridiem

Existing Vehicle Mix

I-605 is part of the United States Department of Defense Strategic Highway Network (STRAHNET) and Surface Transportation Assistance Act (STAA) National Network route for use by oversized trucks. Both I-605 and SR-60 carry the major share of truck traffic with percentages as high as 10.4 percent to 17.8 percent. I-10 carries the least amount of truck traffic in comparison to its daily ADT.

Environmental Consequences

The energy analysis for the project is based on the methodology described in the Caltrans Standard Environmental Reference, Volume 1, Chapter 13 – Energy (Caltrans, 2015), as well as guidance provided by Caltrans regarding CEQA Updates, effective April 27, 2019. The energy analysis addresses both direct and indirect energy consumption, which are defined as follows:

- **Direct Energy.** In the context of transportation, direct energy involves all energy consumed by vehicle propulsion (e.g., automobiles, trains, airplanes). This energy consumption is a function of traffic characteristics, such as vehicle miles traveled (VMT), speed, vehicle mix, and thermal value of fuel being used. Additionally, direct energy also includes the one-time energy expenditure involved in construction of the project. Therefore, analysis of direct energy consumption includes the following factors:
    - **Direct Energy (Mobile Sources):** The energy consumed by vehicle propulsion within the facility during operation of the project.
        - Direct energy consumption from mobile sources associated with the project were estimated using traffic model forecast for VMT from the Air Quality Report for the project area (AMBIENT Air Quality and Noise Consulting, 2020) and the EMFAC2017 air quality model (California Air Resources Board, 2017), which provides estimated fuel consumption rates for Existing Year (2019), Opening Year (2024), and Design Year (2044). The Opening Year (2024) and Design Year (2044) Build Alternative has

been compared to the No Build Alternative under all scenarios.

- **Direct Energy (Construction):** The energy consumed by construction vehicles and equipment during construction of the project.
  - Direct energy consumption from project construction was estimated by converting the estimated CO2 emission levels for the 12-month construction period into gallons of diesel and gasoline that would be consumed during project construction activities. These CO2 emissions were obtained from the I-605/Valley Boulevard Air Quality Report (AMBIENT Air Quality and Noise Consulting, 2020), which quantified CO2 emissions using the EMFAC2017 emission factors and traffic data provided for this project.

- **Indirect Energy.** Indirect energy includes maintenance activities that would result in long-term indirect energy consumption by equipment required to operate and maintain the roadway.
  - To assess indirect energy consumption from the maintenance of the project facility, and the maintenance of vehicles using the facility, energy use factors were obtained from Caltrans' Energy and Transportation Systems Handbook, Appendix C (California Department of Transportation, 1983).

No Build Alternative

Temporary Impacts

The No Build Alternative would not require construction in the project area as a result of the project; therefore, energy consumption for the project as a result of the use of construction vehicles and equipment would not be required.

Permanent Impacts

Direct Impacts

Under the No Build Alternative, project-related improvements would not be constructed within the project area. As shown in **Table 2.3-18**, annual VMT would increase between the Opening Year (2024) and the Design Year (2044), under the No Build Alternative. The increase in annual VMT can be attributed to the increasing traffic volumes that would contribute to worsening traffic congestion, slower traffic speeds, and increases in traffic delays.

Under the No Build Alternative, congested traffic conditions and limitations on mobility would be more prevalent throughout the project area. These conditions would contribute to inefficient energy consumption, as vehicles would use extra fuel while idling in stop-and-go traffic or moving at slow speeds through congested roadways.

Table 2.3-18. Operational Vehicle Miles Traveled by Alternative

Scenario/Analysis Year	Annual VMT[a]
Existing Year (2019)	13,449,720
No Build Alternative – Opening Year (2024)	13,832,461
Build Alternative – Opening Year (2024)	11,189,015
No Build Alternative – Design Year (2044)	15,199,988
Build Alternative – Design Year (2044)	12,207,113

Source: (AMBIENT Air Quality and Noise Consulting, 2020)

[a] According to California Air Resources Board methodology, annual VMT is derived from Daily VMT multiplied by 347. (California Air Resources Board, 2008)

VMT = vehicle miles traveled

As shown in **Table 2.3-19**, permanent direct energy, including the consumption of fuel used by vehicles traveling along the project area would decrease by approximately 11 percent under the Opening Year (2024) No-Build Alternative when compared the Existing Year (2019) No-Build Alternative. Additionally, fuel consumption would decrease by approximately 24.8 percent under the Design Year (2044) No Build Alternative when compared to the Existing Year (2019) No-Build Alternative.

Under the Design Year 2044 No-Build Alternative, fuel consumption would decrease for by approximately 15.5 percent when compared to the Opening Year (2024) No Build Alternative. Therefore, implementation of the No Build Alternative would result in a negligible change in energy consumption and would not substantially contribute to permanent direct energy use in the project area.

Indirect Impacts

As shown in **Table 2.3-20**, under the No Build Alternative, indirect energy consumption in the project area would result in the use of approximately 30.4 billion British Thermal Units (BTU) of energy during the Opening Year (2024) and approximately 33.34 billion BTU of energy during the Design Year (2044). The No Build Alternative serves as a baseline for comparison against the Build Alternative, discussed below.

Table 2.3-19. Annual Direct Energy Consumption (Mobile Sources by Alternative and Study Year

Scenario	Gasoline Consumption (billion gallons)	Gasoline Consumption (billion BTU)	Diesel Consumption (billion Gallons)	Diesel Consumption (billion BTU)	Total Fuel Consumption (billion BTU)	Percent Change from Existing Year (2019) No Build Alternative	Percent Change from Opening Year (2024) No Build Alternative	Percent Change from Design Year (2044) No Build Alternative
Existing Year (2019) No Build Alternative	0.0006	67.60	0.0014	199.14	266.74	--	--	--
Opening Year (2024) No Build Alternative	0.0005	60.47	0.0013	176.90	237.36	-11.0%	--	--
Opening Year (2024) Build Alternative	0.0004	48.91	0.0010	143.09	192.00	-28.0%	-19.11%	--
Design Year (2044) No Build Alternative	0.0004	50.39	0.0011	150.14	200.53	-24.8%	-15.5%	--
Design Year (2044) Build Alternative	0.0003	40.47	0.0009	120.58	161.05	-39.6%	-32.2%	-19.69%

Source: GPA Consulting, 2020 and California Air Resources Board, 2017

BTU = British Thermal Units

Table 2.3-20. Indirect Energy Consumption in the Project Area by Alternative

Scenario	Indirect Energy for Facility Maintenance (billion BTU)	Indirect Energy for Vehicle Maintenance (billion BTU)	Total Indirect Energy Consumption (billion BTU)	Numeric Difference Between Alternatives and No Build Alternative	Percent Difference Between Alternatives and No Build Alternative
Existing Year (2019) No Build Alternative	0.72	28.86	29.58	--	--
Opening Year (2024) No Build Alternative	0.72	29.68	30.40	--	--
Opening Year (2024) Build Alternative	1.06	24.01	25.07	-5.33	-17.54%
Design Year (2044) No Build Alternative	0.72	32.62	33.34	--	--
Design Year (2044) Build Alternative	1.06	26.20	27.25	-6.07	-18.25

Source: GPA Consulting, 2020 and California Air Resources Board, 2017

BTU = British Thermal Units

Build Alternative

Temporary Impacts

Direct energy from project construction is the energy that is consumed during construction activities by vehicles and equipment. Project construction would primarily consume diesel and gasoline through operation of heavy-duty construction equipment, material deliveries, and debris hauling. Project construction would involve the following types of vehicles and equipment during the estimated 12-month construction period:

- Crawler tractors
- Excavators
- Graders
- Rollers
- Rubber tired loaders
- Scrapers
- Rough terrain forklifts
- Paving equipment

As shown in **Table 2.3-21**, project construction activities would result in approximately 467.67 metric tons of CO_2 emissions, which would require approximately 6.31 billion BTU of diesel (or approximately 45,940 gallons) or 6.33 billion BTU of gasoline (or approximately 52,624 gallons) from the use of vehicles and equipment during the 12-month construction period. This represents a small demand on local and regional fuel supplies that would be easily accommodated, and this demand would cease once construction is complete. Therefore, the project would not result in an inefficient, wasteful, and unnecessary consumption of energy.

Table 2.3-21. Direct Energy Consumption (Construction) for Build Alternative During 12-Month Construction Period

Construction Phase (Build Alternative)	12-month Construction Period				
	CO_2 Emissions (metric tons)	Diesel Consumption (billion BTU)	Diesel Consumption (gallons)	Gasoline Consumption (billion BTU)	Gasoline Consumption (gallons)
Land Clearing/ Grubbing	72.84	0.98	7,155	0.99	8,196
Grading/ Excavation	239.01	3.22	23,478	3.23	26,894
Drainage/Utilities/ Sub-Grade	102.71	1.39	10,089	1.39	11,557
Paving	53.11	0.72	5,217	0.72	5,976
Total	467.67	6.31	45,940	6.33	52,624

Source: AMBIENT Air Quality and Noise Consulting, 2020; GPA Consulting, 2020; U.S. Environmental Protection Agency, 2018; and U.S. Energy Information Administration, 2019

BTU = British Thermal Units

1 gallon of gasoline = 120,476 BTU

1 gallon of Diesel = 137,452 BTU

Permanent Impacts

Direct Impacts

As shown in **Table 2.3-18** annual VMT would decrease during the Opening Year (2024) Build Alternative, compared to the No Build Alternative of the same year. Additionally, annual VMT would decrease during the Design Year (2044) Build Alternative, compared to the No Build Alternative of the same year. The decrease in annual VMT can be attributed to the reduction of congestion on Valley Boulevard; and improve traffic operation at the I-605/Valley Boulevard interchange.

As shown in **Table 2.3-19**, direct energy consumption from mobile sources would decrease or have a negligible increase in the project area under all alternative scenarios. Energy consumption under the Opening Year (2024) Build Alternative would decrease by approximately 28 percent when compared to the Existing Year (2019); and energy consumption would decrease by approximately 19 percent when compared to the Opening Year (2024) No Build Alternative. Energy consumption for the Design Year (2044) Build would decrease by approximately 39 percent when compared to the Existing Year (2019), and approximately 32 percent when compared to the Opening Year (2024) No Build Alternative; and energy consumption would increase by a negligible amount (approximately 0.4 percent) when compared to the Design Year (2044) No Build Alternative. Based on this data, the project would not substantially contribute to direct energy consumption and would not be expected to result in permanent adverse direct energy impacts. Therefore, the project would not result in an inefficient, wasteful, and unnecessary consumption of energy.

Indirect Impacts

As shown in **Table 2.3-20**, under the Build Alternative, indirect energy consumption in Opening Year (2024) would decrease by approximately 17 percent compared to the Opening Year (2024) No-Build Alternative. The Build Alternative would result in a decrease of approximately 18 percent in the Design Year (2044) when compared to the Design Year (2044) No-Build Alternative.

Based on this data, the project would not substantially contribute to indirect energy consumption and would not be expected to result in permanent adverse indirect energy impacts. Therefore, the project would not result in an inefficient, wasteful, and unnecessary consumption of energy.

Avoidance, Minimization, and/or Mitigation Measures

The project would not result in adverse effects related to energy consumption; therefore, no avoidance, minimization, or mitigation measures are required. However, the following avoidance and minimization measure is recommended to conserve energy during project construction:

- **AVM-E-1** As part of the Plans, Specifications, and Estimates, a construction efficiency plan would be prepared, which may include the following:
    - Reuse of existing rail, steel, and lumber wherever possible, such as for falsework, shoring, and other applications during the construction process.
    - Recycling of asphalt taken up from roadways, if practicable and cost-effective.
    - Use of newer, more energy-efficient equipment where feasible, and maintenance of older

construction equipment to keep in good working order.

- Scheduling of construction operations to efficiently use construction equipment (e.g., only haul waste when haul trucks are full and combine smaller dozer operations into a single comprehensive operation, where possible).
- Promotion of construction employee carpooling.

2.4 Biological Environment

2.4.1 Natural Communities

Regulatory Setting

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 the Threatened and Endangered Species **Section 2.4.5**. Wetlands and other waters are also discussed below in **Section 2.4.2**.

Affected Environment

The following section summarizes the results of the *Natural Environment Study* (NES) completed in August 2019 (GPA Consulting, 2019).

A biological survey was conducted on January 22, 2019. The Biological Study Area (BSA) was visually surveyed on foot, to the extent feasible, and all plant and wildlife species were identified to determine the potential for protected species to be in the BSA. The BSA encompasses approximately 31.42 acres and includes the roadway and adjacent vegetated and developed areas within an approximately 25- to 50-foot buffer from the edge of the project area. The vegetation communities and cover classes within the BSA include Developed, Ornamental, Ruderal, Unvegetated, and Planted *Eriogonum Fasciculatum* (California buckwheat) Shrubland Alliance. Developed areas within the BSA include portions of Interstate 605 (I-605), I-605 on-ramps and off-ramps, I-605 loop on-ramps and loop off-ramps, Valley Boulevard, East Temple Avenue, and the Union Pacific Railroad (UPRR)/Metrolink railroad and other private properties. Ornamental communities are along the shoulders of the I-605, I-605 on-ramps and off-ramps, I-605 on-ramps and off-ramp loops, Valley Boulevard, and Temple Avenue. Ruderal communities are adjacent to the UPRR/Metrolink railroad property, NB off-ramp onto Valley Boulevard, NB on-ramp from Valley Boulevard, and SB on-ramp. Unvegetated areas are adjacent to the UPRR/Metrolink railroad, NB off-ramp, and SB on-ramp. The planted *Eriogonum Fasciculatum* Shrubland Alliance is adjacent to Valley Boulevard in the northwestern portion of the BSA.

According to the County of Los Angeles General Plan, the land use surrounding the BSA is designated as residential and commercial land uses. The limits of the BSA were determined by reviewing project plans and aerial imagery. The BSA includes areas that could be directly and indirectly impacted by the project, either temporarily or permanently.

Natural Communities

According to the NES, eight natural communities have the potential to be in the BSA based on recorded geographical distribution of the California Natural Diversity Database (CNDDB) species lists reviewed for the project. Based on the results of research and the field survey, there is no potential for special-status natural communities to be in the BSA.

Vegetation Communities

Vegetation within the BSA consists of a mix of landscaped plants and native vegetation. Vegetation communities and cover classes observed in the BSA include Developed, Ornamental, Ruderal, Unvegetated and Planted *Eriogonum Fasciculatum* (California buckwheat) Shrubland Alliance. Each of these are described below.

Developed

Developed areas are where human disturbance has resulted in permanent impacts on natural communities. These include paved areas, buildings, bridges, and other structures. Within the BSA, the developed area includes portions of Valley Boulevard; Temple Avenue; the southbound loop off-ramp and northbound off-ramp onto Valley Boulevard; southbound on-ramp, northbound loop on-ramp, and northbound on-ramp Valley Boulevard onto I-605; Railroad Avenue, and the UPRR/Metrolink railroad tracks (see Figure 4 in the NES).

Ornamental

Ornamental communities predominantly consist of non-native horticultural plants and trees, including introduced trees, shrubs, annual plants, and turf grass. A component of these communities includes mulch or leaf litter. Also observed within this community were individual native blue elderberry (*Sambucus nigra* ssp. *caerulea*) shrubs and trees. Within the BSA, the Ornamental community is found along the shoulders of I-605, I-605 on-ramps and off-ramps, I-605 on-ramps and off-ramp loops, Valley Boulevard, and Temple Avenue.

Ruderal

Ruderal communities are typically in early successional stages following extreme human disturbance or recurrent natural disturbance. This community is dominated by annual and perennial, introduced/non-native, pioneering, herbaceous plants that readily colonize disturbed ground. Ruderal communities often exist along roadsides and fence lines, near developments, and in other areas where vegetation has been substantially altered by mowing or herbicide. Within the BSA, this community is adjacent to the UPRR/Metrolink railroad property, northbound off-ramp onto Valley Boulevard, northbound on-ramp from Valley Boulevard, and southbound on-ramp from Valley Boulevard.

Unvegetated

Unvegetated areas are mostly devoid of vegetation. Unvegetated areas are the result of human disturbance and compaction of the soil from frequent vehicle traffic. Within the BSA, the Unvegetated area is adjacent to the UPRR/Metrolink railroad, northbound off-ramp, and southbound on-ramp.

Planted Eriogonum Fasciculatum Shrubland Alliance

Planted *Eriogonum Fasciculatum* Shrubland Alliance communities were seeded or planted and are dominated by California buckwheat, a native shrub, and include coastal sage scrub. The Planted *Eriogonum Fasciculatum* Shrubland Alliance is characterized by a continuous or intermittent canopy and a variable and potentially grassy herbaceous layer. This community is on upland slopes, intermittently flooded arroyos, channels, and washes, in coarse, well drained, and moderately acidic to slightly saline soils (California Native Plant Society, 2019). Within the BSA, this community is adjacent to Valley Boulevard in the northwestern portion of the BSA.

Habitat Connectivity

A migration or wildlife corridor is an area of habitat that connects two or more patches of habitat that would otherwise be isolated from each other. Wildlife corridors are typically adjacent to urban areas. A functional wildlife corridor allows for ease of movement between habitat patches and is important in preventing habitat fragmentation. Habitat fragmentation is typically caused by human development and can lead to a decrease in biodiversity and ecosystem functionality. The land surrounding the BSA is used for commercial, residential, industrial, and utility purposes.

According to the California Department of Fish and Wildlife (CDFW) Biogeographic Information and Observation System, there are no essential wildlife connectivity areas or natural landscape blocks in the BSA (California Department of Fish and Wildlife, 2019). The closest natural landscape block is approximately 3.7 miles to the south of the BSA. Therefore, the BSA is not likely to be used as a migration or travel corridor. However, the BSA may be used for local foraging and movement by urban wildlife species in the area.

Environmental Consequences

Based on survey results, there are no special-status natural communities in the BSA; therefore, there will be no impacts on special-status communities.

Avoidance, Minimization, and/or Mitigation Measures

There will be no impacts on special-status natural communities; therefore, no avoidance, minimization, or mitigation measures are proposed.

2.4.2 Wetlands and Other Waters

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 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.

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 Alternative Finding must be made.

At the state level, wetlands and waters are regulated primarily by the State Water Resources Control Board (SWRCB), the Regional Water Quality Control Boards (RWQCBs) and the California Department of Fish and Wildlife (CDFW). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission or the Tahoe Regional Planning Agency) may also be involved. Sections 1600-1607 of the California Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFW before beginning construction. If CDFW determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFW jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement

obtained from the CDFW.

The 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.

Affected Environment

The following section summarizes the results of the NES completed in August 2019 (GPA Consulting, 2019).

The BSA is located within southeastern Los Angeles County in the Cities of Baldwin Park, Industry, and the unincorporated community of Basset. The BSA encompasses approximately 31.42 acres and includes the roadway and adjacent vegetated and developed areas within an approximately 25- to 50-foot buffer from the edge of the project area. The vegetation communities and cover classes within the BSA include Developed, Ornamental, Ruderal, Unvegetated, and Planted *Eriogonum Fasciculatum* (California buckwheat) Shrubland Alliance. Developed areas within the BSA include portions of I-605, I-605 on-ramps and off-ramps, I-605 loop on-ramp and loop off-ramp, Valley Boulevard, East Temple Avenue, and the UPRR/Metrolink railroad and other private properties. Ornamental communities are along the shoulders of the I-605, I-605 on-ramps and off-ramps, I-605 on-ramps and off-ramp loops, Valley Boulevard, and Temple Avenue. Ruderal communities are adjacent to the UPRR/Metrolink railroad property, NB off-ramp onto Valley Boulevard, NB on-ramp from Valley Boulevard, and SB on-ramp. Unvegetated areas are adjacent to the UPRR/Metrolink railroad, NB off-ramp, and SB on-ramp. The planted *Eriogonum Fasciculatum* Shrubland Alliance is adjacent to Valley Boulevard in the northwestern portion of the BSA.

The BSA is within the San Gabriel River Watershed. The San Gabriel River Watershed encompasses approximately 640 square miles in the eastern section of Los Angeles County. The San Gabriel River Watershed is surrounded by the San Gabriel Mountains to the north, San Bernardino/Orange County to the east, the Los Angeles River to the west, and the Pacific Ocean to the south (Los Angeles County Department of Public Works, 2019). No waterways or wetlands were observed in the BSA during the biological survey conducted on January 22, 2019. Headwall culverts were observed within the BSA; however, headwall culverts divert runoff from the road and are not considered jurisdictional. Additionally, the San Gabriel River is approximately 100 feet to the west of the BSA and Walnut Creek is approximately 0.45-mile to the north of the BSA.

There are no wetlands or waters of the U.S. or state in the BSA. Therefore, the project would have no impact on jurisdictional waters, and no coordination with USACE, RWQCB, or CDFW is necessary. Because there would be no impacts on waters of the U.S. or state, regulatory permits for wetlands and other waters would not be required for this project.

Environmental Consequences

Based on literature reviews regarding habitat requirements and survey results, there are no

wetlands or other waters in the BSA. Therefore, there will be no impacts on wetlands or other waters.

Avoidance, Minimization, and/or Mitigation Measures

There will be no impacts on wetlands and waters; therefore, no avoidance, minimization, or mitigation measures are proposed.

2.4.3 Plant Species

Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) have regulatory responsibility for the protection of 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) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species **Section 2.4.5** in this document for detailed information about these species.

This section of the document discusses all other special-status plant species, including CDFW species of special concern, USFWS candidate species, and California Native Plant Society (CNPS) rare and endangered plants.

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. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at California Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act (CEQA), found at California Public Resources Code, Sections 21000-21177.

Affected Environment

The following section summarizes the results of the NES completed in August 2019 (GPA Consulting, 2019).

The BSA is located within southeastern Los Angeles County in the Cities of Baldwin Park, Industry, and the unincorporated community of Basset. The BSA encompasses approximately 31.42 acres and includes the roadway and adjacent vegetated and developed areas within an approximately 25- to 50-foot buffer from the edge of the project area. The vegetation communities and cover classes within the BSA include Developed, Ornamental, Ruderal, Unvegetated, and Planted *Eriogonum Fasciculatum* (California buckwheat) Shrubland Alliance. Developed areas within the BSA include portions of I-605, I-605 on-ramps and off-ramps, I-605 loop on-ramp and loop off-ramp, Valley Boulevard, East Temple Avenue, and the UPRR/Metrolink railroad and other private properties. Ornamental communities are along the shoulders of the I-605, I-605 on-ramps and off-ramps, I-605 on-ramps and off-ramp loops, Valley Boulevard, and Temple Avenue. Ruderal communities are adjacent to the UPRR/Metrolink railroad property, NB off-ramp onto

Valley Boulevard, NB on-ramp from Valley Boulevard, and SB on-ramp. Unvegetated areas are adjacent to the UPRR/Metrolink railroad, NB off-ramp, and SB on-ramp. The planted *Eriogonum Fasciculatum* Shrubland Alliance is adjacent to Valley Boulevard in the northwestern portion of the BSA.

According to the CNDDB, CNPS, and USFWS searches, 64 special-status plant species have the potential to be in the BSA based on recorded geographical distribution (see Appendix G). Based on literature reviews regarding habitat requirements and survey results, there is no potential for special-status plants to be in the BSA.

Environmental Consequences

Based on literature reviews regarding habitat requirements and survey results, there is no potential for special-status plants to be in the BSA. Therefore, there will be no impacts on special-status plant species.

Avoidance, Minimization, and/or Mitigation Measures

There will be no impacts on special-status plant species; therefore, no avoidance, minimization, or mitigation measures are proposed.

2.4.4 Animal Species

Regulatory Setting

Many state and federal laws regulate impacts to wildlife. The U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service), and the California Department of Fish and Wildlife (CDFW) 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 or state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in the Threatened and Endangered Species **Section 2.4.5** below. All other special-status animal species are discussed here, including CDFW fully protected species and species of special concern, and 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

State laws and regulations relevant to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the California Fish and Game Code
- Sections 4150 and 4152 of the California Fish and Game Code

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (50 CFR Part 10 and Part 21) protects migratory birds, their occupied nests, and their eggs from disturbance and/or destruction. "Migratory birds" under

the MBTA include all bird species listed in 50 CFR Part 10.13, as updated in December 2013 (United States Fish and Wildlife, 2013). In accordance with the Migratory Bird Treaty Reform Act of 2004 the United States Fish and Wildlife Service (USFWS) included all species native to the U.S. (or U.S. territories) that are known to be present as a result of natural biological or ecological processes. In addition, the USFWS provided clarification that the MBTA does not apply to any nonnative species whose presence in the U.S. are solely the result of intentional or unintentional human-assisted introduction. Nonnative bird species not protected by the MBTA include, but are not limited to, the house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), and rock dove (*Columba livia*).

California Fish and Game Code

Section 2126 of the California Fish and Game Code states that it is unlawful for any person to take any mammals that are identified within Section 2118, including all species of bats.

Sections 3503, 3513, and 3800 of the California Fish and Game Code prohibit the take of birds protected under the MBTA and protects their occupied nests. In addition, Section 3503.5 of the California Fish and Game Code prohibits the take of any birds in the order Falconiformes or Strigiformes (birds-of-prey) and protects their occupied nests. Pursuant to Section 3801 and 3800, the only species authorized for take without prior authorization from California Department of Fish and Wildlife (CDFW) is the house sparrow, European starling, and rock dove.

State-listed species and those petitioned for listing by the CDFW are fully protected under the California Endangered Species Act (CESA). Under Section 2080.1 of the California Fish and Game Code, if a project would result in take of a species that is both federally and state listed, a consistency determination with the findings of the FESA determination is required. Under Section 2081, if a project would result in take of a species that is state-only listed as threatened or endangered, then an incidental take permit from the CDFW is required.

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code prohibit the take or possession of 37 fully protected bird, mammal, reptile, amphibian, and fish species. Each of the statutes states that no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to "take" the species, and states that no previously issued permit or licenses for take of the species "shall have any force or effect" for authorizing take or possession. The CDFW will not authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species.

Los Angeles County General Plan

The Los Angeles County General Plan's Conservation and Natural Resource (C/NR) Element includes policies to protect, conserve, and preserve the natural resources and open spaces in Los Angeles County. This plan provides policies for managing and preserving dedicated open space areas through acquisition, preservation, and easements (Los Angeles County, 2015).

Affected Environment

The following section summarizes the results of the NES completed in August 2019 (GPA Consulting, 2019).

According to the CNDDB and USFWS searches, 100 special-status wildlife species have the

potential to be in the BSA based on recorded geographical distribution (see Appendix G). Based on literature reviews regarding habitat requirements and survey results, 19 special-status wildlife species have potential to be in the BSA, including the Monarch - California overwintering population (*Danaus plexippus* pop. 1), Cooper's hawk (*Accipiter cooperi*), sharp-shinned hawk (*Accipiter striatus*), Swainson's hawk (*Buteo swainsonii*), northern cardinal (*Cardinalis cardinalis*), Vaux's swift (*Chaetura vauxi*), northern harrier (*Circus hudsonius*), merlin (*Falco columbarius*), Oregon vesper sparrow (*Pooecetes gramineus affinis*), California gull *(Larus californicus*), pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), western mastiff bat *(Eumops perotis californicus*), silver-haired bat (*Lasionycteris noctivagans*), western red bat (*Lasiurus blossevillii*), hoary bat (*Lasiurus cinereus),* western yellow bat (*Lasiurus xanthinus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and big-free tailed bat (*Nyctinomops macrotis*).

The definition of the state listing/ranks are described below:

Fully Protected = a classification given to species to provide additional protection to animals that are rare or face possible extinction. Fully Protected Species may not be taken or possessed at any time and no licenses or permits may be issued for their take, except as necessary for scientific research.

S1 = Critically imperiled in the state because of extreme rarity or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

S2 = Imperiled in the state because of rarity because of restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from the nation or state.

S3 = Vulnerable in the state because of a restricted range, relatively few populations, recent or widespread declines, or other factors making it vulnerable to extirpation.

S4 = Uncommon but not rare; some cause for long-term concern because of declines or other factors.

Species of Special Concern (SSC) = a species, subspecies, or distinct population of animal native to California that currently satisfies one or more of the following criteria: 1) is extirpated from the state or, in the case of birds, is extirpated in its primary season or breeding role; 2) is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed; 3) is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or 4) has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

Watch List = Species that were previously designated as SSC, but no longer merit that status, or which do not yet meet SSC criteria, but for which there is a concern and a need to additional information to clarify status.

Habitat in the BSA is disturbed; however, there are mature landscaped trees adjacent to the paved areas that could support birds and bats. Wildlife species observed are those commonly found in developed areas, including black phoebe (*Sayornis nigricans*), northern mockingbird (*Mimus*

polyglottos), European starling, mourning dove (*Zenaida macroura*), and rock dove.

Invertebrates

Monarch Butterfly – California Overwintering Population

The monarch butterfly is listed as S2S3 by the CDFW. This species requires closed-cone coniferous forests and milkweed (*Asclepias* sp.) for breeding and as a food source for larvae. This species roosts in eucalyptus, Monterey pines, and Monterey cypresses in California. Diverse nectar and nearby water sources are required. The California overwintering population migrates to the coast of California and overwinters from Mendocino County in the north to Baja California in the south. This population arrives in California in September and overwinters until February. There are scattered eucalyptus trees in the BSA and water resources approximately 100 feet from the BSA which could provide suitable overwintering roosting habitat; therefore, there is potential for this species to be in the BSA.

Avian Species

Cooper's Hawk

The Cooper's hawk is listed as a Watch List species by the CDFW. This species is found in cismontane woodland, riparian forest, riparian woodland, and upper montane coniferous forest, in wooded habitats. This species nests mainly in riparian vegetation of deciduous trees, often in canyon bottoms on river floodplains, and could also nest in mature live oaks. There is suitable foraging habitat within the BSA, but there is no suitable nesting habitat; therefore, there is potential for this species to forage in the BSA, but it is not expected to nest in the BSA.

Sharp-shined Hawk

The sharp-shinned hawk is listed as a Watch List species by the CDFW. This species is an uncommon permanent resident and breeds in mid-elevation habitats. The sharp-shinned hawk nests in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats and prefers, but is not restricted to, riparian habitats. This species prefers riparian areas with north-facing slopes and nests usually within 275 feet of water. There is suitable foraging habitat within the BSA, but there is no suitable nesting habitat; therefore, there is potential for this species to forage in the BSA, but it is not expected to nest in the BSA.

Swainson's Hawk

The Swainson's hawk is listed as a State Threatened species by the CDFW. This species breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. This species requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. The current breeding range of Swainson's hawks is in the Central Valley and northeastern California from Butte Valley east to Nevada, south-central Modoc County, and eastern Lassen County. The BSA is outside of the known breeding range for this species but it is a fall migrant; therefore, there is potential for this species to forage in the BSA, but it is not expected to nest in the BSA.

Northern Cardinal

The northern cardinal is listed as a Watch List species by the CDFW. This species is found in

brushy woodlands, streamside thickets, orchards, swamps, suburban gardens, and parks. This species is a year-long resident of Los Angeles County; however, there is no confirmed evidence that this species breeds in Los Angeles County. The nests of this species may be placed in small trees, shrubs, or vines and usually concealed by tangles in foliage. The majority of the state's northern cardinals are naturalized birds from escaped or introduced stock. There is suitable foraging habitat in the BSA, but there is no suitable nesting habitat; therefore, there is potential for this species to forage in the BSA, but it is not expected to nest in the BSA.

Vaux's Swift

The Vaux's swift is listed as SSC by the CDFW. This species breeding range includes the forested coastal regions from Del Norte County to Santa Cruz County, with a small breeding population possibly also existing on the Big Sur coast of Monterey County. There are also local breeding populations in low densities through northeastern California and south in the Sierra Nevada to Tulare County. This species shows a preference for foraging over rivers and lakes and feeds low over water. This species feeds exclusively on flying insects over most terrains and habitats. For roosting, migrant Vaux's swifts require some kind of shelter. If available they could utilize hollow structures such as decayed or burned trees, chimneys, barns, outbuildings, or building shafts. The BSA is outside of the known breeding range for this species but it is a fall migrant; therefore, there is potential for this species to forage in the BSA, but it is not expected to nest in the BSA.

Northern Harrier

The northern harrier is listed as SSC by the CDFW. This species is a widespread migrant and winter visitor through California. The breeding range includes coastal areas, Central Valley, northeastern California, and Sierra Nevada region up to 3,600 feet. This species breeds and forages in a variety of open (treeless) habitats that provide adequate vegetative cover, an abundance of suitable prey, and scattered hunting, plucking, and lookout perches such as shrubs or fence posts. In California, such habitats include freshwater marshes, brackish and saltwater marshes, wet meadows, weedy borders of lakes, rivers and streams, annual and perennial grasslands (including those with vernal pools), weed fields, ungrazed or lightly grazed pastures, some croplands, sagebrush flats, and desert sinks. This species nests on the ground in shrubby vegetation, usually at marsh edges; nests are built of a large mound of sticks in wet areas. There are foraging areas in the BSA, but there is no suitable nesting habitat; therefore, there is potential for this species to forage in the BSA, but it is not expected to nest in the BSA.

Oregon Vesper Sparrow

The Oregon vesper sparrow is listed as SSC by the CDFW. This species is a winter migrant in California and breeds from central British Columbia across southern Canada to Nova Scotia and south to northern and eastern California and across the southern and central United States to Tennessee and North Carolina. This species is an obligate grassland species and feeds on invertebrates and seeds. This species winters in California in areas of open ground with little vegetation or short grass, such as fields, meadows, and road edges. There is suitable foraging habitat in the BSA, but there is no suitable nesting habitat; therefore, there is potential for this species to forage in the BSA, but it is not expected to nest in the BSA.

Merlin

The merlin is listed as a Watch List species by the CDFW. This species is a winter migrant in California and breeds in Alaska and Canada. This species frequents open habitats at low elevation near water and tree stands and favors coastlines, lakeshores, and wetlands. This species feeds primarily on small birds, small mammals, and insects. There is suitable foraging habitat in the BSA, but there is no suitable nesting habitat; therefore, there is potential for this species to forage in the BSA, but it is not expected to nest in the BSA.

California Gull

The California gull is listed as a Watch List species by the CDFW. This species is a fairly common nester at alkali and freshwater lacustrine habitats east of the Sierra Nevada and Cascades, and an abundant visitor to coastal and interior lowlands in nonbreeding season. Inland, this species frequents lacustrine, riverine, and cropland habitats, landfill dumps, and open lawns in cities. This species needs undisturbed, isolated islands for nesting. There is suitable foraging habitat in the BSA, but there is no suitable nesting habitat; therefore, there is potential for this species to forage in the BSA, but it is not expected to nest in the BSA.

Bats

Pallid Bat

The pallid bat is listed as SSC by the CDFW. This species is found year around in a variety of low-elevation habitats in most areas of California, including grasslands, shrub lands, woodlands, and forests. This species is thought to prefer open, dry habitats with rocky areas for roosting. The pallid bat day roosts in caves, crevices, mines, and hollow trees, buildings, and bridges, and night roosts in more open sites, such as porches, open buildings, and bridges. Roosts must protect bats from high temperatures, and this species will move deeper into cover if temperatures rise. The pallid bat is highly sensitive to disturbance. There are bridges, buildings, and trees in the BSA which could provide suitable roosting habitat; therefore, there is potential for this species to be in the BSA.

Townsend's Big-eared Bat

The Townsend's big-eared bat is listed as SSC by the CDFW. This species is found in a variety of habitat types, including coniferous forests, deserts, native prairies, riparian communities, agricultural areas, and coastal habitats. It is thought to be most abundant in mesic habitats. This species roosts in caves and cave-like structures, such as exposed cavity-forming rock and mines. This species will also roost in human structures such as attics and barns and has been found on occasion in bridges. Townsend's big-eared bats prefer to roost in large rooms and do not use crevices. The Townsend's big-eared bat is extremely sensitive to human disturbance and is thought to be uncommon in California. There are bridges and buildings in the BSA which could provide suitable roosting habitat; therefore, there is potential for this species to be in the BSA.

Western Mastiff Bat

The western mastiff bat is listed as SSC by the CDFW. This species is found in many open, semi-arid and arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban areas. This species roosts

in crevices on high vertical cliffs or surfaces (including buildings), trees, or tunnels. Because of their large size, they typically require a larger drop distance from roosting sites. There are bridges, buildings, and trees in the BSA which could provide suitable roosting habitat; therefore, there is potential for this species to be in the BSA.

Silver-Haired Bat

The silver-haired bat is listed as S3S4 by the CDFW. This species is found in summer in coastal and montane coniferous forests, valley foothill woodlands, pinyon-juniper woodlands, and valleys. This species roosts in hollow trees, snags, buildings, rock crevices, caves, and under bark. Females may form nursery colonies or as solitary individuals in dense foliage or hollow trees. This species is thought to need roosting sites in close proximity to water. There are buildings and trees in the BSA which could provide suitable roosting habitat. In addition, the BSA contains roosting sites near water sources. Therefore, there is potential for this species to be in the BSA.

Western Red Bat

The western red bat is listed as SSC by the CDFW. This species roosts in forests and woodlands from sea level up through mixed conifer forests. This species roosts primarily in trees, sometimes shrubs; roost sites often are in edge habitats adjacent to streams, fields, or urban areas. The western red bat forages over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. There are trees in the BSA which could provide suitable roosting habitat; therefore, there is potential for this species to be in the BSA.

Hoary Bat

The hoary bat is listed as S4 by the CDFW. This species is found in a wide variety of habitats and elevations in California. This species generally roosts in dense foliage of medium to large trees, and prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. There are trees in the BSA which could provide suitable roosting habitat; therefore, there is potential for this species to be in the BSA.

Western Yellow Bat

The western yellow bat is listed as SSC by the CDFW. This species is uncommon in California, and is found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. This species roosts in trees, particularly palms, and forages over water and among trees. There are palm trees in the BSA which could provide suitable roosting habitat; therefore, there is potential for this species to be in the BSA.

Pocketed Free-Tailed Bat

The pocketed free-tailed bat is listed as SSC by the CDFW. This species is found in pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis habitats. This species typically roosts in cavities of cliffs, high rocky outcrops, and slopes, but there is potential for this species to roost in other crevices in structures, including bridges. There are existing structures and palm trees in the BSA which could provide suitable roosting habitat; therefore, this species has potential to be in the BSA.

Big Free-Tailed Bat

The big-free tailed bat is listed as SSC by the CDFW. This species is believed to prefer rugged, rocky canyons, and typically roosts in high cliffs or rock outcrops, buildings, caves, and occasionally in holes in trees. This species has also been documented roosting in bridges. There are bridges and buildings in the BSA which could provide suitable roosting habitat; therefore, this species has potential to be in the BSA.

Environmental Consequences

Invertebrates

No Build Alternative

The No Build Alternative would not require construction or result in changes to existing conditions; therefore, there would be no impacts on invertebrate species.

Build Alternative

TEMPORARY IMPACTS

The Build Alternative could result in temporary impacts on invertebrates if they were to be in the active construction area. Construction activities, including vegetation removal, tree trimming, and excavation could result in indirect impacts on monarch butterflies in the area. Increases in dust, and/or vibration levels could result in indirect impacts on monarch butterflies roosting in eucalyptus trees within the BSA. The monarch butterfly could be indirectly impacted by temporary loss of roosting habitat resulting from vegetation removal and tree trimming activities. However, with implementation of the avoidance and minimization measures discussed below, adverse impacts on the monarch butterfly are not anticipated.

PERMANENT IMPACTS

The Build Alternative would not result in permanent impacts on invertebrates.

Avian Species

No Build Alternative

The No Build Alternative would not require construction or result in changes to existing conditions; therefore, there would be no impacts on avian species.

Build Alternative

TEMPORARY IMPACTS

The Build Alternative could result in temporary impacts on avian species if they were to be active in the construction area. Construction activities, including vegetation removal and tree trimming, excavation, grading, and paving within the BSA, could result in indirect and direct impacts on birds and raptors if these activities were to be conducted while birds are nesting within or adjacent to the affected areas. Temporary noise generating activities, such as vegetation removal and tree trimming, grading, and paving could also result in temporary indirect impacts on nesting birds and raptors if loud enough to result in disturbance. In addition, construction activities could temporarily disrupt foraging in the project area. However, with the implementation of avoidance and

minimization measures listed below, adverse impacts on nesting migratory birds are not anticipated**.**

PERMANENT IMPACTS

The Build Alternative would not result in permanent impacts on avian species.

Bats

No Build

The No Build Alternative would not require construction or result in changes to existing conditions; therefore, there would be no impacts on bat species.

Alternative 2: Build Alternative

TEMPORARY IMPACTS

The Build Alternative could result in temporary impacts on bat species if they were to be active in the construction area. Construction activities, including vegetation removal and tree trimming and removal within the BSA, could result in direct and indirect impacts on bats in the area. Increases in noise and vibration could result in indirect impacts on bats roosting in the BSA, including roost abandonment. Bats could be directly impacted if swallow nests used for roosting were to be removed during construction. However, with the implementation of avoidance and minimization measures listed below, adverse impacts on bats are not anticipated.

PERMANENT IMPACTS

The Build Alternative would not result in permanent impacts on bat species.

Avoidance, Minimization, and/or Mitigation Measures

Invertebrates

To avoid and/or minimize potential impacts on the monarch butterfly, the following measures would be implemented:

- **AVM-BIO-1**: To confirm the presence/absence of overwintering monarch butterfly, a qualified biologist would survey all suitable refuge sites (typically eucalyptus trees and food genera plants) within 48 hours of construction and within 100 feet from where tree and vegetation removal and tree trimming, or excavation would be conducted.
- **AVM-BIO-2**: If monarch butterflies are found in the BSA, measures would be implemented to avoid impacts on these species, including but not limited to, installation and maintenance of a 100-foot buffer around the roost sites. Construction activities would not be allowed within the buffer area until a qualified biologist confirms that the monarch butterflies have left the area.

To mitigate for potential impacts on monarch butterfly roosting habitat, the following measure would be implemented:

- **BIO-1**: If it is determined that the monarch roosting habitat would be impacted as a result of the project, replanting of eucalyptus, or native trees approved by the Landscape Architect such as Fremont cottonwood (*Populus fremontii*) or western sycamore (*Platanus racemosa*), also utilized by the monarch butterfly, would be required.

Avian Species

To avoid and/or minimize potential impacts on birds and raptors, the following measures would be implemented:

- **AVM-BIO-3**: The project area would be demarcated with visible fencing in order to ensure the construction activities remain within the BSA.
- **AVM-BIO-4**: Construction in areas with trees, vegetation, and structures that may provide nesting habitat for birds and raptors would be reduced to the maximum extent feasible.
- **AVM-BIO-5**: Trimming and removal of vegetation and trees would be minimized and performed outside of the typical nesting season (February 1 to September 1), to the extent feasible.
- **AVM-BIO-6**: In the event that trimming, or removal of vegetation and trees must be conducted during the nesting season, nesting bird surveys would be completed within 500 feet of the construction area by a qualified biologist no more than 48 hours prior to trimming or clearing activities to determine if nesting birds are within the affected vegetation. Nesting bird surveys would be repeated if trimming or removal activities are suspended for five days or more.
- **AVM-BIO-7**: If nesting birds are found in the construction zone, measures to ensure that the birds and/or their nests are not harmed would be implemented, including but not limited to, installation and maintenance of appropriate buffers (typically 150 feet for song birds and 500 feet for raptors) until nesting activity has ended.
- **AVM-BIO-8**: In the event that any bird species is observed foraging within the construction site, it would be allowed to move away from the site prior to initiating any construction activities that could result in direct injury or disturbance of the individual.

With the implementation of avoidance and minimization measures, adverse impacts on bird species are not anticipated; therefore, no mitigation is required.

Bats

To avoid and minimize impacts on bats, the following avoidance and minimization measures would be implemented:

- **AVM-BIO-9**: Where feasible, tree removal (if any) would be conducted in October, which is outside of the maternal and non-active seasons for bats.
- **AVM-BIO-10**: During the summer months (June to August) prior to construction, a thorough bat roosting habitat assessment would be conducted of all trees, swallow nests, and structures within 100 feet of the construction area. Visual and acoustic surveys would be conducted for at least two nights during appropriate weather conditions to assess the presence of roosting bats. If presence is detected, a count and species analysis would be completed to help assess the type of colony and usage.
- **AVM-BIO-11**: No fewer than 30 days prior to construction, and during the non-breeding and active season (typically October), bats would be safely evicted from any roosts to be impacted by the project under the direction of a qualified biologist. Once bats have been safely evicted,

exclusionary devices would be installed to prevent bats from returning and roosting in these areas prior to removal. Roosts that would not be impacted by the project would be left undisturbed.

- **AVM-BIO-12**: No fewer than two weeks prior to construction, all excluded areas would be surveyed to determine whether exclusion measures were successful and to identify any outstanding concerns. Exclusionary measures would be monitored throughout construction to ensure they are functioning correctly and would be removed following construction.
- **AVM-BIO-13**: If the presence or absence of bats cannot be confirmed in potential roosting habitat, a qualified biologist would be onsite during removal or disturbance of this area. If the biologist determines that bats are being disturbed during this work, work would be suspended until bats have left the vicinity on their own or can be safely excluded under direction of the biologist. Work would resume only once all bats have left the site and/or approval to resume work is given by a qualified biologist.
- **AVM-BIO-14**: In the event that a maternal colony of bats is found, no work would be conducted within 100 feet of the maternal roosting site until the maternal season is finished or the bats have left the site, or as otherwise directed by a qualified biologist. The site would be designated as a sensitive area and protected as such until the bats have left the site. No activities would be authorized adjacent to the roosting site. Combustion equipment, such as generators, pumps, and vehicles, would not to be parked nor operated under or adjacent to the roosting site. Construction personnel would not be authorized to enter areas beneath the colony, especially during the evening exodus (typically between 15 minutes prior to sunset and one hour following sunset).

With the implementation of avoidance and minimization measures, adverse impacts on bats are not anticipated; therefore, no compensatory mitigation is required.

2.4.5 Threatened or Endangered Species

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."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2080 of the California Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFW. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the California Fish and Game Code.

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.

Affected Environment

The following section summarizes results of the NES completed in August 2019 (GPA Consulting, 2019).

According to the CNDDB and USFWS searches, 100 special-status wildlife species have the potential to be in the BSA based on recorded geographical distribution (see Appendix G). Based on literature reviews regarding habitat requirements and survey results, there is one state threatened species with potential to be in the BSA, the Swainson's hawk. In addition, there are no designated critical habitats in the BSA.

Swainson's Hawk

The Swainson's hawk is listed as a State Threatened species by the CDFW. This species breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. This species requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. The current breeding range of Swainson's hawks is in the Central Valley and northeastern California from Butte Valley east to Nevada, south-central Modoc County, and eastern Lassen County. The BSA is outside of the known breeding range for this species but it is a fall migrant; therefore, there is potential for this species to forage in the BSA, but it is not expected to nest in the BSA.

Environmental Consequences

Federal Endangered Species Act Consultation

Based on literature reviews regarding habitat requirements and survey results, there is no potential for federally threatened or endangered species to be in the BSA. Therefore, there will be no impacts on federally threatened or endangered species and FESA consultation is not required.

California Endangered Species Act Consultation

There is potential for the state threatened Swainson's hawk to be in the BSA; however, with implementation of avoidance and minimization measures, the project would not result in adverse impacts on this species, including take. Therefore, an Incidental Take Permit and consultation under CESA is not required for this project.

No Build Alternative

The No Build Alternative would not require construction or result in changes to existing conditions; therefore, there would be no impacts on threatened or endangered species.

Build Alternative

Temporary Impacts

The Build Alternative could result in temporary impacts on threatened or endangered species if they were to be in the active construction area. Construction activities, including vegetation removal and tree trimming could result in direct impacts on avian species if they were nesting in the trees or vegetation to be removed. Temporary noise generating activities, such as vegetation removal and tree trimming, grading, and paving could also result in temporary indirect impacts on nesting birds if loud enough to result in disturbance. In addition, construction activities could temporarily disrupt foraging in the project area. However, with the implementation of avoidance and minimization measures **AVM-BIO-1** to **AVM-BIO-14**, adverse impacts on nesting migratory birds, including take, are not anticipated**.**

Permanent Impacts

The Build Alternative would not be expected to result in permanent impacts on avian species. In addition, the project would not result in take, including hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill of state listed species including Swainson's hawk.

Avoidance, Minimization, and/or Mitigation Measures

To avoid/and or minimize potential impacts on threatened or endangered species, measures **AVM-BIO-1** to **AVM-BIO-14**, listed above in **Section 2.4.4**, would be implemented.

With the implementation of avoidance and minimization measures, adverse impacts on threatened or endangered birds are not anticipated; therefore, no compensatory mitigation is required.

2.4.6 Invasive Species

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.

Affected Environment

The following section summarizes results of the NES completed in August 2019 (GPA Consulting, 2019).

Eight invasive species were observed during the survey including, Peruvian pepper tree (*Schinus molle*), Russian thistle (*Salsola tragus*), castor bean (*Ricinus communis*), red stemmed filaree (*Erodium cicutarium*), tree tobacco (*Nicotiana glauca*), Mexican fan palm (*Washingtonia robusta*), foxtail barley (*Horedum murinum*), and fountain grass (*Pennisetum setaceum*).

Environmental Consequences

No Build Alternative

No Build Alternative would not require construction or result in changes to existing conditions; therefore, there would be no impacts on invasive species.

Build Alternative

There are several species growing in the BSA that are listed by the Invasive Species Council of California as invasive to California. A complete list of native, non-native, and invasive plant species observed in the BSA is included in Appendix G. Invasive species are often found in disturbed areas, and project activities would have the potential to spread invasive species through further disturbance of the BSA. These species could also be spread through the improper disposal of the graded and excavated soils on site or off site, or through landscaping with invasive species. Existing vegetation would be preserved to the extent feasible, and BMPs, such as identification of existing invasive species, avoidance of invasive species in erosion control, staff training, equipment cleaning, and monitoring, would be implemented in accordance with EO 13112. Therefore, the introduction or spread of invasive species is not anticipated.

Avoidance, Minimization, and/or Mitigation Measures

To avoid and/or minimize the potential spread of invasive species and to comply with EO 13112, the following measures would be implemented:

- **AVM-BIO-15**: The project area would be demarcated with visible fencing in order to ensure the construction activities remain within the BSA.

- **AVM-BIO-16**: Invasive vegetation removed from the BSA would be treated and disposed of in a manner following the recommendations of the California Invasive Plant Council to prevent the spread of invasive species on site or off site. Best management practices may include, but are not limited to, identification of existing invasive species, avoidance of invasive species in erosion control, staff training, equipment cleaning when entering and exiting the project area, and monitoring.
- **AVM-BIO-17**: New landscaping materials, including erosion control seed mixes and other plantings, would be composed of non-invasive species and would be clear of weeds, and all erosion control and landscape planting would be conducted in a manner that would not result in the spread of invasive species.
- **AVM-BIO-18**: Plants listed in the Pest Ratings of Noxious Weed Species and Noxious Weed Seed (United States Department of Agriculture, 2003) would not be used as part of the project.

With implementation of these measures, the project would be in compliance with the EO 13112.

2.5 Cumulative Impacts

2.5.1 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.

The California Environmental Quality Act (CEQA) Guidelines Section 15130 describes when a cumulative impact analysis is necessary and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts under CEQA can be found in Section 15355 of the CEQA Guidelines. 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.

2.5.2 Resources Excluded from Cumulative Impacts Analysis

As proposed in the Caltrans guidance, if the project would not result in direct or indirect impacts to a resource, it would not contribute to a cumulative impact on that resource and would not need to be evaluated with respect to potential cumulative impacts.

The following resources have been excluded from the cumulative impact analysis because

cumulative impacts are not anticipated.

Coastal Zone: The project is not located within the coastal zone; therefore, the project would not contribute to cumulative adverse impacts to coastal resources.

Wild and Scenic Rivers: There are no wild and scenic rivers within the project study area; therefore, the project would not contribute to cumulative adverse impacts to wild and scenic rivers.

Land Use: The improvements associated with the Build Alternative are consistent with local and regional goals to improve traffic operations and to reduce congestion in the area. The Build Alternative would improve areas that are currently designated or used for transportation. Land use compatibility conflicts are not expected where existing land uses would be converted for transportation use. Therefore, adverse cumulative impacts related to land use are not anticipated.

Parks and Recreation: Construction activities would temporarily impact parks and recreation facilities within the project area; however, impacts would be short term and there would be no permanent impacts to parks and recreation facilities. Therefore, the project would not contribute to cumulative adverse impacts to parks and recreation facilities.

Farmland/Timberlands: There are no farmlands or timberlands within or adjacent to the project study area; therefore, the project would not contribute to cumulative adverse impacts to farmland and timberland resources.

Growth: The Build Alternative would improve existing and future traffic operations, including reducing congestion and queuing. In addition, the project would accommodate existing and future planned growth that is projected, with or without the project. The Build Alternative does not induce growth or remove obstacles to growth in the project area. Therefore, the project would not contribute to cumulative adverse impacts related to growth.

Community Character and Cohesion: Although the Build Alternative would require partial right of way acquisitions and permanent easements, the project would not result in separation of residential areas and community facilities through changes in land use or result in residential displacements within the project area. The project is anticipated to improve community character and cohesion within the project area as a result of enhanced traffic circulation and access. Therefore, the project would not contribute to cumulative adverse impacts to community character and cohesion.

Relocations and Real Property Acquisition: The Build Alternative would result in partial right of way acquisition, Caltrans highway easement, maintenance easements, and two permanent easements to accommodate project improvements. However, the identified right of way acquisitions and easements would not displace businesses or residents. Therefore, the project would not contribute to cumulative adverse impacts related to relocation and real property acquisitions.

Environmental Justice: The Build Alternative would benefit nearby communities and commuters, including minority and low-income populations by easing congestion, improving freeway operations (mainline and ramps), improving mobility and travel times, improving and enhancing safety, and improving local and system interchange operations and connectivity. As such, the project could ultimately improve access to jobs and community services. These benefits

would be shared by all communities within the project area. Therefore, the project would not contribute to cumulative adverse impacts related to environmental justice.

Utilities and Emergency Services: Although the Build Alternative would require detour routes, relocation of one SoCal Gas line, and road and on-/off-ramp closures implementation of **AVM-UT-1** through **AVM-UT-3** and **AVM-ES-1** would minimize disruptions in utility service and delays in emergency response time. Any disruptions or delays would be short term and the Build Alternative would not permanently adversely affect utilities or emergency services. Therefore, the project would not contribute to cumulative adverse effects to utilities and emergency services.

Traffic and Transportation: The analysis of traffic conditions included in **Section 2.2.9** for 2024 (Opening Year) and 2044 (Design Year) is a cumulative analysis that considers traffic generated by existing and future planned improvements. The Build Alternative would result in improved traffic operations and reduce congestion within the project area. Therefore, the project would not contribute to cumulative adverse effects to traffic and transportation.

Visual/Aesthetics: Construction of the Build Alternative would not substantially alter the existing views of and from the I-605/Valley Boulevard interchange. The proposed ramp realignments, additional travel lanes, noise barriers, and new signage would be consistent with the existing roadway features. Therefore, the project would not contribute to cumulative adverse effects to visual/aesthetics.

Cultural Resources: The UPRR is being assumed eligible for this project. The Build Alternative would include portions of the at-grade crossing to be reconstructed; therefore, the resource would be impacted. However, with the implementation of standard conditions the impacts to this resource would not be adverse. Therefore, the project would not contribute to cumulative adverse effects to cultural resources.

Hydrology and Floodplain: According to Federal Emergency Management Agency, the project is located in an area of minimal flood hazard (Zone X). Additionally, there are no proposed changes to hydrology within the project area. Therefore, the project would not contribute to cumulative adverse impacts to hydrology and floodplain.

Water Quality and Storm Water Runoff: During construction, there is potential for construction-related pollutants to spill or to leak and be transported via storm runoff into drainages adjacent to the project area and into downstream receiving waters. However, implementation of **AVM-WQ-1** through **AVM-WQ-2** would reduce temporary impacts from construction. The Build Alternative would include BMPs to target pollutants of concern in storm water runoff during construction and operation of the project. During operation, oil, grease, and chemical pollutants could be discharged into the storm drain system in the project area from incidental drippings from vehicles and accidental spills during maintenance activities. However, adherence to operation maintenance protocols, treatment BMPs, and Design Pollution Prevention BMPs would be implemented to address these potential impacts. The resource study area for the project is urbanized and there are limited impacts associated with the Build Alternative; therefore, the project would not contribute to cumulative adverse impact to water quality.

Geology/Soils/Seismic/Topography: The project area is within a seismically active region and a liquefaction zone. However, the project would be designed and constructed to current standards

and would not increase exposure to existing hazards. Additionally, any geologic impacts would be localized and would not impact regional geology. Therefore, the project would not contribute to cumulative adverse impacts related to geological and seismic hazards.

Paleontology: During construction of the Build Alternative paleontological resources are not anticipated to be encountered; however, if they are encountered **PAL-1** through **PAL-7** would minimize potential adverse effect to these resources. Therefore, the project would not contribute to cumulative adverse effects to paleontological resources.

Hazardous Waste/Materials: Hazardous waste and materials may be encountered during construction of the Build Alternative, including excavation activities. In addition, hazardous materials anticipated to be used during construction may be transported through the adjacent communities. However, handling, use, storage, disposal, and transport of hazardous waste and materials would adhere to all regulatory requirements and **AVM-HW-1** through **AVM-HW-4** would be implemented to minimize any construction related impacts from hazardous waste. Therefore, the project would not contribute to cumulative adverse effects related to hazardous waste and materials.

Air Quality: The project is not anticipated to have adverse impacts related to air quality. In addition, the implementation of **AVM-AQ-1** through **AVM-AQ-4** construction related impacts would not be substantial and are not likely to contribute to cumulated air quality impacts. Also, the project was determined to not be a project of air quality concern. Therefore, the project would not contribute to cumulative adverse impacts related to air quality.

Noise: During construction of the project, noise from construction activities may intermittently dominate the noise environment in the immediate area. However, construction would be completed in accordance with Caltrans Standard Specification **AVM-N-1**, **AVM-N-2**, and **N-1** would be implemented to minimize construction related noise impacts. In addition, after implementation of noise abatement, increases in predicted traffic noise levels would decrease. Therefore, the project would not contribute to cumulative adverse effects related to noise.

Energy: The project would not result in wasteful, inefficient, or unnecessary consumption of energy resources and would not conflict with a renewable energy plan or energy efficiency. Therefore, the project would not contribute to cumulative adverse impacts to energy resources.

Natural Communities: There are no natural communities in the project area; therefore, the project would not contribute to cumulative adverse effects to natural communities.

Wetlands and Other Waters: There are no wetlands or other waters in the project area; therefore, the project would not contribute to cumulative adverse effects to wetlands or other waters.

Plant Species: There are no special-status plant species in the project area; therefore, the project would not contribute to cumulative adverse effects to special-status plant species.

Animal Species: The Build Alternative could temporarily impact special-status animal species if they were to be within the project area; however, **AVM-BIO-1** through **AVM-BIO-14** would be implemented to minimize potential impacts. Therefore, the project would not contribute to cumulative adverse impacts to special-status animal species.

Threatened or Endangered Species: There is no potential for federally listed species to be in the project area. The state listed Swainson's hawk is not expected to be in the BSA; however, with implementation of **AVM-BIO-1** through **AVM-BIO-14**, adverse impacts on this species are not anticipated. Therefore, the project would not contribute to cumulative adverse effects to threatened or endangered species.

Invasive Species: With the implementation of **AVM-BIO-15** through **AVM-BIO-18**, construction of the Build Alternative would not substantially increase the potential for spread of invasive species. Therefore, the project would not contribute to cumulative adverse effects related to invasive species.

3.0 California Environmental Quality Act (CEQA) Evaluation

3.1 Determining Significance Under CEQA

The proposed project is a joint project by the California Department of Transportation (Department) and the Federal Highway Administration (FHWA) and is subject to state and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (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. The Department is the lead agency under CEQA and NEPA.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or a lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated, and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require the Department to identify each "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of "mandatory findings of significance," which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

3.2 CEQA Environmental Checklist

This checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects will indicate that there are no impacts to a particular resource. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts. The questions in this form are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, and standardized measures that are applied to all or most Caltrans projects such as Best Management Practices (BMPs) and measures included in the Standard Plans and Specifications or as Standard Special

Provisions, are considered to be an integral part of the project and have been considered prior to any significance determinations documented below; see Chapters 1 and 2 for a detailed discussion of these features. The annotations to this checklist are summaries of information contained in Chapter 2 in order to provide the reader with the rationale for significance determinations; for a more detailed discussion of the nature and extent of impacts, please see Chapter 2. This checklist incorporates by reference the information contained in Chapters 1 and 2.

3.2.1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

a. The project is not located near or within a scenic vista (or vista point). The project is adjacent to an existing freeway corridor, located within land use areas designated as employment, institutional, single-family residential, and recreation/open. Therefore, there would be no impact to scenic vistas as a result of the project.

b. The project is not located near or within an officially designated scenic highway (California Department of Transportation, 2008). Therefore, there would be no impact to a state scenic highway as a result of the project.

c. The project is located within an urbanized area within the City of Industry and unincorporated Los Angeles County. The project would not introduce new vertical elements that would degrade the aesthetic quality of the area. Therefore, the project would

not conflict with applicable zoning and other regulations governing scenic quality.

d. The existing sources of lighting in the project area are primarily associated with roadway vehicles, streetlamps, and adjacent industrial and commercial businesses. Project improvements would not include the addition of new lighting to the project area and would not create new sources of light or glare. Therefore, there would be no impact on day or nighttime views in the area as a result of the project.

3.2.2 Agriculture and Forest Resources

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

a. According to the California Department of Conservation's (CDOC) Farmland Mapping and Monitoring Program (FMMP), there are no lands near or within the project area that are designated as Prime Farmland, Unique Farmland, or Farmland or Statewide Importance. The nearest designated farmland is approximately 16 miles east of the project area in San Bernardino County. Therefore, there would be no impact.

b. The project is located in an urban area within the City of Industry and unincorporated Los Angeles County, surrounded by land uses designated as residential, employment, institutional, and recreation/open space. The project would not conflict with existing zoning for agricultural use, or a Williamson Act contract. Therefore, there would be no impact.

c. The project is located within an urbanized area within the City of Industry and unincorporated Los Angeles County, and is not located within or near areas designated as forest land or timberland. The project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. Therefore, there would be no impact.

d. The project area is not located near or within areas designated as forest land, thus, would not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, there would be no impact.

e. The project area is not located near or within areas designated as Farmland or forest land, thus, the project would not involve changes to existing land that could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. Therefore, there would be no impact.

3.2.3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

CEQA Significance Determinations

No Impact

a. As discussed in **Section 2.3.5**, Air Quality, the project is listed in the *2020-2045 RTP/SCS* under RTP ID 1163S009. The project is also listed in the *2019 FTIP* under Project ID No. LA0G1457. The project's design, concept, and scope have not changed significantly from what was analyzed in the regional emission analysis prepared for the federally approved *2020-2045 RTP/SCS* and the *2019 FTIP*. The air quality conformity analysis prepared for these plans found that the plans, which account for regionally significant projects and financial constraints, would conform to the SIPs for attaining and maintaining the NAAQS as provided in Section 176(c) of the FCAA. FHWA determined that the *2020-2045 RTP/SCS* and the *2019 FTIP* conform to the SIP on June 5, 2020.

The 2016 AQMP was adopted by the SCAQMD Governing Board on March 3, 2017. It incorporates the latest scientific and technological information and planning assumptions, including the *2016-2040 RTP/SCS* and updated emission inventory methodologies for various source categories. Because the RTP was adopted, the project is consistent with the SCAQMD AQMP. Therefore, the project would not conflict with or obstruct implementation of the applicable air quality plan. Therefore, there would be no impact.

Less Than Significant Impact

b.,c. As discussed in **Section 2.3.5**, Air Quality, the project is within a state nonattainment area for $PM_{2.5}$ and PM_{10} standards; however, the project was determined to not be a POAQC for PM_{10} or $PM_{2.5}$ by SCAG's TCWG on October 22, 2019. This determination was made because the project would not significantly increase traffic volumes along area roadways or the number of diesel vehicles within the project area. In addition, the No Build and Build Alternative's emissions would be lower than the existing baseline levels of emissions. The determination is included in Appendix B of the Air Quality Report.

The MSAT analysis provided in **Section 2.3.5** shows that the project would have a low potential for MSAT effects. In addition, emissions would likely be lower in the design year than present levels as a result of U.S. EPA's national control programs. Therefore, MSAT emissions in the study area are likely to be lower in the future due to U.S. EPA-projected reductions and the project would not result in impacts related to MSAT emissions.

The project is within an attainment area for the state CO standard and an attainment/maintenance area for the federal CO standard. Based on the screening criteria discussed in **Section 2.3.5**, the project area intersection would not be suspected of resulting in higher CO concentrations than those existing within the region at the time of attainment demonstration.

In comparison to existing conditions, the Build Alternative would maintain or improve level of service and reduce vehicle delay at most of the affected intersections (see Section 2.2.9

for additional information). In comparison to existing conditions, the proposed Build Alternative Year 2024 conditions would result in a decrease in emissions of approximately 32 percent for ROG, 34 percent for CO, 42 percent for NO_X, 2 percent for PM_{10}, and 7 percent for $PM_{2.5}$. In comparison to existing conditions, the proposed Build Alternative Year 2044 conditions would result in decreased emissions of approximately 60 percent for ROG, 54 percent for CO, and 49 percent for NO_X, and increased emissions of approximately 8 percent for PM_{10}, and 3 percent for $PM_{2.5}$ (see Section 2.3.5 for additional information). Although increases in PM_{10} and $PM_{2.5}$ emissions would increase under Build Alternative Year 2044 compared to existing conditions, increases in PM_{10} and $PM_{2.5}$ emissions would be even greater under No Build Alternative Year 2044 conditions (15% and 5%, respectively). Thus, any increases in PM_{10} and $PM_{2.5}$ would not be attributable to the Build Alternative. Therefore, project operation would not increase criteria pollutants or expose sensitive receptors to substantial pollutant concentrations.

During construction, short-term degradation of air quality is expected from the release of particulate matter (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include CO, NO_X, volatile organic compounds, directly emitted PM_{10} and $PM_{2.5}$, and toxic air contaminants such as diesel particulate matter. Construction activities are expected to temporarily increase traffic congestion in the area, resulting in increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area surrounding the construction site. Compliance with SCAQMD rules and regulations during construction would reduce construction-related air quality impacts from fugitive dust emissions, construction equipment emissions, asbestos, and lead to less-than-significant levels through implementation of measures **AVM-AQ-1** through **AVM-AQ-4** (see **Section 2.3.5**).Therefore, the project's impact on regional air quality emissions would be less than significant. In addition, with implementation of these measures, the project would not expose sensitive receptors to substantial pollutant concentrations.

d. Project operation would not introduce new sources of emissions, when compared to existing conditions. Some phases of construction, particularly asphalt paving, would result in short-term odors in the immediate area of each paving site. Such odors would be quickly dispersed as distance from the site increases. Compliance with SCAQMD rules and Caltrans standard measures, in addition to measures **AVM-AQ-1** through **AVM-AQ-4** would reduce any short-term project air quality impacts, including objectionable odors. Therefore, impacts would be less than significant.

3.2.4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?	☐	☐	☒	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

b. Based on survey results, there is no riparian habitat or special-status natural communities in the BSA. The project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS. Therefore, there would be no impact.

c. There are no wetlands or waters of the U.S. or state in the BSA. The project would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Therefore, there would be no impact.

d. The project is not located within an essential wildlife connectivity areas or natural landscape blocks and the BSA is not likely to be used as a migration or travel corridor. The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites. Therefore, there would be no impact.

e. The County of Los Angeles has a General Plan that includes policies to protect, conserve, and preserve the natural resources and open spaces in Los Angeles, however the project would not have a significant impact on biological resources. Additionally, the BSA mostly consists of developed, ruderal, and ornamental landscaping. The project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Therefore, there would be no impact.

f. The project area is not within any applicable habitat conservation plan or natural community conservation plan areas. The project would not conflict with any adopted Habitat Conservation Plans, Natural Community Plans, or other approved local, regional, or state habitat conservation plans. Therefore, there would be no impact.

Less Than Significant Impact

a. One hundred special-status wildlife species have the potential to be in the BSA based on recorded geographical distribution. Based on literature reviews regarding habitat requirements and survey results, 19 special-status wildlife species have potential to be in the BSA. Construction activities, including vegetation removal, tree trimming, and excavation could result in indirect impacts on special-status wildlife in the area. Increases in dust, and/or vibration levels could result in indirect impacts on monarch butterflies roosting in eucalyptus trees within the BSA. The monarch butterfly could be indirectly impacted by temporary loss of roosting habitat resulting from vegetation removal and tree trimming activities. Temporary noise generating activities, such as vegetation removal and tree trimming, grading, and paving could result in temporary indirect impacts on nesting birds if loud enough to result in disturbance. In addition, construction activities could temporarily disrupt foraging in the project area. Increases in noise and vibration could result in indirect impacts on bats roosting in the BSA, including roost abandonment. Bats could be directly impacted if swallow nests used for roosting were to be removed during construction. However, with implementation of avoidance and minimization measures **AVM-BIO-1** to **AVM-BIO-14** and mitigation measure **BIO-1**, impacts on special-status wildlife species are anticipated to be less than significant.

The state threatened Swainson's hawk has the potential to be in the BSA. Construction activities, including vegetation removal and tree trimming could result in direct impacts on threatened or endangered species if they were nesting in the trees or vegetation to be removed. Temporary noise generating activities, such as vegetation removal and tree

trimming, grading, and paving could also result in temporary indirect impacts on nesting birds and raptors if loud enough to result in disturbance. In addition, construction activities could temporarily disrupt foraging in the project area. With implementation of avoidance and minimization measures **AVM-BIO-1** to **AVM-BIO-14**, impacts on threatened or endangered species are anticipated to be less than significant.

3.2.5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	☒
c. Disturb any human remains, including, those interred outside of dedicated cemeteries?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

b. Construction activities will be completed within an urban environment along existing infrastructure; therefore, there is a low potential for encountering intact archaeological resources.

c. Construction activities will be completed within an urban environment along existing infrastructure; therefore, there is a low potential for disturbing human remains, including those interred outside of dedicated cemeteries. .

Less Than Significant Impact

a. The UPRR is being assumed eligible for the proposed undertaking; however, the Secretary of Interior Standards (SOIS) Action Plan has been developed and will be followed. Therefore, it is anticipated that the project will have less than significant impact to this resource.

3.2.6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☒
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

a. The project would not result in potentially significant environmental impact due to wasteful inefficient or unnecessary consumption of energy resources during project construction or operation.

b. The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

3.2.7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☐	☒

b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

CEQA Significance Determinations

No Impact

a-i. The project is not located within the boundaries of an Alquist-Priolo Earthquake Fault Zone (California Geological Survey, 2017). In addition, there are no known faults within the project area. Therefore, no impacts would result.

a-iv. The topography of the project area is predominantly flat. There are embankments associated with the existing interchange; however, they are engineered and do not present a landslide hazard. In addition, the project area is not within a state designated landslide zone. Therefore, no impacts from landslides would result.

d. Expansive soils are characterized by their ability to undergo significant volume changes (shrink or swell) due to variations in moisture content. Changes in soil moisture content can result from precipitation, landscape irrigation, utility leakage, or perched groundwater and may result in unacceptable settlement or displacement of structures. The project area primarily consists of sandy soils which are not expansive soils. Therefore, no impacts would result because of expansive soils.

e. The proposed project would not require the use of septic tanks or alternative wastewater disposal systems. Therefore, no impacts would result.

Less Than Significant Impact

a-ii. The project area is in the seismically active southern California region and could be subject to strong seismic ground shaking. The proposed project includes roadway widening and freeway ramp improvements that could be impacted by strong seismic ground shaking from nearby active and potentially active faults. However, the project would be designed and constructed to current seismic standards and would not increase exposure to existing

seismic hazards. Therefore, impacts from strong seismic ground shaking would be less than significant.

a-iii. The project area is within a liquefaction zone, as delineated by the California Geological Survey (2017). However, the proposed project would replace existing infrastructure and would not alter land use in the study area. The project would be designed and constructed to current standards. Therefore, impacts from seismic-related ground failure, including liquefaction would be less than significant.

b. Construction of the proposed project could temporarily disturb soils within the project area. Construction activities such as grading, compacting, and excavating could expose subsurface soils increasing the possibility of soil erosion. During project construction, the contractor would be required to adhere to the requirements of all permits and implement erosion and sediment control BMPs; specifically, those identified in the SWPPP. Therefore, soil erosion impacts would be less than significant.

c. As previously discussed, (see response **a-ii** and **a-iii**), the project area is subject to strong seismic ground shaking and is within an area susceptible to liquefaction. However, design and construction of the project would be consistent with required standards. In addition, the proposed project would modify an existing facility. Therefore, impacts on soil stability would be less than significant.

f. Construction of the proposed project would involve earth moving activities such as grading and excavating within the project area which might directly affect paleontological resources within the project area. However, the majority of the project area is underlain with young channel deposits which have a low potential for sensitivity. The eastern portion of the project area is underlain with young alluvium which has a low importance for depths above six feet and high importance for depths at or below six feet. Therefore, impacts on paleontological resources would be less than significant.

3.2.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

CEQA Significance Determinations

Less than Significant Impacts

a. Construction of the project would occur over an approximate 12-month period and would

generate a total of approximately 468 $MTCO_2e$ (see Section 3.3 for additional information). However, these impacts would be short-term in duration. Construction-generated GHGs and related impacts to climate change would be reduced with implementation of **AVM-GHG-1** through **AVM-GHG-18** (see **Section 3.3.5**); **AVM-AQ-4** (see **Section 2.3.5**); compliance with Caltrans' Standard Specifications, Section 14-9, SCAQMD Rules and Regulations (**AVM-AQ-3**); and compliance with ARB's *In-Use Off-Road Diesel-Fueled Fleets Regulation*. Specifically, compliance with Caltrans' Standard Specifications, Section 14-9, would require compliance with air-pollution-control rules, regulations, ordinances, and statutes, including ARB's emission-reduction requirements and idling limitations for construction equipment and vehicles. These measures would result in reductions in construction-generated GHG emissions. In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be further mitigated, to some degree, by longer intervals between maintenance and rehabilitation events. Therefore, project construction would not generate GHG emissions that may have a significant impact on the environment and impacts would be less than significant.

Operation of the No Build and Build Alternatives would result in lower GHG emissions than the existing baseline. When compared to the No Build conditions, operation of the Build Alternative would result in decreased mobile-source GHG emissions of approximately 4 percent under Year 2024 conditions and 6 percent under Year 2044 conditions (see **Section 3.3** for additional information). Therefore, project operation would not generate GHG emissions that may have a significant impact on the environment.

b. Applicable plans, policies, and regulations adopted for the purpose of reducing GHG emissions are described in **Section 3.3**. As discussed under Response (a) above, the project would be consistent with rules and regulations for reducing construction generated GHGs. Once operational, the project would result in decreased mobile-source GHG emissions compared to the existing baseline and No Build conditions. Therefore, the project would not conflict with any plan, policy, or regulation for the purpose of reducing GHG emissions. Accordingly, impacts would be less than significant.

3.2.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☒	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

e. The project is not located within an airport land use plan area or within two miles of a public airport or public use airport. Therefore, the project would not result in a safety hazard or excessive noise for people residing or working in the project area and there would be no impact.

g. The project is located in a developed urban area. The project area and the surrounding areas do not include brush and grass typically found in wildland fire areas. Therefore, the project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires and there would be no impact.

Less Than Significant Impact

a. During construction, there is a potential to encounter hazardous materials in soils and existing road and structures materials such as aerially deposited lead (ADL) and structural materials (lead chromate and treated wood waste). Additionally, two parcels that are within

the project area of the Build Alternative may have contributed to soil and/or groundwater impacts as a result of past railroad activities.

Hazardous materials (e.g. solvents, paints, fuels) anticipated to be used during construction and any hazardous waste generated would be handled in accordance with all applicable federal, state, and local regulations. In addition, Caltrans policies regarding the use, storage, handling, disposal, and transport of hazardous waste/materials would be adhered to. With implementation of **AVM-HW-1** through **AVM-HW-4**, potential impacts related to hazardous materials would be less than significant.

Routine maintenance activities during operation would be required to follow applicable regulations and requirements with respect to handling and disposing of potentially hazardous materials. Therefore, the operation of the Build Alternative would not result in adverse effects related to hazardous wastes and materials.

b. The project would not create a substantial hazard to the public or the environment through any reasonably foreseeable upset or accident conditions involving the release of hazardous materials. As discussed above in response (**a**) routine hazardous materials would be handled in accordance with all applicable federal, state, and local regulations. Therefore, potential impacts related to hazardous materials would be less than significant.

Routine maintenance activities during operation would be required to follow applicable regulations and requirements with respect to storage, handling, transport, and disposing of potentially hazardous materials. Therefore, the operation of the Build Alternative would not result in adverse effects related to hazardous wastes and materials.

c. Mountain View High School is within 0.25 mi of the project limits. No schools are known to be planned within 0.25 mi of the project limits. As discussed in Responses (**a**) and (**b**) above, routine hazardous materials (e.g. paint, solvents, and fuel) would be used, handled, stored, disposed of, and transported during construction of the proposed project in accordance with applicable local, state, and federal regulations. Also, operation of the proposed project does not involve the reasonably foreseeable potential for release of hazardous emissions or handling of acutely hazardous materials, as the transport of hazardous materials is subject to strict regulation.

Routine maintenance activities during operation of the proposed project would comply with applicable regulations with respect to the use, storage, handling, transport, and disposing of potentially hazardous materials. Therefore, operation of the Build Alternative would result in less than significant impacts related to the emissions or handling of hazardous waste or materials near existing or proposed schools.

d. The project is located within the southern portion of the BPOU of the San Gabriel Valley Area 2 Superfund Site. The BPOU is an eight square mile area of groundwater contamination. Based on depth to groundwater within the project and the deepest anticipated excavation depths for the project, the groundwater table is not expected to be encountered during construction activities, and dewatering is not anticipated. Therefore, contaminated groundwater originating from the BPOU is not considered an environmental concern and is not anticipated to impact the project.

Additionally, a portion of a parcel included on the Cortese List pursuant to Government Code 65962.5 has been identified for acquisition for widening of Temple Avenue. However, based on depth to groundwater relative to expected depth of excavation during construction activities, encountering impacted groundwater is not anticipated. Also, the portion identified for acquisition was formerly used as a parking lot fronting Temple Avenue and was over 100 feet away from any facility operations. Therefore, a limited shallow site investigation is recommended for this property to evaluate the presence of potential contaminants from historic aerospace manufacturing activities. With the implementation of a limited shallow site investigation, impacts related to listed hazardous materials sites would be less than significant and would not create a significant hazard to the public or the environment.

f. During construction, the project could include short-term closures of ramps and modifications to existing facilities. The temporary closures and detours could have short-term impacts on emergency response and evacuation within the project area. However, a Transportation Management Plan would be implemented during construction, and coordination with emergency services would be required. Therefore, potential impacts related to emergency response plans would be less than significant.

3.2.10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒

	iii. create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
	iv. impede or redirect flood flows?	☐	☐	☐	☒
d.	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e.	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

b. Groundwater in the project area is anticipated to be encountered at 50 feet below ground surface. The depth of excavation required for the project is not anticipated to extend to this depth. Therefore, groundwater is not anticipated to be encountered during construction and no impacts would result in this regard.

c-ii, iv. The proposed project would not include altering the existing drainage facilities within the project area. Additionally, the project area is not located in the 100-year floodplain and has a minimal flood hazard. Therefore, no impacts would result in this regard.

d. The proposed project is not located in a flood hazard, tsunami, or seiche zone. Therefore, no impacts would result in this regard.

e. The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Therefore, no impacts would result in this regard.

Less Than Significant Impact

a. The proposed project would have the potential to affect water quality during construction and operation. The project's construction impacts would be minimized to the maximum extent practicable through the adherence with the Construction General Permit (CGP) and Section 401 Water Quality Certification (WQC) requirements. Additionally, because the project has a disturbed surface area greater than one acre, a Stormwater Pollution Prevention Plan (SWPPP) would be required. The SWPPP would identify BMPs to be implemented during construction. Construction site BMPs for the project may include spill prevention and control, stockpile management, storm water sampling and analysis, rain event action plan, and temporary construction entrance, silt fence, and fiber roll. With adherence to the CGP, Section 401 WQC, and SWPPP requirements, potential water quality impacts during construction would be less than significant.

The project's operation impacts would be minimized through adherence to the Caltrans Statewide NPDES Permit, which requires the implementation of post-construction BMPs

and runoff reduction measures to minimize impacts to water quality. Based on the SWDR, post-construction (permanent BMPs) may include design pollution prevention BMPs, preservation of existing drainage patterns, discharge to existing drainages, and biofiltration swales. With adherence to Caltrans NPDES permit and implementation of BMPs, impacts related to project operation would be less than significant.

c-i, iii. The proposed project would not include altering the existing drainage pattern within the project area, which is already developed with existing roadway, freeway, and drainage facilities. As noted in response (**a**), post-construction BMPs and runoff reduction measures to minimize impacts to water quality would be implemented, as required by the NPDES Permit. Therefore, impacts related to erosion and siltation would be less than significant.

3.2.11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

a. Project improvements would occur on the existing roadways, on- and off-ramps, traffic signals, and sidewalks. The project would not include new buildings or structures that would create a barrier to impede further community cohesion or physically divide and established community. Therefore, there would be no impact.

b. The project would improve mobility and relieve congestion on I-605 at the Valley Boulevard interchange. According to the City of Industry's General Plan, the project is located within and adjacent to land uses designated as employment, commercial, institutional, and recreation/open space (City of Industry, 2014a). The surrounding land uses would be maintained, and the project would not conflict with any applicable plans, policies, or regulations. Therefore, there would be no impact.

3.2.12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

a. The project area is located in a region classified as MRZ-2; however, the project area is not being used for mineral resource extraction. In addition, the project area has no known existing mineral resources, groundwater, oil, gas, and geothermal resources. Therefore, the project will not result in the loss of availability of known mineral resources that would be of value to the region and the residents of the state.

b. The project area is currently not being used for mineral resource extraction and is not considered a locally important mineral resource recovery site. Therefore, the project will not result in the loss of availability of a locally important mineral resource recovery site.

3.2.13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

c. There are no private airstrips in proximity to the project area. The nearest public airport is the San Gabriel Valley Airport (formerly called the El Monte Airport), which is approximately two miles northwest of the project area. The project area is not within the airport's noise impact area (65 community noise equivalent level contour) as identified in the El Monte Airport Master Plan Report (County of Los Angeles, 1995). Therefore, the project would not create a hazard to people residing or working in the project area.

Less Than Significant Impact

a. Noise-sensitive receptors in the vicinity of the project area include a future public park, single-family residences, and motels. The Noise Study Report prepared for the project measured short-term daytime noise levels in the project area, which range from approximately 58 to 76 a-weighted decibels (dBA) equivalent continuous sound level (L_{eq}) (AMBIENT Air Quality and Noise Consulting, LLC, 2020b). The existing average-hourly traffic noise level (L_{eq}[h]) ranged from 48 to 74 dBA L_{eq}(h). Ambient noise levels were largely influenced by vehicle traffic on I-605 and local arterial streets.

Based on Caltrans' Traffic Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barrier Projects (California Department of Transportation, 2011), 3 dBA differences in noise levels are generally perceptible to the human ear. A substantial noise increase occurs when a project's predicted worst-hour design-year noise level exceeds the existing worst-hour noise level by 12 dBA or more. In noisy urban environments, such as the project area, 12 decibel increases are not necessarily significant.

Based on data in Table 2.3-15 (see Section 2.3.6), design-year future worst-hour noise levels would range from 50 to 77 dBA L_{eq}(h) under the Build Alternative. When compared to existing conditions, the Build Alternative would result in increases in future worst hour noise levels up to 5 dBA L_{eq}(h) at noise-sensitive receptors. Increases of 5 dBA would be perceptible to the human ear but would not be substantial. Therefore, under CEQA, no significant noise impact would occur as a result of the project and no mitigation is required. However, noise abatement would need to be considered under NEPA and 23 Code of Federal Regulations Part 772 because the noise levels approach or exceed the noise abatement criteria of 67 dBA at noise-sensitive receptors (see Section 2.3.6 for additional information).

Noise levels during construction of the Build Alternative may impact noise-sensitive

receptors. Construction equipment can generate intermittent noise levels ranging from 77 to 90 dBA L_{max} (maximum sound level) at a distance of 50 feet. Construction noise would be short-term, intermittent, and largely overshadowed by local traffic noise. Construction noise control would conform to the provisions in Section 14-8.02, "Noise Control," of the Standard Specifications and Special Provisions (SSP 14-8.02) (**AVM-N-1**). Construction equipment would have sound-control devices and idling equipment would be turned off (**AVM-N-2**). Implementation of **AVM-N-1** and **AVM-N-2** would minimize construction noise impacts under the project. Therefore, short-term noise impacts from construction activities are considered less than significant.

b. On-road vehicles are typically not considered to be significant sources of ground vibration that would cause structural damage or increased levels of annoyance to nearby land uses. As a result, long-term operational activities associated with the project would not involve the use of any equipment or processes that would result in significant levels of groundborne vibration and noise.

The Federal Transit Administration's (FTA) construction vibration damage criteria range from 0.2 inches per second (in/sec) peak particle velocity (ppv) (94 vibration velocity decibels [VdB]) for non-engineered structures to 0.5 in/sec ppv (102 VdB) for engineered/reinforced structures. No land uses that would be considered extremely susceptible to groundborne vibration, such as recording studios and concert halls, have been identified in the project area.

Construction equipment often associated with road development projects would generate ground vibration levels of approximately 0.21 in/sec ppv (94 VdB), or less, at 25 feet. The highest vibration levels from project construction would be associated with the use of vibratory rollers. However, vibration levels associated with vibratory rollers would not occur for an extended duration at any one location and would operate in excess of 25 feet from nearby buildings. Because groundborne vibration levels decrease at increasing distances from the source, construction-generated vibration levels at nearby land uses would not be expected to exceed FTA's recommended groundborne vibration criteria of 0.5 in/sec ppv (102 VdB) for structural damage or 0.2 in/sec ppv (94 VdB) for human annoyance. Therefore, construction impacts related to groundborne vibration and noise would be less than significant.

3.2.14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

a. As previously discussed in **Section 2.2.4**, potential growth-related impacts were evaluated using the first-cut screening analysis. The results of that analysis were:

- The project would include improvements to existing roadways, freeway on-/off-ramps, and intersections. No new transportation facilities would be constructed; therefore, the project would not change accessibility.
- The project would accommodate existing and planned growth but would not influence growth beyond what is currently planned.

Therefore, the project would not induce substantial unplanned population growth in the area, either directly or indirectly.

b. Project improvements would require partial right of way acquisition and permanent easements. However, right of way would be acquired from an undeveloped vacant property and would not affect existing housing or residents in the project area. Therefore, the project would not result in the displacement of any people or housing, and construction of replacement housing would not be required. Therefore, there would be no impact.

3.2.15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
v. Fire protection?	☐	☐	☒	☐
vi. Police protection?	☐	☐	☒	☐
vii. Schools?	☐	☐	☐	☒
viii. Parks?	☐	☐	☐	☒
ix. Other public facilities?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

a-iii. The project includes improvements to existing infrastructure, including roadways and freeway on- and off-ramps. Implementation of the project would not increase local population or the need for new or physically altered schools. Therefore, the project would not result in impacts on schools.

a-iv. The project includes improvements to existing infrastructure, including roadways and freeway on- and off-ramps. Implementation of the project would not increase local population or the need for new or physically altered recreational facilities. Therefore, the project would not result in impacts on recreational facilities.

a-v. The project includes improvements to existing infrastructure, including roadways and freeway on- and off-ramps. Implementation of the project would not increase local population or the need for new or physically altered public facilities (e.g. libraries, community support services, government services). Therefore, the project would not result in impacts on public facilities.

Less Than Significant Impact

a-i. Construction activities would require nighttime closures of freeway ramps. However, detour routes would be required during full ramp closures to route traffic around the ramp utilizing alternate freeway interchanges and local streets. Emergency providers would be notified in advance about the detour routes and the planned closures. Therefore, impacts to fire protection in the project area would be less than significant.

a-ii. Construction activities would require nighttime closures of freeway ramps. However, detour routes would be required during full ramp closures to route traffic around the ramp utilizing alternate freeway interchanges and local streets. Police departments would be notified in advance about the detour routes and the planned closures. Therefore, impacts to police protection in the project area would be less than significant with the implementation of detour routes.

3.2.16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

a. The project includes improvements to existing infrastructure, including roadways and freeway on- and off-ramps. The project would not provide new or increased access to existing recreational facilities such that substantial physical deterioration would occur or be accelerated. Therefore, there would be no impact.

b. The project includes improvements to existing infrastructure, including roadways and freeway on- and off-ramps. The project would not result in the construction or expansion of new recreational facilities. Therefore, there would be no impact.

3.2.17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☐	☒
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	☒
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☒	☐

CEQA Significance Determinations

No Impact

a. The project would be consistent with all plans and programs from the City of Industry's and Los Angeles County's General Plans. Therefore, the project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

b. While public agencies may immediately apply Section 15064.3 of the updated Guidelines, statewide application is not required until July 1, 2020. In addition, uniform statewide guidance for Caltrans projects is still under development. The PDT determined that LOS

would be an appropriate metric to analyze traffic impacts for this project. Therefore, the project would not be inconsistent with CEQA Guidelines section 15064.3, subdivision (b).

c. The project would be designed, constructed, and operated consistent with Caltrans Highway Design Manual and other applicable federal, state, and local standards and specifications for intersections, freeway on- and off-ramps, roadways, retaining walls, and pedestrian access improvements. The project does not include any additional access or roadway improvements that would substantially increase hazards due to geometric design features or incompatible uses. Therefore, there would be no impact.

Less Than Significant Impact

d. As described earlier in responses 3.2.15 (a-i) and (a-ii) construction activities would include short-term closures that would result in temporary impacts to emergency services. However, implementation of a Transportation Management Plan and coordination with emergency responders would be required. Therefore, impacts would be less than significant.

3.2.18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

CEQA Significance Determinations

Less than Significant Impact

a. During AB 52 consultation, the Gabrieleño Band of Mission Indians – Kizh Nation (Tribe) provided numerous pages of information about tribal sensitivity of the area and the presence of a tribal cultural resource, a trade route along Valley Boulevard (formerly

Mission Road) in the direct APE. The Tribe considers Valley Boulevard (formerly Mission Road) to be the area of a Gabrielino trade route, part of a cultural landscape that includes the ethnographic villages and settlements in and around the Whittier Narrows at the confluence of the Rio Hondo and the San Gabriel River, the provincial village of *Ahwiinga* to the east, *La Mision Vieja* (original 1771 location), and the *Mission San Gabriel Arcángel* (1775 location). The Tribe considers the route to be a Tribal Cultural Resource. For the purposes of this project, Caltrans has assumed this resource eligible for listing in the NRHP and the CRHR at the local level of significance under Criterion A/1 in the areas of Ethnic Heritage (Native American) and Social History for its association as a trade route that facilitated community bonding within the Gabrielino territory and with sister tribal groups through the ability to trade over thousands of years. For the purposes of this project, Valley Boulevard (formerly Mission Road) is an approximately 28-mile-long route that runs from the intersection of Mission Road and Alhambra Road in the community of Lincoln Heights in the City of Los Angeles, through the Cities of Alhambra, San Gabriel, Rosemead, El Monte, Industry, La Puente, Walnut, and parts of unincorporated County to Fairplex Drive in Pomona.

The approximately 28-mile long route along Valley Boulevard (formerly Mission Road) is in a highly developed urban environment. Identification of intact archaeological deposits within soils prior to construction is unlikely due to previous ground disturbances within the direct APE. Additionally, no physical remnants of the original unpaved Gabrielino trade route are visible on Valley Boulevard (formerly Mission Road) in the APE due to the highly developed built environment of the interchange and surrounding area. However, in consideration of the Tribe's concerns, and out of an abundance of caution, Caltrans has chosen to implement minor phasing of its identification and evaluation efforts. Under **AVM-CUL-1**, Caltrans will implement a phased cultural resources identification plan approach that includes archaeological and tribal monitoring within the Direct APE during final design and construction phases of the project. Caltrans has prepared a post-review discovery and monitoring plan to outline the steps needed in the event of the discovery of archaeological or tribal cultural resources during construction. Therefore, impacts would be less than significant.

b. Consultation was conducted with the Native American Heritage Commission (NAHC) and several Native American tribes to comply with AB 52. The NAHC was contacted on March 18, 2019 to conduct a Sacred Lands File search in order to ascertain the presence of known sacred sites, Native American cultural resources, and/or human remains within the APE. On April 4, 2019, the NAHC responded with a positive result for Native American cultural resources in the APE and recommended contacting the Gabrieleño Band of Mission Indians – Kizh Nation for information. The NAHC also recommended contact with five Native American groups/individuals for information regarding cultural resources that could be affected by the project.

The following tribes were contacted via email or phone calls:

- Andrew Salas, Chairperson for Gabrieleño Band of Mission Indians – Kizh Nation: A letter was sent to Mr. Salas on April 10, 2019. inviting the tribe to consult on the project.

Mr. Salas responded on April 17, 2019 requesting to consult on the project. On May 13, 2019 Mr. Salas and Matthew Teutimez, Tribe Biologist, met with a Caltrans representative to discuss the project. Mr. Salas and Mr. Teutimez comments on the project focused on the importance of waterways and trade routes to the Kizh Nation. Mr. Salas and Mr. Teutimez also expressed that, if possible, it should be determined whether any fill that exists within the APE is engineered fill or redeposited local fill. On November 12, 2019, a teleconference between Caltrans representatives and Mr. Salas and Mr. Teutimez was held to continue discussing the tribe's concerns. Mr. Salas and Mr. Teutimez expressed concerns with the project based on findings in other projects within the area with similar records search results as were obtained for this project. Mr. Salas and Mr. Teutimez also requested clarification on definition of "original grade". Caltrans representatives stated this is a term used by engineers to describe the elevation of the ground surface prior to construction (i.e. original ground surface level equals existing conditions prior to construction). On November 20, 2019, a follow-up email was sent to the Caltrans representative from the Kizh Nation with ethnographic information, family history, and placename information. On April 17, 2020, the Caltrans representative sent an email and a letter to the Kizh Nation indicating the potential for discovering buried archaeological sites is very low and that the project did not meet Caltrans' criteria for Native American monitoring during construction. On May 15, 2020, the Kizh Nation emailed Caltrans to indicate they did not agree with the findings in the Archaeological Survey Report. On May 27, 2020, Caltrans provided a reply stating the agency made good-faith effort to identify cultural resources within the APE and determined there is low potential for encountering archaeological deposits. The Kizh Nation sent a letter via email to Caltrans on July 2, 2020 requesting to be consulted if any ground disturbance would be completed for the project and included a Bean and Smith 1978 Map. A teleconference between Caltrans and the Kizh Nation was held on July 14, 2020 to discuss concerns regarding the project. The Tribe explained the concerns about the area, including the historic importance of the confluence of two rivers where many villages were located and highly utilized by tribal peoples. Additionally, the Tribe expressed a desire to continue working with Caltrans and their concern about the project, particularly the cultural landscape and ground disturbance. Caltrans and Kizh Nation agreed to a follow-up meeting which would include a Caltrans Tribal Liaison. On August 3, 2020 a follow-up teleconference between the Kizh Nation and Caltrans was held and the Tribe expressed their concerns regarding the importance of the area. Caltrans stated that monitoring is warranted because of the concerns from the Tribe and proximity to other known sites. Therefore, monitoring would be included in the Environmental Commitments Record and on the project plans. In a follow-up email on August 3, 2020, the Kizh Nation asked who the lead agency is for this project and which federal agency is involved; the Tribe also requested the environmental documents. Caltrans replied that Caltrans, acting as FHWA, is the lead federal agency responsible for highway projects under NEPA and other federal laws. Caltrans also provided a link to the draft environmental document. Caltrans sent an email to the Kizh Nation on August 6, 2020 stating that in consideration of the Tribe's concerns, and out of an abundance of

caution, Caltrans would implement **AVM-CUL-1** which includes archaeological and tribal monitoring within the Direct APE during final design and during construction phases of the project; this measure would be included in the Environmental Commitments Record for the project. On August 11, 2020, the Kizh Nation requested to continue consultation to address the fact that the Tribe considers Valley Boulevard to be the area of a Gabrielino trade route, part of a cultural landscape, and thus a Tribal Cultural Resource.

- Anthony Morales, Chairperson for Gabrielino/Tongva San Gabriel Band of Mission Indians: A letter was sent to Mr. Morales on April 10, 2019 inviting the tribe to consult on the project. Two follow-up attempts were made, an email on May 10, 2019 and a voicemail left on June 7, 2019. No response has been received to date.
- Sandonne Goad, Chairperson for Gabrielino/Tongva Nation: A letter was sent to Ms. Goad on April 10, 2019 inviting the tribe to consult on the project. Two follow-up attempts were made, an email on May 10, 2019 and a phone call on June 7, 2019. No response has been received to date.
- Robert Dorame, Chairperson for Gabrielino Tongva Indians of California Tribal Council: A letter was sent to Mr. Dorame on April 10, 2019 inviting the tribe to consult on the project. Two follow-up attempts were made, an email on May 10, 2019 and a phone call on June 7, 2019. During the phone call on June 7, 2019 Mr. Dorame did not request to consult on the project but asked to be sent project information via email. Mr. Dorame requested that until he has a chance to review project information that the Gabrielino Tongva Indians of California Tribal Council be notified of any finds, including any human remains regardless of Most Likely Descendent (MLD) determination. A second follow-up phone call was made on June 17, 2019. Mr. Dorame stated that he had been reviewing the project materials provided to him on June 7, 2019, and that his previous comments were adequate and reiterated that he wants to be notified if any remains are found.
- Charles Alvarez, for Gabrielino-Tongva Tribe: A letter was sent to Mr. Alvarez on April 10, 2019 inviting the tribe to consult on the project. The letter was returned marked with "return to sender". Two follow-up attempts were made, an email on May 10, 2019 and a voicemail on June 7, 2019. No response has been received to date.

Under **AVM-CUL-1**, Caltrans will implement a phased cultural resources identification plan approach that includes archaeological and tribal monitoring within the Direct APE. Caltrans has prepared a post-review discovery and monitoring plan to outline the steps needed in the event of the discovery of archaeological or tribal cultural resources during construction. In the event that previously unknown buried human remains are encountered during construction, **AVM-CUL-2** would be implemented. Therefore, impacts would be less than significant.

3.2.19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with	Less than Significant Impact	No Impact

		Mitigation		
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

c. The project would not require the need for wastewater treatment. Therefore, there would be no impact.

e. The project would comply with all federal, state, and local management and reduction statues and regulations related to solid waste. Therefore, there would be no impact.

Less Than Significant Impact

a. The project would improve traffic flow along Valley Boulevard and the I-605 interchange on- and off-ramps. The project would require the temporary relocation of one underground powerline and the permanent relocation of one gas distribution line, one water line/fire hydrant, and one six inch water line. The fire hydrant located along Temple Avenue would need to be relocated, in addition to a 6 inch waterline along Valley Boulevard in front of the SF Wheel & Tire and ASAP Towing properties, due to the proposed storm drain facilities. However, in general, roadway pavement reconstruction is at or above original grade and permanent impacts to existing facilities are not anticipated. However, as the design progresses, Caltrans and Metro would coordinate with the utility owners/operators to minimize the disruption to any utility service to ensure that project improvements would

not adversely affect customer service or utility operations during relocation. Therefore, impacts would be less than significant.

b. Water would be required during project construction for the roadway modifications and construction activities. However, the water supply needed would not require any new or expanded entitlements. Therefore, impacts would be less than significant.

d. The project would create waste during construction activities. However, waste generated by the project would not exceed state and local standards. According to the Los Angeles County Best Management Practices Manual, the contractor shall provide covered and watertight dumpsters of sufficient size and numbers to contain the solid waste generated on the construction site, including waste generated by the public. Dumpsters and trash cans should be emptied once every two weeks, and full dumpsters and containers should be emptied within two days of being full. Litter stored in containers should be handled and disposed of by licensed disposal contractors, and solid waste disposal haulers and facilities should be approved by the Engineer. Therefore, impacts would be less than significant.

3.2.20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

CEQA Significance Determinations

No Impact

a-d. The project is not located within or near a state responsibility area or lands classified as very high fire severity zones. Therefore, no impacts would result.

3.2.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
Would the project:				
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

CEQA Significance Determinations

The project would have no effect on aesthetics, agriculture and forest resources, energy, land use and planning, mineral resources, population and housing, recreation, and wildfire.

In addition, the project would have less than significant impacts on air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazardous waste, hydrology and water quality, noise, public services, transportation, tribal cultural resources, and utilities and service systems.

Less Than Significant Impact

a. The project would not degrade the quality of the environmental or permanently impact any wildlife or plant species or their associated habitat. There are no wetlands, streams, rivers, or lakes present within the project area.

The UPRR is being assumed eligible for the proposed undertaking. However, impacts to the UPRR are not significant. In addition, the project is considered to have low sensitivity for archaeological resources. Therefore, the project would not substantially degrade the quality of major periods of California history or prehistory.

The Gabrielino trade route is being assumed eligible for the proposed undertaking due to the large property size and the limited potential for effects. The Direct APE has been disturbed considerably due to construction of the UPRR, Valley Boulevard and I-605/Valley Blvd Interchange. No physical manifestations of the trade route are visible currently. Therefore, the project would not substantially degrade the Tribal Cultural Resource

b. The Build Alternative would result in improved operating conditions for the I-605/Valley Boulevard interchange compared to the No Build and would not contribute to cumulative adverse impacts to resource areas. Therefore, the impacts of the Build Alternative would not be cumulatively considerable (the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).

c. The project would not result in environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly. The project would improve traffic operations for the I-605/Valley Boulevard interchange, which would reduce delays, travel time, thereby improving the human environment.

3.3 Wildfire

3.3.1 Regulatory Setting

Senate Bill 1241 required the Office of Planning and Research, the Natural Resources Agency, and the California Department of Forestry and Fire Protection to develop amendments to the "CEQA Checklist" for the inclusion of questions related to fire hazard impacts for projects located on lands classified as very high fire hazard severity zones. The 2018 updates to the CEQA Guidelines expanded this to include projects "near" these very high fire hazard severity zones.

3.3.2 Affected Environment

According to the Fire Hazard Severity Zone Maps (Cal Fire, 2007; Cal Fire, 2012), the project area is not located in a very high hazard area for State Responsibility Area or Local Responsibility Area.

3.4 Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the earth's climate system. An ever-increasing body of scientific research attributes these climatological changes to greenhouse gas (GHG) emissions, particularly those generated from the production and use of fossil fuels.

While climate change has been a concern for several decades, the establishment of the Intergovernmental Panel on Climate Change (IPCC) by the United Nations and World

Meteorological Organization in 1988 led to increased efforts devoted to GHG emissions reduction and climate change research and policy. These efforts are primarily concerned with the emissions of GHGs generated by human activity, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG; while it is a naturally occurring component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2.

Two terms are typically used when discussing how we address the impacts of climate change: "greenhouse gas mitigation" and "adaptation." Greenhouse gas mitigation covers the activities and policies aimed at reducing GHG emissions to limit or "mitigate" the impacts of climate change. Adaptation, on the other hand, is concerned with planning for and responding to impacts resulting from climate change (such as adjusting transportation design standards to withstand more intense storms and higher sea levels). This analysis will include a discussion of both.

3.4.1 Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce GHG emissions from transportation sources.

Federal

To date, no national standards have been established for nationwide mobile-source GHG reduction targets, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea level change, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (Federal Highway Administration, 2019). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values—"the triple bottom line of sustainability" (Federal Highway Administration, n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Various efforts have been promulgated at the federal level to improve fuel economy and energy efficiency to address climate change and its associated effects. The most important of these was the Energy Policy and Conservation Act of 1975 (42 USC Section 6201) and Corporate Average Fuel Economy (CAFE) Standards. This act establishes fuel economy standards for on-road motor vehicles sold in the United States. Compliance with federal fuel economy standards is determined through the CAFE program on the basis of each manufacturer's average fuel economy for the

portion of its vehicles produced for sale in the United States.

Energy Policy Act of 2005, 109th Congress H.R.6 (2005–2006): This act sets forth an energy research and development program covering: (1) energy efficiency; (2) renewable energy; (3) oil and gas; (4) coal; (5) the establishment of the Office of Indian Energy Policy and Programs within the Department of Energy; (6) nuclear matters and security; (7) vehicles and motor fuels, including ethanol; (8) hydrogen; (9) electricity; (10) energy tax incentives; (11) hydropower and geothermal energy; and (12) climate change technology.

The U.S. EPA in conjunction with the National Highway Traffic Safety Administration (NHTSA) is responsible for setting GHG emission standards for new cars and light-duty vehicles to significantly increase the fuel economy of all new passenger cars and light trucks sold in the United States. Fuel efficiency standards directly influence GHG emissions.

State

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and executive orders (EOs) including, but not limited to, the following:

EO S-3-05 (June 1, 2005): The goal of this EO is to reduce California's GHG emissions to: (1) year 2000 levels by 2010, (2) year 1990 levels by 2020, and (3) 80 percent below year 1990 levels by 2050. This goal was further reinforced with the passage of Assembly Bill (AB) 32 in 2006 and Senate Bill (SB) 32 in 2016.

Assembly Bill (AB) 32, Chapter 488, 2006, Núñez and Pavley, The Global Warming Solutions Act of 2006: AB 32 codified the 2020 GHG emissions reduction goals outlined in EO S-3-05, while further mandating that the California Air Resources Board (ARB) create a scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." The Legislature also intended that the statewide GHG emissions limit continue in existence and be used to maintain and continue reductions in emissions of GHGs beyond 2020 (Health and Safety Code [H&SC] Section 38551(b)). The law requires ARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

EO S-01-07 (January 18, 2007): This order sets forth the low carbon fuel standard (LCFS) for California. Under this EO, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by the year 2020. ARB re-adopted the LCFS regulation in September 2015, and the changes went into effect on January 1, 2016. The program establishes a strong framework to promote the low-carbon fuel adoption necessary to achieve the Governor's 2030 and 2050 GHG reduction goals.

Senate Bill (SB) 375, Chapter 728, 2008, Sustainable Communities and Climate Protection: This bill requires ARB to set regional emissions reduction targets for passenger vehicles. The Metropolitan Planning Organization (MPO) for each region must then develop a "Sustainable Communities Strategy" (SCS) that integrates transportation, land-use, and housing policies to plan how it will achieve the emissions target for its region.

SB 391, Chapter 585, 2009, California Transportation Plan: This bill requires the State's long-

range transportation plan to identify strategies to address California's climate change goals under AB 32.

EO B-16-12 (March 2012) orders State entities under the direction of the Governor, including ARB, the California Energy Commission, and the Public Utilities Commission, to support the rapid commercialization of zero-emission vehicles. It directs these entities to achieve various benchmarks related to zero-emission vehicles.

EO B-30-15 (April 2015) establishes an interim statewide GHG emission reduction target of 40 percent below 1990 levels by 2030 to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050. It further orders all state agencies with jurisdiction over sources of GHG emissions to implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 GHG emissions reductions targets. It also directs ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent ($MMTCO_2e$).[8] Finally, it requires the Natural Resources Agency to update the state's climate adaptation strategy, *Safeguarding California*, every 3 years, and to ensure that its provisions are fully implemented.

SB 32, Chapter 249, 2016, codifies the GHG reduction targets established in EO B-30-15 to achieve a mid-range goal of 40 percent below 1990 levels by 2030.

SB 1386, Chapter 545, 2016, declared "it to be the policy of the state that the protection and management of natural and working lands … is an important strategy in meeting the state's greenhouse gas reduction goals, and would require all state agencies, departments, boards, and commissions to consider this policy when revising, adopting, or establishing policies, regulations, expenditures, or grant criteria relating to the protection and management of natural and working lands."

AB 134, Chapter 254, 2017, allocates Greenhouse Gas Reduction Funds and other sources to various clean vehicle programs, demonstration/pilot projects, clean vehicle rebates and projects, and other emissions-reduction programs statewide.

SB 743**,** Chapter 386 (September 2013): This bill changes the metric of consideration for transportation impacts pursuant to CEQA from a focus on automobile delay to alternative methods focused on vehicle miles traveled, to promote the state's goals of reducing greenhouse gas emissions and traffic related air pollution and promoting multimodal transportation while balancing the needs of congestion management and safety.

SB 150**,** Chapter 150 2017, Regional Transportation Plans: This bill requires the California Air Resources Board to prepare a report that assesses progress made by each metropolitan planning organization in meeting their established regional greenhouse gas emission reduction targets.

EO B-55-18, (September 2018) sets a new statewide goal to achieve and maintain carbon neutrality no later than 2045. This goal is in addition to existing statewide targets of reducing GHG emissions.

[8] GHGs differ in how much heat each trap in the atmosphere (global warming potential, or GWP). CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent" (CO_2e). The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.

EO N-19-19 (September 2019) advances California's climate goals in part by directing the California State Transportation Agency to leverage annual transportation spending to reverse the trend of increased fuel consumption and reduce GHG emissions from the transportation sector. It orders a focus on transportation investments near housing, managing congestion, and encouraging alternatives to driving. This EO also directs ARB to encourage automakers to produce more clean vehicles, formulate ways to help Californians purchase them, and propose strategies to increase demand for zero-emission vehicles.

3.4.2 Environmental Setting

The proposed project is in an urban area of Los Angeles County with a well-developed road and street network. Existing land uses in the project area include residential, commercial, and industrial developments; a high school; vacant land; the San Gabriel River; railroad right of way; and power line right of way. Traffic congestion during peak hours is not uncommon in the project area. An RTP/SCS by SCAG guides transportation and housing development in the project area. The Los Angeles County 2035 General Plan Community Climate Action Plan addresses GHGs in the project area.

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time, such as a calendar year. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state, as required by H&SC Section 39607.4.

National GHG Inventory

The U.S. EPA prepares a national GHG inventory every year and submits it to the United Nations in accordance with the Framework Convention on Climate Change. The inventory provides a comprehensive accounting of all human-produced sources of GHGs in the United States, reporting emissions of CO_2, CH_4, N_2O, HFCs, perfluorocarbons, SF_6, and nitrogen trifluoride. It also accounts for emissions of CO_2 that are removed from the atmosphere by "sinks" such as forests, vegetation, and soils that uptake and store CO_2 (carbon sequestration). The 1990–2016 inventory found that of 6,511 $MMTCO_2e$ GHG emissions in 2016, 81% consist of CO_2, 10% are CH_4, and 6% are N_2O; the balance consists of fluorinated gases (U.S. EPA, 2018). In 2016, GHG emissions from the transportation sector accounted for nearly 28.5% of U.S. GHG emissions.

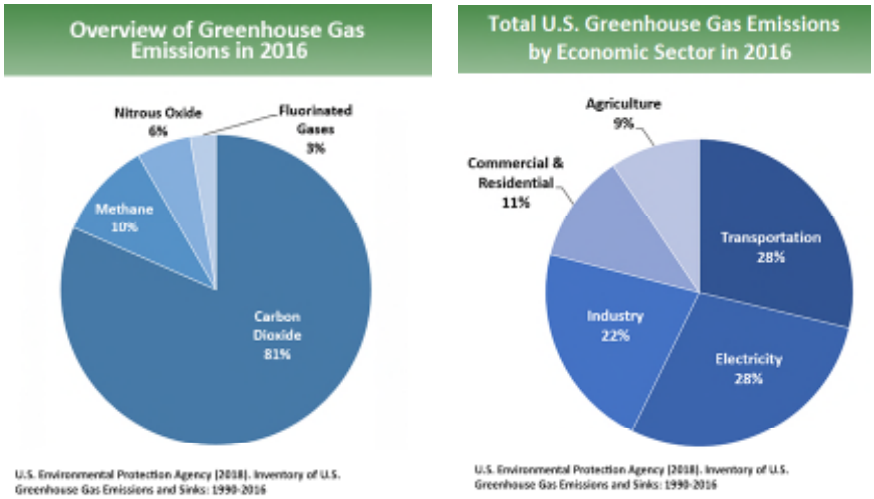


Figure 3.4-1. U.S. Greenhouse Gas Emission in 2016

State GHG Inventory

ARB collects GHG emissions data for transportation, electricity, commercial/residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. The 2019 edition of the GHG emissions inventory found total California emissions of 424.1 MMTCO2e for 2017, with the transportation sector responsible for 41% of total GHGs. It also found that overall statewide GHG emissions declined from 2000 to 2017 despite growth in population and state economic output (California Air Resources Board, 2019a).

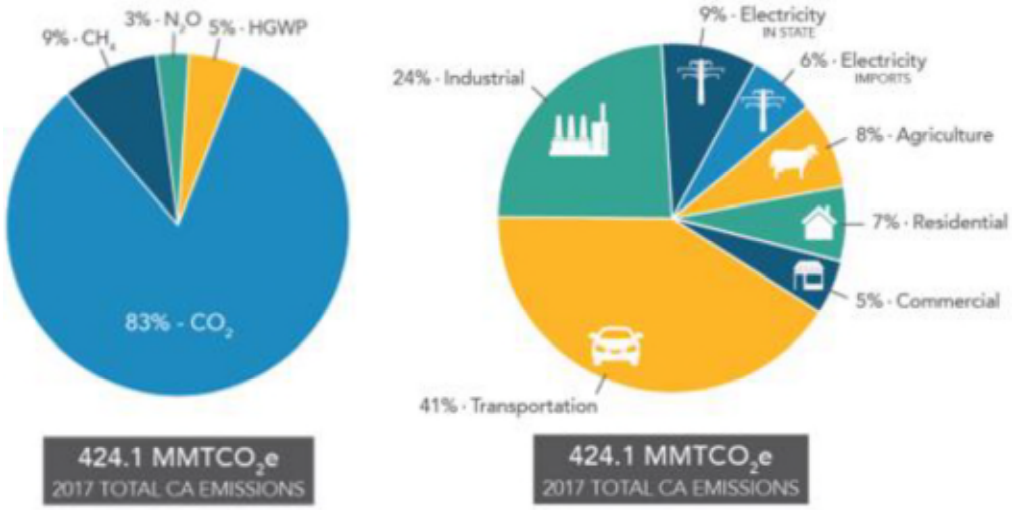
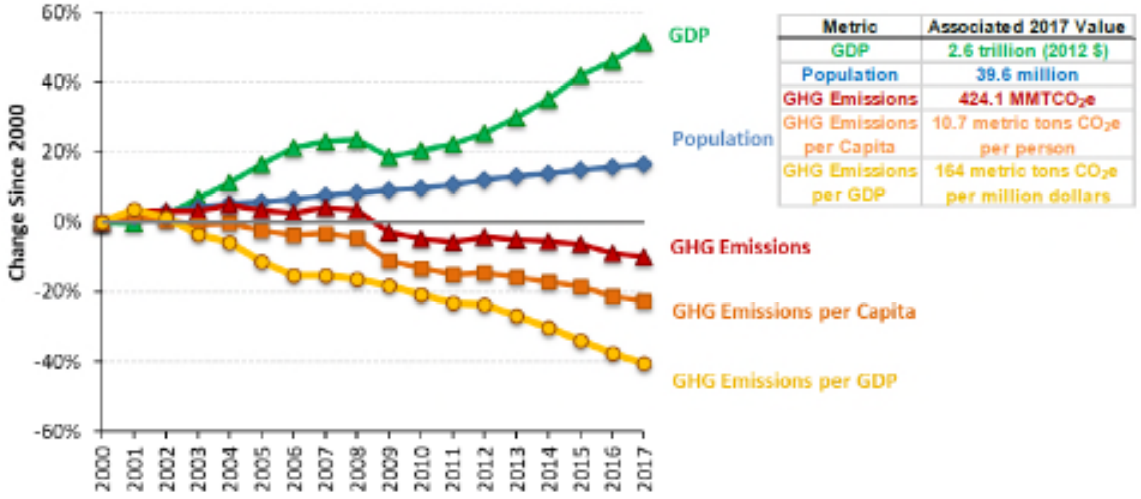


Figure 3.4-2. California 2017 Greenhouse Gas Emissions



Source: (California Air Resources Board, 2019b)

Figure 3.4-3. Change in California GDP, Population, and GHG Emissions Since 2000

AB 32 required ARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. ARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The AB 32 Scoping Plan and the subsequent updates contain the main strategies California will use to reduce GHG emissions.

Regional Plans

ARB sets regional targets for California's 18 MPOs to use in their RTP/SCSs to plan future projects that will cumulatively achieve GHG reduction goals. Targets are set at a percent reduction of passenger vehicle GHG emissions per person from 2005 levels. The proposed project is included in the *2020-2045 SCAG RTP/SCS*. The regional reduction target for the SCAG region is 8 percent for 2020 and 19 percent for 2035 (California Air Resources Board, 2019c). **Table 3.4-1** shows other relevant plans, policies, and goals that relate to reducing GHG emissions.

Table 3.4-1. Regional and Local Plans and Relevant Policies or Goals

Title	GHG Reduction Policies or Strategies
California Transportation Plan 2040 (adopted June 2016)	• Improve highways and roads through integrated multimodal corridor management and new technologies • Secure revenue from transportation users to fund transportation improvements
Southern California Association of Governments *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy* (adopted May 2020)	• Support planning efforts that bring housing, jobs, and transit closer together. • Prioritize transportation funding on preventative maintenance. • Manage the existing transportation system through demand management strategies and Intelligent Transportation Systems. • Expand the transit network and foster development of transit-oriented communities.

Table 3.4-1. Regional and Local Plans and Relevant Policies or Goals

Title	GHG Reduction Policies or Strategies
	• Create "complete streets" that are safe and inviting to all roadway users. • Integrate land use decisions and technological advancements that support the efficient movement of goods.
Gateway Cities *Strategic Transportation Plan* (adopted March 2016)	• Reduce GHG emissions from reduced congestion
Gateway Cities *Air Quality Action Plan* (June 2013)	• Implement best management practices to reduce road dust form construction • Require low-emission equipment for public construction contracts • Enforce anti-idling regulations • Reduce exposure of sensitive receptors to diesel exhaust
County of Los Angeles *Community Climate Action Plan 2020* (adopted August 2015)	• Expand bicycle, pedestrian, and transit networks • Travel demand management • Efficient goods movement
Metro's *Long Range Transportation Plan* (adopted 2009)	• Invest in carpool lanes and demand management • Use recycled materials and low GHG components during project construction

3.4.3 Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation of the SHS and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of the combustion of petroleum-based products, like gasoline, in internal combustion engines. Relatively small amounts of CH_4 and N_2O are emitted during fuel combustion. In addition, a small amount of HFC emissions are included in the transportation sector.

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Pub. Resources Code, § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130)).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

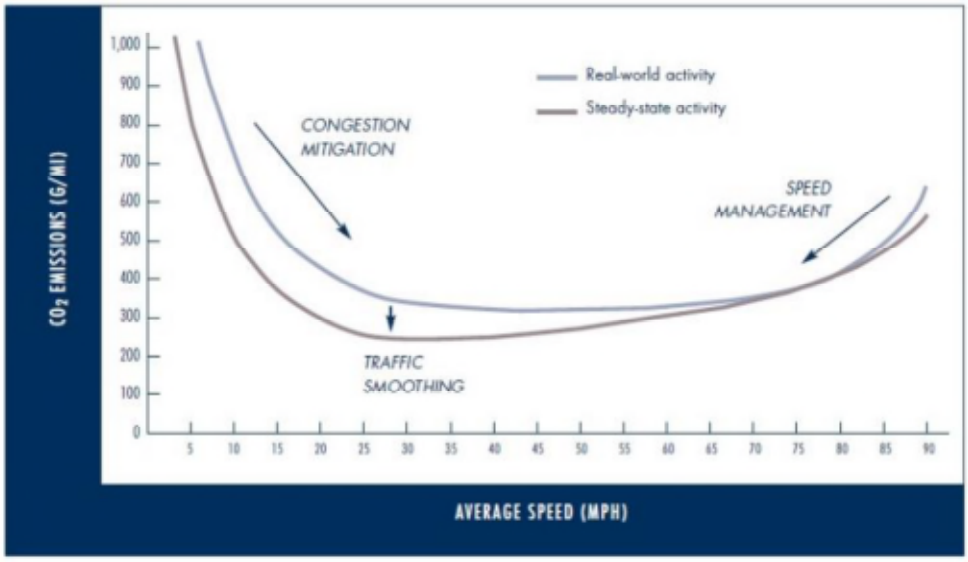
The following discussion incorporates the results of the Air Quality Report (AMBIENT Air Quality and Noise Consulting, 2020a) prepared for the project. The Air Quality Report contains detailed methodology, modeling files, and calculation worksheets.

Operational Emissions

CO_2 accounts for 95 percent of transportation GHG emissions in the U.S. The largest sources of transportation-related GHG emissions are passenger cars and light-duty trucks, including sport utility vehicles, pickup trucks, and minivans. These sources account for over half of the emissions from the sector. The remainder of GHG emissions comes from other modes of transportation, including freight trucks, commercial aircraft, ships, boats, and trains, as well as pipelines and lubricants. Because CO_2 emissions represent the greatest percentage of GHG emissions it has been selected as a proxy within the following analysis for potential climate change impacts generally expected to occur.

The highest levels of CO_2 from mobile sources such as automobiles occur at stop-and-go speeds (0–25 miles per hour) and speeds over 55 miles per hour; the most severe emissions occur from 0–25 miles per hour (see **Figure 3.4-4**). To the extent that a project relieves congestion by enhancing operations and improving travel times in high-congestion travel corridors, GHG emissions, particularly CO_2, may be reduced.

Four primary strategies can reduce GHG emissions from transportation sources: (1) improving the transportation system and operational efficiencies, (2) reducing travel activity, (3) transitioning to lower GHG-emitting fuels, and (4) improving vehicle technologies/efficiency. To be most effective, all four strategies should be pursued concurrently.



Source: (Barth & Boriboonsomsin, 2010)

Figure 3.4-4. Possible Use of Traffic Operation Strategies in Reducing On-Road CO_2 Emissions

SCAG is required by federal law to prepare and update a long-range (minimum of 20 years) RTP. In addition, California Senate Bill 375 requires that the RTP also includes an SCS, which outlines growth strategies that better integrate land use and transportation planning and help reduce the state's GHG emissions from cars and light trucks (California Government Code §65080 [b][2][B]). For the SCAG region, ARB has set GHG reduction targets at 8 percent below 2005 per capita emissions levels by 2020, and 19 percent below 2005 per capita emissions levels by 2035. The

2020-2045 RTP/SCS is projected to help meet or exceed these targets, lowering GHG emissions (below 2005 levels) by 8 percent by 2020; and 19 percent by 2035 (Southern California Association of Governments, 2020).

The project is included in the SCAG *2020-2045 RTP/SCS* (RTP ID 1163S009) and the *2019 FTIP* (Project No. LA0G1457). The project's design concept and scope are consistent with descriptions included in the *2020-2045 RTP/SCS* and *2019 FTIP*. The *2019 FTIP* and the *2020-2045 RTP/SCS* listings are included as **Appendix E**. The Programmatic EIR for the *2020-2045 RTP/SCS* states that impacts related to GHG emissions would be significant and unavoidable. Although GHG emissions would decrease with implementation of the Plan when compared with existing and No Project conditions, the reductions would not meet California's emissions reduction targets (specifically AB 32, SB 32, and the Scoping Plan). However, the analysis does not account for future changes to fuels and technology that are anticipated to reduce emissions beyond what was projected. The Plan includes several SCAG-wide measures and project-level recommended measures, but impacts would continue to be significant.

In comparison to the No Build Alternative conditions, the Build Alternative would not result in increases in traffic volumes along area roadways. Additionally, the Build Alternative would decrease vehicle delay at primarily affected intersections. In comparison to No Build Alternative for years 2024 and 2044, the Build Alternative would result in decreased mobile-source GHG emissions of approximately 8 percent for both future years (see Quantitative Analysis below for supporting data).

Transit-only and multi-modal alternatives were not considered for this project because they would not meet the project purpose and need. However, the project would include the following design improvements that would enhance safety for bicyclists and pedestrians and support these alternative modes of transportation:

- The shoulder on Valley Boulevard would be widened, which would accommodate a future bike lane where none now exists.
- The curve radius of the northbound loop on-ramp from eastbound Valley Boulevard would be reduced to slow entering traffic to enhance safety for bicyclists and pedestrians and support use of these alternative modes.
- Curb ramps, sidewalks, driveways, and pedestrian routes would be upgraded to comply with current ADA standards.

Quantitative Analysis

Long-term operational GHG emissions related with the project would be associated with the operation of motor vehicles along area roadways. Motor vehicle operational emissions were quantified for existing, Opening Year 2024, and Design Year 2044 conditions. Emissions were quantified using the CTEMFAC2017 version 1.0.2 computer program based, in part, on traffic data provided for this project (Intueor Consulting, Inc., 2019). Estimated annual operational mobile-source GHG emissions and traffic conditions for the project area are summarized in **Table 3.4-2**.

Table 3.4-2. Summary of Comparative GHG Emissions & Traffic Conditions

Scenario/Analysis Year	Annual VMT2	MTCO2e/Year1 (% Change)
Existing – Year 2019	13,449,720	3,833.93
No Build Alternative – Opening Year 2024	13,832,461	3,401.48
No Build Alt. 2024 Compared to Existing:		-432.45 (-11%)
Build Alternative – Opening Year 2024	11,189,015	3,282.23
Build Alt. Compared to Existing:		-551.70 (-14%)
Build Alt. Compared to No Build Alt. 2024:		-119.25 (-4%)
No Build Alternative – Design Year 2044	15,199,988	2,882.40
No Build Alt. 2044 Compared to Existing:		-951.53 (-25%)
Build Alternative – Design Year 2044	12,207,113	2,718.73
Build Alt. 2044 Compared to Existing:		-1,115.20 (-29%)
Build Alt. 2044 Compared to No Build Alt. 2044:		-163.67 (-6)

VMT = vehicle miles traveled

$MTCO_2e$ = metric tons of carbon dioxide equivalents

1. Emissions were quantified using CT-EMFAC2017 emission factors and traffic data provided for this project

2. Annual VMT is derived from Daily VMT multiplied by 347. ARB methodology (California Air Resources Board, 2008)

Refer to Appendix F of the Air Quality Report for emission modeling assumptions and results

As depicted in **Table 3.4-2**, existing mobile-source GHG emissions within the project area total approximately 3,834 metric tons of carbon dioxide equivalent ($MTCO_2e$)/year. Under No Build Alternative year 2024 and year 2044 conditions, mobile-source GHG emissions within the project area total approximately 3,401 $MTCO_2e$/year and 2,882 $MTCO_2e$/year, respectively. In comparison to existing conditions, the No Build Alternative would result in an approximately 11 percent decrease in mobile-source GHG emissions under year 2024 conditions and an approximately 25 percent decrease under year 2044 conditions. The Build Alternative would result in approximately 3,282 $MTCO_2e$ per year in 2024 and 2,719 $MTCO_2e$ per year in 2044. Compared to existing conditions, this represents a decrease in GHG emissions of 14 percent and 29 percent in 2024 and 2044, respectively.

In comparison to No Build Alternative conditions, the proposed Build Alternative would result in decreases in mobile-source GHGs of approximately 4 percent under year 2024 conditions and 6 percent under year 2044 conditions. Emissions reductions under the Build Alternative are due to improved vehicle operations and overall reductions in VMT when compared to the No Build Alternative. The Build Alternative, when compared to existing and No Build Alternative conditions, would reduce VMT within the project area because the proposed replacement of the horseshoe ramp with a signalized intersection would reduce the distance traveled to southbound I-605 (i.e., the Build Alternative would shorten the existing route).

While CT-EMFAC has a rigorous scientific foundation and has been vetted through multiple

stakeholder reviews, its GHG emission rates are based on tailpipe emission test data.[9] Moreover, the model does not account for factors such as the rate of acceleration and vehicle aerodynamics, which influence the amount of emissions generated by a vehicle. GHG emissions quantified using CT-EMFAC are therefore estimates and may not reflect actual physical emissions. Though CT-EMFAC is currently the best available tool for calculating GHG emissions from mobile sources, it is important to note that the GHG results are only useful for a comparison among alternatives.

Construction Emissions

Construction GHG emissions would result from material processing, on-site construction equipment, and traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases.

In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be offset to some degree by longer intervals between maintenance and rehabilitation activities.

Construction GHG emissions were estimated using SMAQMD's *Road Construction Emissions Model, Version 9.0.0*. While the model was developed for Sacramento conditions in terms of fleet emission factors and other modeling assumptions, the model is considered adequate for estimating road construction emissions in the SCAB and is used for that purpose in this project analysis. Emissions modeling was conducted based on off-road equipment requirements and estimated areas to be paved provided by the project engineer. All other construction activity assumptions, including on-road vehicle travel distances, were based on the default parameters contained in the model. The emissions presented are based on the best information available at the time of calculations.

Construction-generated GHG emissions are summarized in **Table 3.4-3**. Construction of the Build Alternative would occur over an approximate 12-month period and would generate a total of approximately 468 $MTCO_2e$. Emissions modeling assumptions and results are included in Appendix F of the Air Quality Report.

Table 3.4-3. Construction-Generated GHG Emissions

Construction Phase	$MTCO_2e$
Land Clearing/ Grubbing	72.84
Grading/Excavation	239.01
Drainage/Utilities/Sub-Grade	102.71

[9] This analysis does not currently account for the effects of the US National Highway Traffic Safety Administration and Environmental Protection Agency SAFE (Safer Affordable Fuel-Efficient) Vehicles Rule. Part One revoking California's authority to set its own greenhouse gas emissions standards was published on September 27, 2019 and effective November 26, 2019. The SAFE Vehicles Rule Part 2 would amend existing Corporate Average Fuel Economy (CAFE) and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establish new standards covering model years 2021 through 2026. The proposal would retain the model year 2020 standards for both programs through model year 2026 (U.S. DOT 2018). Although CARB has not yet provided adjustment factors for greenhouse gas emissions to be utilized in light of the SAFE Rule, modeling these estimates with EMFAC2017 or CT-EMFAC2017 remains the most precise means of estimating future greenhouse gas emissions.

Table 3.4-3. Construction-Generated GHG Emissions

Construction Phase	$MTCO_2e$
Paving	53.11
Maximum/Phase:	239.01
Project Total:	467.67

$MTCO_2e$ = metric tons of carbon dioxide equivalents

Construction GHG emissions were estimated using the SMAQMD's Road Construction Emissions Model, Version 9.0.0. Refer to Appendix F of the Air Quality Report for emissions modeling assumptions and results.

All construction contracts include Caltrans Standard Specifications Section 7-1.02A and 7 1.02C, Emissions Reduction, which require contractors to comply with all laws applicable to the project and to certify they are aware of and will comply with all ARB emission reduction regulations; and Section 14-9.02, Air Pollution Control, which requires contractors to comply with all air pollution control rules, regulations, ordinances, and statutes. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.

The project would also implement SCAQMD Rules and Regulations to reduce air quality impacts from construction equipment emissions. In addition to federal and state GHG reduction strategies, the project contractor would ensure that construction equipment engines are maintained in good condition and tuned per manufacturers' specifications to minimize emissions; properly operating equipment also reduces GHG emissions and potential climate change impacts from construction of the project (see **AVM-AQ-4** in **Section 2.3.5**).

3.4.4 CEQA Conclusions

While the proposed project will result in GHG emissions during construction, it is anticipated that the project will not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG-reduction measures, the impact would be less than significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

3.4.5 Greenhouse Gas Reduction Strategies

Statewide Efforts

Major sectors of the California economy, including transportation, will need to reduce emissions to meet the 2030 and 2050 GHG emissions targets. Former Governor Edmund G. Brown promoted GHG reduction goals that involved (1) reducing today's petroleum use in cars and trucks by up to 50 percent; (2) increasing from one-third to 50 percent our electricity derived from renewable sources; (3) doubling the energy efficiency savings achieved at existing buildings and making heating fuels cleaner; (4) reducing the release of methane, black carbon, and other short-lived climate pollutants; (5) managing farms and rangelands, forests, and wetlands so they can store carbon; and (6) periodically updating the state's climate adaptation strategy, *Safeguarding*

California.

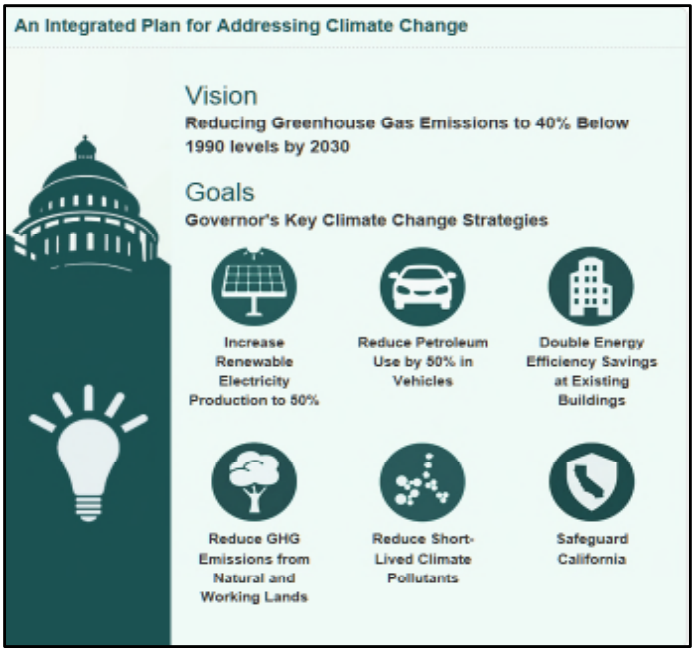


Figure 3.4-5. California Climate Strategy

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). A key state goal for reducing greenhouse gas emissions is to reduce today's petroleum use in cars and trucks by up to 50 percent by 2030 (State of California, 2019).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Caltrans Activities

Caltrans continues to be involved on the Governor's Climate Action Team as the ARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 (2016), set an interim target to cut GHG emissions to 40 percent below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

California Transportation Plan (CTP 2040)

The California Transportation Plan (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. In 2016, Caltrans completed the California Transportation Plan 2040, which establishes a new model for developing ground transportation systems, consistent with CO2 reduction goals. It serves as an umbrella document for all the other

statewide transportation planning documents. Over the next 25 years, California will be working to improve transit and reduce long-run repair and maintenance costs of roadways and developing a comprehensive assessment of climate-related transportation demand management and new technologies rather than continuing to expand capacity on existing roadways.

SB 391 (Liu 2009) requires the CTP to meet California's climate change goals under AB 32. Accordingly, the CTP 2040 identifies the statewide transportation system needed to achieve maximum feasible GHG emission reductions while meeting the state's transportation needs. While MPOs have primary responsibility for identifying land use patterns to help reduce GHG emissions, CTP 2040 identifies additional strategies in Pricing, Transportation Alternatives, Mode Shift, and Operational Efficiency.

Caltrans Strategic Management Plan

The Strategic Management Plan, released in 2015, creates a performance-based framework to preserve the environment and reduce GHG emissions, among other goals. Specific performance targets in the plan that will help to reduce GHG emissions include:

- Increasing percentage of non-auto mode share
- Reducing VMT
- Reducing Caltrans' internal operational (buildings, facilities, and fuel) GHG emissions

Funding and Technical Assistance Programs

In addition to developing plans and performance targets to reduce GHG emissions, Caltrans also administers several sustainable transportation planning grants. These grants encourage local and regional multimodal transportation, housing, and land use planning that furthers the region's RTP/SCS; contribute to the State's GHG reduction targets and advance transportation-related GHG emission reduction project types/strategies; and support other climate adaptation goals (e.g., *Safeguarding California*).

Caltrans Policy Directives and Other Initiatives

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) is intended to establish a Department policy that will ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Activities to Address Climate Change* (April 2013) provides a comprehensive overview of Caltrans' statewide activities to reduce GHG emissions resulting from agency operations.

Project-Level GHG Reduction Strategies

The following measures will also be implemented in the project to reduce GHG emissions and potential climate change impacts from the project.

- **AVM-GHG-1.** All construction equipment shall use low sulfur fuel as required by California Code of Regulations (CCR) Title 17, Section 93114.
- **AVM-GHG-2.** To the extent locally available, alternative fuels such as renewable diesel shall be used for construction equipment.
- **AVM-GHG-3.** On-road construction vehicles shall comply with CCR Title 13, Section 2485,

which limits idling of diesel-fueled commercial motor vehicles that operate in the State of California with gross vehicular weight ratings of greater than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies the following:

1. Drivers of said vehicles shall not idle the vehicle's primary diesel engine for greater than five minutes at any location, except as noted in Subsection (d) of the regulation.
2. Drivers of said vehicles shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than five minutes at any location when within 100 feet of a restricted area, except as noted in Subsection (d) of the regulation.
3. Signs must be posted in the designated queuing areas and job sites to remind drivers of the five-minute idling limit. The specific requirements and exceptions in the regulation can be reviewed at the following web site: www.arb.ca.gov/msprog/truck-idling/2485.pdf.

- **AVM-GHG-4.** Off-road diesel equipment shall comply with the five-minute idling restriction identified in Section 2449(d)(3) of the California Air Resources Board's In-Use Off-Road Diesel regulation: www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf.
- **AVM-GHG-5.** Truck haul trips shall be scheduled outside of peak morning and evening commute hours.
- **AVM-GHG-6.** Construction waste shall be reduced and the use of recycled materials shall be maximized (reduces consumption of raw materials, reduces landfill waste, and encourages cost savings).
- **AVM-GHG-7.** Measures to reduce consumption of potable water shall be incorporated during construction.
- **AVM-GHG-8.** The right size equipment shall be utilized for the job.
- **AVM-GHG-9.** To the extent locally available, equipment with new technologies (e.g., off-road equipment meeting Tier 3, or newer, emissions standards and electric-powered equipment) shall be used.
- **AVM-GHG-10.** Existing construction environmental training shall be supplemented with information regarding methods to reduce GHG emissions related to construction.
- **AVM-GHG-11.** Caltrans shall specify the use of alternative bridge construction (e.g., reduce construction windows and use more precast elements that reduce need for additional falsework, forms, bracing, etc.).
- **AVM-GHG-12.** Caltrans shall specify the use of recycled materials (e.g., tire rubber).
- **AVM-GHG-13.** Large removed trees shall be salvaged for lumber or similar on-site beneficial uses other than standard wood-chipping (e.g., used in roadside landscape projects or green infrastructure components).
- **AVM-GHG-14.** Caltrans shall specify on-site recycling of existing project features (e.g., metal beam guard railing, light standards, sub-base granular material, or native material that meet

Caltrans specifications for incorporation into new work).

- **AVM-GHG-15.** Caltrans shall specify the use of pavement materials that reduce rolling resistance of highway surfaces while still maintaining design and safety standards.
- **AVM-GHG-16.** The need for transport of earthen materials shall be reduced by balancing cut and fill quantities.
- **AVM-GHG-17.** Caltrans shall specify the utilization of cold in-place recycling. This pavement rehabilitation treatment is typically used on low traffic-volume, hot mix asphalt pavements to extend the pavement service life and to recycle natural resources. The treatment also reduces emissions and energy use associated with processing and hauling these materials: https://www.dot.ny.gov/programs/climate-change/activities.
- **AVM-GHG-18.** The need for electric lighting during construction shall be reduced by using ultra-reflective sign materials that are illuminated by headlights.
- **AVM-AQ-3.** The contractor will adhere to Caltrans Standard Specifications for Construction (Section 14.9-02).
- **AVM-AQ-4.** Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications.

In addition, the project would include the following design features that would help reduce GHG emissions:

- A wider shoulder on Valley Boulevard would accommodate a future bike lane where none now exists. Reducing the curve radius of the northbound loop on-ramp from eastbound Valley Boulevard would slow entering traffic to enhance safety for bicyclists and pedestrians and support use of these alternative modes.
- Existing vegetation would be protected in place and new landscaping would be installed at the ramp interchanges and within bioswales (see **AVM-VA-1** in **Section 2.2.10**). Vegetation helps absorb and sequester CO_2.

3.4.6 Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges combined with a rising sea level can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

Federal Efforts

Under NEPA assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance.

The U.S. Global Change Research Program (USGRCP) delivers a report to Congress and the president every 4 years, in accordance with the Global Change Research Act of 1990 (15 U.S.C. ch. 56A § 2921 et seq). The *Fourth National Climate Assessment*, published in 2018, presents the foundational science and the "human welfare, societal, and environmental elements of climate change and variability for 10 regions and 18 national topics, with particular attention paid to observed and projected risks, impacts, consideration of risk reduction, and implications under different mitigation pathways." Chapter 12, "Transportation," presents a key discussion of vulnerability assessments. It notes that "asset owners and operators have increasingly conducted more focused studies of particular assets that consider multiple climate hazards and scenarios in the context of asset-specific information, such as design lifetime" (U.S. Global Change Research Program, 2018).

The U.S. DOT Policy Statement on Climate Adaptation in June 2011 committed the federal Department of Transportation to "integrate consideration of climate change impacts and adaptation into the planning, operations, policies, and programs of DOT in order to ensure that taxpayer resources are invested wisely, and that transportation infrastructure, services and operations remain effective in current and future climate conditions" (Federal Highway Administration, 2011).

FHWA order 5520 (*Transportation System Preparedness and Resilience to Climate Change and Extreme Weather Events,* December 15, 2014) established FHWA policy to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that foster resilience to climate effects and sustainability at the federal, state, and local levels (Federal Highway Administration, 2019).

State Efforts

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. *California's Fourth Climate Change Assessment* (State of California, 2018) is the state's latest effort to "translate the state of climate science into useful information for action" in a variety of sectors at both statewide and local scales. It adopts the following key terms used widely in climate change analysis and policy documents:

- *Adaptation* to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.
- *Adaptive capacity* is the "combination of the strengths, attributes, and resources available to an individual, community, society, or organization that can be used to prepare for and undertake actions to reduce adverse impacts, moderate harm, or exploit beneficial opportunities."

- *Exposure* is the presence of people, infrastructure, natural systems, and economic, cultural, and social resources in areas that are subject to harm.
- Resilience is the "capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience". Adaptation actions contribute to increasing resilience, which is a desired outcome or state of being.
- *Sensitivity* is the level to which a species, natural system, or community, government, etc., would be affected by changing climate conditions.
- *Vulnerability* is the "susceptibility to harm from exposure to stresses associated with environmental and social change and from the absence of capacity to adapt." Vulnerability can increase because of physical (built and environmental), social, political, and/or economic factor(s). These factors include, but are not limited to ethnicity, class, sexual orientation and identification, national origin, and income inequality. Vulnerability is often defined as the combination of sensitivity and adaptive capacity as affected by the level of exposure to changing climate.

Several key state policies have guided climate change adaptation efforts to date. Recent state publications produced in response to these policies draw on these definitions.

EO S-13-08, issued by then-governor Arnold Schwarzenegger in November 2008, focused on sea-level rise, and resulted in the *California Climate Adaptation Strategy* (2009), updated in 2014 as *Safeguarding California: Reducing Climate Risk* (Safeguarding California Plan). The Safeguarding California Plan offers policy principles and recommendations and continues to be revised and augmented with sector-specific adaptation strategies, ongoing actions, and next steps for agencies.

EO S-13-08 also led to the publication of a series of sea-level rise assessment reports and associated guidance and policies. These reports formed the foundation of an interim *State of California Sea-Level Rise Interim Guidance Document* (SLR Guidance) in 2010, with instructions for how state agencies could incorporate "sea-level rise (SLR) projections into planning and decision making for projects in California" in a consistent way across agencies. The guidance was revised and augmented in 2013. *Rising Seas in California – An Update on Sea-Level Rise Science* was published in 2017 and its updated projections of sea-level rise and new understanding of processes and potential impacts in California were incorporated into the *State of California Sea-Level Rise Guidance Update* in 2018.

EO B-30-15, signed in April 2015, requires state agencies to factor climate change into all planning and investment decisions. This EO recognizes that effects of climate change other than sea-level rise also threaten California's infrastructure. At the direction of EO B-30-15, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies* in 2017, to encourage a uniform and systematic approach. Representatives of Caltrans participated in the multi-agency, multidisciplinary technical advisory group that developed this guidance on how to integrate climate change into planning and investment.

AB 2800 (Quirk 2016) created the multidisciplinary Climate-Safe Infrastructure Working Group,

which in 2018 released its report, *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California*. The report provides guidance to agencies on how to address the challenges of assessing risk in the face of inherent uncertainties still posed by the best available science on climate change. It also examines how state agencies can use infrastructure planning, design, and implementation processes to address the observed and anticipated climate change impacts.

Caltrans Adaptation Efforts

Caltrans Vulnerability Assessments

Caltrans is conducting climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects including precipitation, temperature, wildfire, storm surge, and sea-level rise. The approach to the vulnerability assessments was tailored to the practices of a transportation agency, and involves the following concepts and actions:

- *Exposure* – Identify Caltrans assets exposed to damage or reduced service life from expected future conditions.
- *Consequence* – Determine what might occur to system assets in terms of loss of use or costs of repair.
- *Prioritization* – Develop a method for making capital programming decisions to address identified risks, including considerations of system use and/or timing of expected exposure.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments will guide analysis of at-risk assets and development of adaptation plans to reduce the likelihood of damage to the State Highway System, allowing Caltrans to both reduce the costs of storm damage and to provide and maintain transportation that meets the needs of all Californians.

Sea Level Rise Analysis

The project is outside the coastal zone and not in an area subject to sea-level rise. Accordingly, direct impacts on transportation facilities due to projected sea-level rise are not expected.

Floodplains

The project is located in a Federal Emergency Management Agency Zone X floodplain, an area of minimal flood hazard. The San Gabriel River runs about 100 feet west of the project area, but there are no waterways within the project footprint. Average yearly precipitation in the project area between 2010 and 2017 was about 11.5 inches (see **Section 2.3.1**). The Caltrans District 7 Climate Change Vulnerability Assessment (California Department of Transportation, 2019d) projects changes in 100-year storm precipitation depths in the project area to be less than 5 percent by 2025, increasing by up to 9.9 percent by 2055, before potentially falling back to a change of less than 5 percent by 2085. These changes indicate the region can expect heavier rainfall during storm events.

The proposed project would not change hydrology or drainage patterns within the project area. Vegetation would be planted within bioswales to enhance storm water infiltration. Accordingly, the

project is likely to be resilient to precipitation changes anticipated under climate change conditions.

4.0 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, tribal consultation, and public participation for this project have been accomplished through a variety of formal and informal methods, including Project Development Team (PDT) meetings and consultation with interested parties. This chapter summarizes the results of the Department's efforts to fully identify, address, and resolve project-related issues through early and continuing coordination.

4.1 Agency Coordination and Consultation

The following coordination and consultation have been completed as part of this project.

4.1.1 Native American Consultation

Consultation with a five Native American Tribes (groups and individuals) was conducted in April 2019 in compliance with Section 106 of the National Historic Preservation Act and Assembly Bill (AB) 52. The consultation with the Native American Heritage Commission (NAHC) and Native American representatives is summarized in **Table 4.1-1**.

Table 4.1-1. Summary of Native American Consultation

Native American Group/Individual	Date of Project Notification Letter	Date and Results of Follow-Up
Gabrieleño Band of Mission Indians – Kizh Nation, Andrew Salas, Chairperson	April 10, 2019	April 17, 2019: Requested to consult on project. May 13, 2019: Mr. Salas and Mr. Teutimez met with Caltrans representative to discuss the project. November 12,2019: Mr. Salas and Mr. Teutimez met with Caltrans representative to discuss the project. November 20, 2019: Mr. Salas sent a follow-up email to Caltrans representative with ethnographic information, family history, and placename information. April 17, 2020: Caltrans representative sent an email and letter to the Kizh Nation indicating the potential for discovering buried archaeological sites is very low and that the project did not meet Caltrans' criteria for Native American monitoring during construction. May 15, 2020: Kizh Nation emailed Caltrans to indicate they did not agree with the findings of the Archaeological Survey Report (ASR). May 27, 2020: Caltrans replied via email stating the agency made good faith effort to identify cultural resources within the APE and determined there is a low potential for encountering archaeological deposits. July 2, 2020: Kizh Nation sent a letter via email to Caltrans requesting to be consulted if any ground

Table 4.1-1. Summary of Native American Consultation

Native American Group/Individual	Date of Project Notification Letter	Date and Results of Follow-Up
		disturbance would be completed for the project. The letter included a Bean and Smith 1978 Map. July 14, 2020: A teleconference between Caltrans and Kizh Nation was conducted to discuss concerns regarding the project. The Tribe explained the concerns about the area, including the historic importance of the confluence of the two rivers where many villages were located and highly utilized by tribal peoples. Additionally, the Tribe expressed a desire to continue working with Caltrans and their concern about the project. Caltrans and Kizh Nation agreed to a follow-up meeting which would include a Caltrans Tribal Liaison. August 3, 2020: A follow-up teleconference between the Kizh Nation and Caltrans was held and the Tribe expressed their concerns regarding the importance of the area. Caltrans stated that monitoring is warranted because of the concerns from the Tribe and proximity to other known sites. Therefore, monitoring would be included in the Environmental Commitments Record and on the project plans. August 3, 2020: In a follow-up email, the Kizh Nation asked who the lead agency is for this project and which federal agency is involved; the Tribe also requested the environmental documents. Caltrans replied that Caltrans, acting as FHWA, is the lead federal agency responsible for highway projects under NEPA and other federal laws. Caltrans also provided a link to the draft environmental document. August 6, 2020: Caltrans sent an email to the Kizh Nation stating that in consideration of the Tribe's concerns, and out of an abundance of caution, Caltrans would implement archaeological and tribal monitoring in the Direct APE and this measure would be included in the Environmental Commitments Record for the project. Caltrans received information from the Kizh Nation for use in the preparation of a Confidential Cultural Resources Addendum. November 10, 2020: Caltrans staff left a voicemail and an email for Chairman Salas asking more specific questions about the trade route. December 8, 2020: Caltrans staff discussed the trade route with the Kizh Nation during a regularly scheduled teleconference. December 10, 2020: Caltrans staff emailed a summary of the teleconference discussion. December 23, 2020: Caltrans staff sent the final drafts of the Cultural Resources Addendum, Finding of No

Table 4.1-1. Summary of Native American Consultation

Native American Group/Individual	Date of Project Notification Letter	Date and Results of Follow-Up
		Adverse Effect without Standard Conditions, Phased Identification Plan, and Post-review Discovery and Monitoring Plan to the Kizh Nation for a 30-day review. January 22, 2021: Caltrans staff emailed a reminder to the Kizh Nation that they should send comments on the documents by January 25, 2021. No response received to date.
Gabrielino/Tongva San Gabriel Band of Mission Indians, Anthony Morales, Chairperson	April 10, 2019	May 10, 2019: A follow-up email was sent. June 7, 2019: A follow-up phone call was made, voicemail was left.
Gabrielino/Tongva Nation, Sandonne Goad, Chairperson	April 10, 2019	May 10, 2019: A follow-up email was sent. June 7, 2019: A follow-up phone call was made, directed to a voicemail; however, the voicemail box was full. Therefore, unable to leave a message.
Gabrielino Tongva Indians of California Tribal Council, Robert Dorame, Chairperson	April 10, 2019	May 10, 2019: A follow-up email was sent. June 7, 2019: A follow-up phone call was made. Mr. Dorame did not request to consult, but requested to be notified of any finds and to be notified of any human remains found regardless of MLD determination. June 17, 2019: A second follow-up phone call was made. Mr. Dorame stated his previous comments were adequate and reiterated that he wants to be notified if any remains are found.
Gabrielino-Tongva Tribe, Charles Alvarez	April 10, 2019	May 7, 2019: The notification letter was returned marked with “return to sender.” May 10, 2019: A follow-up email was sent. June 7, 2019: A follow-up phone call was made and a voicemail was left.

4.1.2 Historic Consultation

Certified letters were sent to organizations and interested parties that were identified as having a potential interest in the undertaking in April 2019. The purpose of the letters was to inform each group of the proposed undertaking and to solicit information on known historic properties near the project area (see **Table 4.1-2**).

Table 4.1-2. Summary of Historic Consultation

Group/Organization	Date of Project Notification Letter	Date and Results of Follow-Up
City of Industry, Planning Department	April 10, 2019	No response has been received.
La Puente Valley Historical Society	April 10, 2019	No response has been received.

Table 4.1-2. Summary of Historic Consultation

Group/Organization	Date of Project Notification Letter	Date and Results of Follow-Up
Los Angeles County Department of Regional Planning	April 10, 2019	April 16, 2019: Representative from the Department responded unaware of any historic properties in the vicinity of the project.
Los Angeles Railroad Heritage Foundation	April 10, 2019	July 30, 2019: A follow-up email was sent because of the presence of a presumed eligible UPRR line within the APE. No response has been received
Historical Society of Southern California	April 10, 2019	April 14, 2019: Representative responded that the organization "does not comment on these projects."
Los Angeles Conservancy	April 10, 2019	No response has been received.
Los Angeles Historic Landmarks and Records Commission	April 10, 2019	This Commission is affiliated with the Los Angeles County Department of Regional Planning; therefore, the response is applicable to both.
Society of Architectural Historians, Southern California Chapter	April 10, 2019	No response has been received.

4.1.3 Caltrans Cultural Studies Office and State Historic Preservation Office

On July 16, 2019, a request for assumption of eligibility for the NRHP for the UPRR was submitted to the Caltrans Cultural Studies Office (CSO). An approval of the assumption of eligibility was received on July 22, 2019. A request for assumption of eligibility for the Gabrielino trade route along Valley Boulevard was submitted to the Caltrans Cultural Studies Office (CSO); approval of the assumption of eligibility was obtained on December 17, 2020. The Caltrans CSO concurred with the Finding of No Adverse Effect without Standard Conditions for the project on February 18, 2021. Caltrans initiated consultation with the State Historic Preservation Office on February 17, 2021 on the finding of no adverse effect without standard conditions and requested Section 4(f) concurrence for the historic Gabrielino Trade Route sites and UPRR. The State Historic Preservation Office did not object to the findings on March 17, 2021 (see Appendix F).

4.1.4 Transportation Conformity Working Group

Project-level PM hot-spot analysis was presented to SCAG's Transportation Conformity Working Group for discussion and review on October 22, 2019. The project was determined to be not a project of air quality concern.

4.1.5 Union Pacific Railroad

Coordination between the project team and UPRR has been conducted throughout the process. An initial diagnostic meeting was held on July 23, 2019. Following the initial meeting several coordination meetings have been held with UPRR and CPUC (October 17 and November 7, 2019 and January 29, 2020).

4.1.6 Hazardous Waste Consultation

During the development of the ISA, consultation with government officials was conducted regarding potential for hazardous materials/waste within the project area. Consultation with these officials is summarized in **Table 4.1-3**.

Table 4.1-3. Summary of Hazardous Waste Consultation

Government Agency and Contact	Date of and Reason for Contact	Follow-up
San Gabriel River Response Site		
U.S. EPA: Ray Chavira	February 25, 2019: Records requested	On February 27, 2019 Mr. Chavira responds, stating the site is associated with a removal action of solid waste debris that occurred in 1998 on the western side of the San Gabriel River in Long Beach. Based on this information, it was determined that the location is likely incorrectly mapped in the regulatory database. No further consultation regarding this site.
San Gabriel Valley Area 2 Superfund Site (Baldwin Park Operable Unit)		
U.S. EPA: Ray Chavira	February 25, 2019: Information requested regarding hazardous materials associated with site	On February 27, 2019 Mr. Chavira indicated the groundwater in the BPOU was impacted from historical industrial operations located north of the site. Continuing on to state the groundwater underlying the project area encompassed the southern-most edge of the contaminant plume, and because of the distance from the contamination source point, soil vapor originating from contaminated groundwater was not an issue within the project area. No further consultation with Mr. Chavira to date.
U.S. EPA: Wayne Praskins	July 23, 2019 Discuss this site with the project manager for U.S. EPA	On July 23, 2019 Mr. Praskins stated that the U.S. EPA would not issue protections in writing for properties or project unrelated to the Superfund case. Mr. Praskins provided recent groundwater contaminant data for groundwater monitoring wells in close proximity to the project area. No further consultation with Mr. Praskins to date.
San Gabriel Valley Area 1 Superfund Site (Suburban Water Systems Operable Unit)		
U.S. EPA Kathleen Aisling	September 2019 Multiple discussions	In September 2019, Group Delta (preparer for ISA) participated in several discussions with Ms. Aisling. Ms. Aisling stated the U.S. EPA took jurisdiction over deep groundwater impacts for all facilities within a portion of the southeast San Gabriel Valley, including portions of the City of Industry. This included APN 8564-007-008. Ms. Aisling stated that future landowners or tenants of this site who wish to avoid CERCLA liability must comply with CERCLA's Bona Fide Prospective Purchaser provisions.

Table 4.1-3. Summary of Hazardous Waste Consultation

Government Agency and Contact	Date of and Reason for Contact	Follow-up
		Additionally, Ms. Aisling stated that U.S. EPA Region 9 would be willing to consider recommending issuance of a comfort letter to local agencies assuming ownership of the property. However, the Comfort Letter would only apply to the deeper drinking water aquifer. No further consultation with Ms. Aisling to date.
Alcoa Global Fasteners, Inc. (APN 8564-007-008)		
Los Angeles RWQCB Shervin Milani	September 2019 Multiple discussions	In September 2019, Group Delta participated in multiple discussions with Ms. Milani regarding this parcel. Ms. Milani stated that a Covenant and Environmental Restriction on the property was recorded between Alcoa Global Fasteners, Inc. and the Los Angeles RWQCB. According to Ms. Milani a Health and Safety Plan and a Soil Management Plan would need to be submitted to the Los Angeles RWQCB prior to any earthwork within the parcel boundaries. In addition, Ms. Milani stated that the covenant would likely not apply to new public right of way where redevelopment is no longer possible.

4.1.7 Air Quality Project Level Conformity Determination

On October 30, 2020, a request for project level conformity determination for this project was submitted to FHWA and on November 20, 2020, FHWA determined that the project-level transportation conformity requirements of 40 CFR Part 93 have been met. The FHWA Project Level Conformity Determination for this project is contained in Appendix E.

4.1.8 Species Lists

Species lists were initially obtained from the NOAA Fisheries Service on January 8, 2019 and the USFWS on January 29, 2019, and updated species lists from both agencies were provided on January 20, 2021. The species lists provide information about the threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur in the vicinity of a proposed project. The species lists provided by the NOAA Fisheries Service and USFWS are included in Appendix G.

4.2 Public Circulation of Draft Initial Study/Environmental Assessment

The Draft Initial Study/Environmental Assessment (IS/EA) was circulated for public review from June 15, 2020 to July 15, 2020 a total of 31 days. A Notice of Availability (NOA), including an opportunity for a public hearing, was mailed to agencies, Native American representatives, elected officials, libraries, schools, interested parties who previously expressed interest in the project, and property owners within 300 feet of the project limits. In addition, the NOA was

published in three newspapers: *LA Opinion* (June 16, 2020), *San Gabriel Valley Tribune* (June 17, 2020), and *Chinese Daily News* (June 18, 2020). The NOA included a description of the project, location where the IS/EA could be reviewed electronically (http://media.metro.net/2020/I-605-Valley-Blvd-ISEA-Master-signed-May2020.pdf.), and the date of the end of the public comment period.

4.3 Comments Received on the Draft Initial Study/Environmental Assessment

As shown in **Table 4.3-1**, a total of six comment letters and emails were received: three from regional agencies, one from a Native American Tribe, and two from individuals. A written response to all environmental comments received during the public review period as well as the letters are provided in **Appendix I**. Each comment has been assigned a letter/number code (see **Table 4.3-1**). In response to some of the comments received, the text in the IS/EA ND/FONSI has been revised.

Table 4.3-1. Comment Letters Received on Draft Initial Study/Environmental Assessment

Letter/ Comment No.	Commenter	Date of Letter	Category	Page No. of Response
NA-1	Kizh Nation	July 2, 2020	Native American Representative	I-2
I-1	Robert Torres	July 14, 2020	Individual	I-5
I-2	Avocado Heights Community	July 15, 2020	Individual	I-8
R-1	San Gabriel Valley Water Company	July 14, 2020	Regional/County Agency	I-30
R-2	Los Angeles County Sanitation Districts	July 15, 2020	Regional/County Agency	I-35
R-3	Los Angeles County Department of Water and Power	July 16, 2020	Regional/County Agency	I-37

5.0 List of Preparers

The following persons were responsible for preparation of this Initial Study with Negative Declaration/Environmental Assessment with Finding of No Significant Impact and supporting technical studies.

5.1 California Department of Transportation, District 7

Jason Roach, Senior Environmental Planner, Division of Environmental Planning. 22 years' experience

Larry Lai, Associate Environmental Planner, Division of Environmental Planning. 2 years' experience

5.2 NCM Engineering

Michael Crull, Senior Project Manager. 39 years' experience. Contribution: Project Manager.

Nick Haigh, Senior Transportation Engineer. 29 years' experience. Contribution: Project Engineer

5.3 Ambient

Kurt Legleiter, Principal. 26 years' experience. Contribution: Air Quality Report and Noise Study Report.

5.4 Duke CRM

Curt Duke, M.A., RPA, Principal Investigator, Prehistoric Archaeologist. 24 years' experience in California archaeology (PQS equivalence). Contribution: Archaeological Survey Report

Alexandria Bulato, B.A, Archeologist. 3 years' experience in California archeology (PQS equivalence-Lead Archaeological Surveyor). Contribution: Archaeological Survey Report

5.5 GPA Consulting

Laura Comstock, Senior Environmental Planner. 8 years' experience. Contribution: Project Manager.

Marieka Schrader, Senior Associate Biologist. 19 years' experience. Contribution: Environmental Document preparation.

Adelina O. Muñoz, Senior Biologist. 20 years' experience. Contribution: Biological Resources Project Management and biological field surveys.

Nicole Greenfield, Associate Environmental Planner. 6 years' experience. Contribution: Environmental Document preparation.

Anastasia Shippey, Associate Biologist/Environmental Planner. 6 years' experience. Contribution: Environmental Document preparation.

Alen Estrada-Rodas, Environmental Planner. 2.5 years' experience. Contribution: Environmental Document preparation.

Hannah Hart, Biologist. 2.5 years' experience. Contribution: Environmental Document preparation

and biological field surveys.

5.6 Group Delta

Glenn Burks, Ph.D., P.E., Director of Environmental Services. 24 years' experience. Contribution: Initial Site Assessment.

6.0 Distribution List

6.1 Federal Agencies

U.S. Environmental Protection Agency, NEPA Review Region IX Office Connell Dunning NEPA Reviewer – Transportation 75 Hawthorne Street San Francisco, CA 94105	Federal Highway Administration California Division Hector Santiago P.E. Project Delivery Team Leader, CalSouth Deputy Office Director 888 S. Figueroa Street, Suite 440 Los Angeles, CA 90017
U.S. Department of Energy Office of Environmental Management William White Senior Advisor for Environmental Management 1000 Independence Avenue, SW Washington DC 20585	U.S. Fish and Wildlife Service Carlsbad Fish and Wildlife Office Jonathan Snyder Division Chief, Los Angeles and Orange Counties 2177 Salk Avenue, Suite 250 Carlsbad, CA 92008
Federal Railroad Administration Amanda Ciampolillo Environmental Protection Specialist 1200 New Jersey Ave SE Washington DC 20590	Office of Environmental Affairs Department of Health and Human Services 200 Independence Avenue SW, Room 537 F Washington DC 20201
Centers for Disease Control and Prevention National Center for Environmental Health Robert R. Redfield, Director 1600 Clifton Road Atlanta, GA 30333	U.S. Army Corps of Engineers Los Angeles District Spencer D. MacNeil Chief Transportation Specialist Projects Branch, Regulatory Division 915 Wilshire Boulevard Los Angeles, CA 90017
U.S. Army Corps of Engineers Los Angeles District Stephanie Hall Environmental Protection Specialist 915 Wilshire Boulevard Los Angeles, CA 90017	Federal Transit Administration, Region IX Ray Tellis, Regional Administrator San Francisco Federal Building 90 7th Street, Suite 15-300 San Francisco, CA 94103
Federal Highway Administration Office of Project Development and Environmental Review Emily Biondi, Director 1200 New Jersey Avenue, SE Washington DC 20590	Federal Emergency Management Agency Region IX 1111 Broadway, Suite 1200 Oakland, CA 94607

Office of Environmental Policy and Compliance Department of Interior Main Interior Building, MS 2462 1849 C Street, NW Washington DC 20240	

6.2 State Agencies

State Water Resources Control Board Eileen Sobeck, Executive Officer 1001 I St, 22nd Floor Sacramento, CA 95814	California Public Utilities Commission Sacramento Office Michael Picker, President 770 L Street Sacramento, CA 95816
California Highway Patrol Mark Garrett, Southern Division Chief 411 N. Central Avenue, Suite 410 Glendale, CA 91203	California Department of Fish and Wildlife Senior Environmental Supervisor 4665 Lampson Avenue Los Alamitos, CA 90720
California Environmental Protection Agency Office of the Secretary Jared Blumenfeld Secretary for Environmental Protection 1001 I Street, P.O. Box 2815 Sacramento, CA 95812	Office of Historic Preservation Julianne Polanco State Historic Preservation Officer 1725 23rd Street, Suite 100 Sacramento, CA 95816
California Department of Toxic Substances Control Chatsworth Regional Office Haissam Salloum 9211 Oakdale Avenue, Chatsworth, CA 91311	California Transportation Commission Tine Sloan, Commission Chair 1120 N Street, Room 2221 (MS-52) Sacramento, CA 95814
California Department of Toxic Substances Control Office of Communications Rosanna Westmoreland, Deputy Director P.O. Box 806 Sacramento, CA 95812-0806	California Native Plant Society Steve Hartman, Board President 2707 K Street, Suite 1 Sacramento, CA 95816-5113
Department of Education Chief, Bureau of School Planning 1430 N Street Sacramento, CA 95814	Department of Water Resources Karla Nemeth, Director 1416 9th Street, Room 1115-1 Sacramento, CA 94236-0001

State Department of Housing and Community Development Ben Metcalf, Director 1800 Third Street Sacramento, CA 95811-6942	California State Clearinghouse 1400 Tenth Street Sacramento, CA 95814
California Department of Parks and Recreation Lisa Mangat, Director 915 I Street, 5th Floor Sacramento, CA 95814	State Lands Commission Jennifer Lucchesi, Executive Officer 100 Howe Avenue, Suite 100 Sacramento, CA 95825
Energy Commission Drew Bohan, Executive Director 1516 Ninth Street Sacramento, CA 95814	California Department of Forestry and Fire Protection P.O. Box 944246 Sacramento, CA 94244-2460
California Air Resources Board Richard Corey, Executive Officer Executive Office P.O Box 2815 Sacramento, CA 95812	

6.3 Regional/County Agencies

Southern California Association of Governments Main Office Sarah Jepson, Planning Director 818 W 7th Street, #1200 Los Angeles, CA 90017	South Coast Air Quality Management District Derrick Alatorre, Deputy Executive Officer 21865 Copley Drive Diamond Bar, CA 91765
Sanitation Districts of Los Angeles County Robert C. Ferrante Chief Engineer and General Manager 1955 Workman Mill Road, P.O. Box 4998 Whittier, CA 90607	San Gabriel Valley Council of Governments Marisa Creter, Executive Director 1000 South Fremont Avenue, Unit #42 Alhambra, CA 91803
Regional Water Quality Control Board Los Angeles Region Renee Purdy, Executive Officer 320 West Fourth Street, Suite 200 Los Angeles, CA 90013	Los Angeles County Sheriff's Department Alex Villanueva, Sheriff Facilities Planning Bureau 211 West Temple Street Los Angeles, CA 90012
Los Angeles County Office of the Assessor Kenneth Hahn Hall of Administration Jeffrey Prang, Assessor 500 West Temple Street, Room 225 Los Angeles, CA 90012	Native American Heritage Commission James Ramos, NAHC Chairperson 1550 Harbor Boulevard, Suite 100 West Sacramento, CA 95691

Los Angeles County Department of Parks and Recreation John Wicker, Director 433 S. Vermont Avenue Los Angeles, CA 90020	Los Angeles County Metropolitan Transportation Authority James de la Loza, Chief Planning Officer One Gateway Plaza Los Angeles, CA 90012-2952
Los Angeles County Department of Public Works Programs Development Division 900 S. Fremont Avenue Alhambra, CA 91803	Los Angeles County Fire Department Environmental Review Unit 12605 Osborne Street Pacoima, CA 91331-2129
Los Angeles County Registrar- Recorder/County Clerk 12400 Imperial Highway Norwalk, CA 90650	Greater Los Angeles County Vector Control District Truc Dever, General Manager 12545 Florence Avenue Santa Fe, CA 90670

6.4 Native American Representatives

Gabrieleño Band of Mission Indians – Kizh Nation Andrew Salas, Chairperson P.O. Box 393 Covina, CA 91723	Gabrielino/Tongva San Gabriel Band of Mission Indians Anthony Morales, Chairperson P.O. Box 693 San Gabriel, CA 91778
Gabrielino/Tongva Nation Sandonne Goad, Tribal Chairwoman 106 1/2 Judge John Aiso Street, #231 Los Angeles, CA 90012	Gabrielino Tongva Indians of California Tribal Council Robert F. Dorame, Tribal Chair P.O. Box 490 Bellflower, CA 90707
Gabrielino-Tongva Tribe Linda Candelaria, Tribal Councilwoman 1999 Avenue of the Stars, Ste. 1100 Los Angeles, CA 90067	San Fernando Band of Mission Indians Donna Smith Yocum, Chairwoman P.O. Box 221838 Newhall, CA 91322
Barbareño/Ventureño Band of Mission Indians, Julie Tumamait- Stenslie, Chair P.O. Box 364 Ojai, CA 93024	San Manuel Band of Mission Indians Lee Clauss, Cultural Resources Management Director 26569 Community Center Drive Highland, CA 92346
Soboba Band of Luiseno Indians Scott Coazart, Chairman P.O. Box 487 San Jacinto, CA 92581	

6.5 Elected Officials – Federal

The Honorable Dianne Feinstein U.S. Senator 11111 Santa Monica Boulevard, Suite 915 Los Angeles, CA 90025	The Honorable Alex Padilla U.S. Senator B03 Russell Senate Office Building Washington, DC 20510
The Honorable Grace Napolitano United States Congress Member, 32nd District 4401 Santa Anita Ave Suite 201 El Monte, CA 91731	

6.6 Elected Officials – State

The Honorable Susan Rubio California State Senator, District 22 100 S. Vincent Ave, Ste. 401 West Covina, CA 91790	The Honorable Ian Calderon Assembly Member, District 57 13181 Crossroads Parkway North Suite 160 City of Industry, CA 91746-3497

6.7 Elected Officials – County

County of Los Angeles Board of Supervisors, 1st District Supervisor Hilda L. Solis 500 West Temple St., Suite 383 Los Angeles, CA 90012	County of Los Angeles Board of Supervisors, 4th District Supervisor Janice Hahn 500 West Temple St., Suite 383 Los Angeles, CA 90012

6.8 Elected Officials – City

City of Industry Planning Commission Michael Greubel, Chair 15625 East Stafford Street #100 City of Industry, CA 91744	City of Industry Cory Moss, Mayor 15625 East Stafford Street #100 City of Industry, CA 91744

6.9 Libraries

La Puente Library Jeanette Freels Library Manager 15920 E Central Avenue La Puente, CA 91744	

6.10 Schools

Los Angeles Unified School District Superintendent Austin Beutner 333 South Beaudry Avenue, 24th Floor Los Angeles, CA 90017	Bassett Unified School District Superintendent Debra French 904 N Willow Avenue La Puente, CA 91746
Hacienda La Puente Unified School District Superintendent Cynthia Parulan-Colfer 15959 E. Gale Ave City of Industry, CA 91745	

6.11 Interested Groups and Organizations

Los Angeles County Economic Development Corporation Barbara Levine Senior Regional Manager – Gateway Cities 444 South Flower Street, Suite 3700 Los Angeles, CA 90071	San Gabriel Valley Water Company Ron Quillicy 11142 E Garvey Avenue El Monte, CA 91733
Sanitation Districts of Los Angeles County Grace R. Chan Chief Engineer and General Manager P.O. Box 4998 Whittier, CA 90607	Industry Business Council Dean Yamagata 15651 Stafford Street City of Industry, CA 91744
Bureau of Indian Affairs Michael Adams, Acting Deputy Ethics Counselor 2800 Cottage Way Sacramento, CA 95825	California Contract Cities Association Marcel Rodarte, Executive Director 17315 Studebaker Road, Suite 210 Cerritos, CA 90703
California Conservation Corps Bruce Saito, Director 4366 S. Main Street Los Angeles, CA 90037	San Gabriel Valley Conservation Corps Norma J. Quinones, Executive Director 10900 Mulhall Avenue El Monte, CA 91731
Breathe California of Los Angeles Marc Carrel, President & CEO 5858 Wilshire Boulevard, Suite 300 Los Angeles, CA 90036	California Trucking Association (CTA) Eric Sauer Senior Vice President, Government Affairs 3251 Beacon Boulevard West Sacramento, CA 95691
Communications Workers of America Lynn Johnson, District Director 12215 Telegraph Road, Suite 210 Santa Fe Springs, CA 90670	Reinforcing Ironworkers, Local 416 Richard Tyler Bird, President 13830 San Antonio Drive Norwalk, CA 90650

La Puente Valley County Water District Greg Galindo, General Manager 112 N First Street La Puente, CA 91744	Bike San Gabriel Valley Andrew Fung Yip, Program Specialist 10900 Mulhall Street El Monte, CA 91731
Southern California Edison Peter Pham, Senior Project Manager 1325 S Grand Avenue Santa Ana, CA 92705	Southern California Gas 11912 E Valley Boulevard El Monte, CA 91732
Amigos de los Rios Claire Robinson, Managing Director 908 E Altadena Drive Altadena, CA 91001	

7.0 References

AMBIENT Air Quality and Noise Consulting. (2020a). *Air Quality Report, I-605/Valley Interchange Improvements.* Los Angeles, California: California Department of Transportation.

AMBIENT Air Quality and Noise Consulting, LLC. (2020b). *Noise Study Report for I-605/Valley Boulevard Interchange Improvements Project.* Los Angeles, California: California Department of Transportation.

Cal Fire. (2007, November 7). *Fire Hazard Severity Zones in SRA Los Angeles County.* Retrieved April 3, 2019, from Fire Hazard Severity Zones: https://osfm.fire.ca.gov/media/6705/fhszs_map19.pdf

Cal Fire. (2012, May). *Very High Fire Hazard Severity Zones in LRA, Los Angeles County.* Retrieved April 3, 2019, from Fire Hazard Severity Zones: https://osfm.fire.ca.gov/media/7280/losangelescounty.pdf

California Air Resources Board. (2008). *Climate Change Draft Scoping Plan: Measure Documentation Supplement.* Retrieved November 6, 2019, from https://ww3.arb.ca.gov/cc/scopingplan/document/measure_documentation.pdf

California Air Resources Board. (2017). *EMFAC2017 Web Database.* Retrieved from https://www.arb.ca.gov/emfac/2017/

California Air Resources Board. (2019a). *California Greenhouse Gas Emissions Inventory–2019 Edition.* Retrieved August 21, 2019, from https://ww3.arb.ca.gov/cc/inventory/data/data.htm

California Air Resources Board. (2019b). *California Greenhouse Gas Emissions for 2000 to 2017, Trends of Emissions and Other Indicators*. Retrieved August 21, 2019, from https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2017/ghg_inventory_trends_00-17.pdf

California Air Resources Board. (2019c). *SB 375 Regional Plan Climate Targets*. Retrieved August 21, 2019, from https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets

California Department of Conservation. (2016). *Compilation of Quaternary Surficial Deposits*. Retrieved January 23, 2020, from DOC Maps: California Geology: https://maps.conservation.ca.gov/cgs/QSD/

California Department of Fish and Wildlife. (2019, January 8). *Biogeographic Information and Observation System Habitat Connectivity Viewer*. Retrieved from https://www.wildlife.ca.gov/Data/BIOS

California Department of Housing and Community Development. (2019). *State Income Limits for 2019.* Retrieved from www.hcd.ca.gov/grants-funding/income-limits/state-and-federal-income-limits.shtml

California Department of Transportation. (2008, October). *Scenic Highway Guidelines.* Retrieved from California Department of Transportation:

http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/guidelines/scenic_hwy_guidelines_04-12-2012.pdf

California Department of Transportation. (2011a). *Volume 4: Community Impacts Assessment.* Retrieved from Caltrans Standard Environmental Reference: https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-4-community-impacts-assessment

California Department of Transportation. (2011b). *Traffic Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barriere Projects.* Division of Environmental Analysis. Sacramento, California: California Department of Transportation. Retrieved November 18, 2019, from http://website.dot.ca.gov/env/noise/docs/traffic-noise-protocol-may2011.pdf

California Department of Transportation. (2014, August 11). *Chapter 8 - Paleontology*. Retrieved May 29, 2019, from Standard Environmental Reference - Environmental Handbook, Volume 1: Guidance for Compliance: http://www.dot.ca.gov/ser/vol1/sec3/physical/Ch08Paleo/chap08paleo.htm

California Department of Transportation. (2016, June). *California Transportation Plan 2040.* Retrieved June 2018, from Caltrans State Planning: https://dot.ca.gov/programs/transportation-planning/state-planning/california-transportation-plan

California Department of Transportation. (2017a). *Construction Site BMP Manual.* Sacramento: California Department of Transportation. Retrieved June 2018, from http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm

California Department of Transportation. (2017b, January 13). Caltrans Fault Database V2C. Sacramento. Retrieved 2018, from http://dap3.dot.ca.gov/ARS_Online/technical.php

California Department of Transportation. (2017c, November). *Highway Design Manual* (Sixth Edition ed.). Los Angeles, CA: Publication Distibution Unit. Retrieved March 2018, from Caltrans: http://www.dot.ca.gov/design/manuals/hdm.html

California Department of Transportation. (2018). *Standard Specifications.* Sacramento, California: California Department of Transportation. Retrieved November 20, 2019, from California Department of Transportation: https://dot.ca.gov/programs/design/ccs-standard-plans-and-standard-specifications

California Department of Transportation. (2019a). *Preliminary Utility Impact Report.* Los Angeles, California: California Department of Transportation.

California Department of Transportation. (2019b). *Scenic Resource Evaluation and Visual Impact Assessment Memorandum.* Los Angeles, California: California Department of Transportation.

California Department of Transportation. (2019c). *Statewide Trash Implementation Plan.* Stormwater Management Program. Sacramento, CA: Division of Environmental Analysis. Retrieved August 16, 2019, from https://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/caltrans/trash_imp

lement_plan_20181130.pdf

California Department of Transportation. (2019d). *Caltrans Climate Change Vulnerability Assessments District 7 Technical Report.*

California Department of Water Resources. (2003). *Bulletin 118, California's Groundwater.* Retrieved April 18, 2019, from California Department of Water Resources: http://www.water.ca.gov/pubs/groundwater/bulletin_118/california's_groundwater__bulletin_118_-_update_2003_/bulletin118_4-sc.pdf

California Department of Water Resources. (2019). *Groundwater Basin Boundary Assessment Tool*. Retrieved April 18, 2019, from Groundwater Management: Basin Boundary Modifications: https://gis.water.ca.gov/app/bbat/

California Geological Survey. (2017, June). *Earthquake Zones of Required Investigation El Monte Quadrangle.* Retrieved February 6, 2019, from Seismic Hazards Program: http://www.conservation.ca.gov/cgs/shp

California Institute of Technology. (2013, January 31). *Significant Earthquakes and Faults*. Retrieved June 2018, from Southern California Earthquake Data Center: http://scedc.caltech.edu/significant/fault-index.html

California Native Plant Society. (2019, February 4). *Eriogonum fasciculatum Shrubland Alliance*. Retrieved from Manual of California Vegetation (Online Version): http://vegetation.cnps.org/alliance/203

City of Industry. (2014a, June 12). *City of Industry - General Plan.* Retrieved September 2018, from City of Industry - Codes, General Plan, and Regulations: http://www.cityofindustry.org/city-hall/departments/development-services/planning/codes-and-regulations

City of Industry. (2014b). *General Plan Land Use Map.* Retrieved from City of Industry General Plan: http://www.cityofindustry.org/home/showdocument?id=414

City of Industry. (2020). *Project Under Construction.* Retrieved from Public Works and Engineering Department: https://www.cityofindustry.org/city-hall/departments/development-services/public-works-engineering/projects-in-construction

Council on Environmental Quality. (1997). *Environmental Justice Guidance under the National Environmental Policy Act Appendix A.*

County of Los Angeles Department of Parks and Recreation. (n.d.). *Department of Parks and Recreation Annual Report 2005-2006.* Retrieved from http://file.lacounty.gov/SDSInter/dpr/069242_Annual_Report_2005-2006.pdf

Duke Cultural Resources Management, LLC. (2020). *Draft Archaeological Survey Report.* Los Angeles, California: California Department of Transportation.

Federal Highway Administration. (2006, August 24). *Construction Noise Handbook.* Retrieved August 1, 2019, from FHWA - Environment - Noise: https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/

Federal Highway Administration. (2011, June). *US DOT Policy Statement On Climate Change Adaptation*. Retrieved January 16, 2020, from Office of Planning, Environment, & Realty (HEP): https://www.fhwa.dot.gov/environment/sustainability/resilience/policy_and_guidance/usdot.cfm

Federal Highway Administration. (2016, October). *Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents*. Retrieved November 2019, from Air Quality Transportation & Toxic Air Pollutants: https://www.fhwa.dot.gov/environMent/air_quality/air_toxics/policy_and_guidance/

Federal Highway Administration. (2019, February 7). *Sustainability*. Retrieved January 16, 2020, from Office of Planning, Environment, & Realty: https://www.fhwa.dot.gov/environment/sustainability/resilience/

Federal Highway Administration. (n.d.). *Sustainable Highways Initiative.* Retrieved August 21, 2019, from https://www.sustainablehighways.dot.gov/overview.aspx

Federal Interagency Working group on Environmental Justice and NEPA Committee. (2016). *Promising Practices for EJ Methodologies in NEPA Reviews.* Retrieved from https://www.fws.gov/environmental-justice/pdfs/nepa_promising_practices_document_2016.pdf

GPA Consulting. (2020). *Draft Historic Property Survey Report.* Los Angeles, California: California Department of Transportation.

GPA Consulting. (2019). *Natural Environment Study for the I-605/Valley Boulevard Interchange Improvements Project.* Los Angeles, California: California Department of Transportation.

Group Delta. (2019a). *District Preliminary Geotechnical Report I-605/Valley Boulevard Interchange Improvement Project.* Rancho Santa Margarita, CA: NCM Engineering.

Group Delta. (2019b). *Initial Site Assessment (ISA) for the Interstate 605/Valley Boulevard Interchange Improvement Project.* Los Angeles, CA.

Intueor Consulting, Inc. (2019). *Traffic Operations Analysis Report for I-605/Valley Boulevard Interchange Improvements Project.* Los Angeles, California: NCM Engineering.

Los Angeles County. (2015). *Los Angeles County General Plan 2035.* Los Angeles, California. Retrieved from http://planning.lacounty.gov/generalplan/

Los Angeles County Department of Public Works. (2019, January 29). *San Gabriel River Watershed*. Retrieved from https://dpw.lacounty.gov/wmd/watershed/sg/

Los Angeles Regional Water Quality Control Board. (2012, November 8). *MS4 Discharges within the Coastal Watersheds of Los Angeles County, Order No. R4-2012-0175, NPDES No. CAS004001*. Retrieved July 28, 2015, from www.waterboards.ca.gov: http://www.waterboards.ca.gov/losangeles/water_issues/programs/stormwater/municipal/la_ms4/2012/Order%20R4-2012-0175%20-%20A%20Final%20Order%20revised.pdf

Los Angeles Regional Water Quality Control Board. (2014, September). *Water Quality Control Plan Los Angeles Region.* Retrieved July 2018, from Los Angeles RWQCB Basin Plan:

http://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.shtml

National Oceanic and Atmospheric Administration. (2018). *Climate Data Online*. Retrieved July 2018, from National Centers for Environmental Information: https://www.ncdc.noaa.gov/cdo-web/

NCM Engineering Corporation. (2019). *Long Form - Stormwater Date Report: I-605 Valley Boulevard Interchange Improvements Project.* Los Angeles, CA: Caltrans.

Paleo Environmental Associates, Inc. (2019). *I-605 Corridor Improvement Project Paleontological Identification Report-Paleontological Evaluation Report.* Los Angeles, CA: California Department of Transportation.

South Coast Air Quality Management District. (1980). *A Climatological/Air Quality Profile, California South Coast Air Basin.*

South Coast Air Quality Management District. (1993, April). *CEQA Air Quality Handbook.* Retrieved September 13, 2018, from California Energy Commission: https://www.energy.ca.gov/sitingcases/ivanpah/documents/others/2009-08-12_Attachemt_AQ1-1_CEQA_Air_Quality_Handbook_TN-47534.PDF

South Coast Air Quality Management District. (2017, March). *Final 2016 Air Quality Management Plan.* Retrieved September 13, 2018, from Final 2016 AQMP: http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp

South Coast Air Quality Management District. (2019). *National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin.* Retrieved November 2019, from South Coast AQMD: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=14

Southern California Association of Governments. (2008). *Regional Comprehensive Plan.* Retrieved from http://www.scag.ca.gov/Documents/f2008RCP_Complete.pdf

Southern California Association of Governments. (2016). *The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy.* Retrieved from Southern California Association of Governments: http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx

Southern California Association of Governments. (2018, September 6). *2016 RTP/SCS Amendments - Amendment #3.* Retrieved November 6, 2019, from 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy: http://scagrtpscs.net/Pages/2016RTPSCSAmendments.aspx

Southern California Association of Governments. (2019a, September 4). *2019 Approved FTIP - Los Angeles County State Highway.* Retrieved November 6, 2019, from Federal Transportation Improvement Program: http://ftip.scag.ca.gov/Pages/2019/approved.aspx

Southern California Association of Governments. (2019b, May). *Local Profiles.* Retrieved November 8, 2019, from SCAG - Data and Tools: http://www.scag.ca.gov/DataAndTools/Pages/LocalProfiles.aspx

Southern California Association of Governments. (2020). *The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy .* Retrieved from Southern California Association of Governments: https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal-plan_0.pdf?1606001176

Southern California Association of Governments. (2021, February 15). *Connect SoCal.* Retrieved November 6, 2019, from 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy: https://scag.ca.gov/read-plan-adopted-final-plan

State of California. (2018). *California's Fourth Climate Change Assessment*. Retrieved August 21, 2019, from http://www.climateassessment.ca.gov/

State of California. (2019). *California Climate Strategy*. Retrieved August 21, 2019, from https://www.climatechange.ca.gov/.

State Water Resources Control Board. (2013, January 23). *Construction General Permit Fact Sheet.* Retrieved from 2009-0009-DWQ CONSTRUCTION GENERAL PERMIT: http://www.waterboards.ca.gov/water_issues/programs/stormwater/docs/constpermits/wqo_2009_0009_factsheet.pdf

State Water Resources Control Board. (2018a). *San Gabriel River Watershed*. Retrieved July 11, 2018, from https://www.waterboards.ca.gov/rwqcb4/water_issues/programs/regional_program/Water_Quality_and_Watersheds/san_gabriel_river_watershed/summary.shtml

State Water Resources Control Board. (2018b, April 11). *Final 2014/2016 California Integrated Report (Clean Water Act Section 303(d) List / 305 (b) Report)*. Retrieved July 2018, from Impaired Water Bodies: https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml

U.S. EPA. (2018). *Inventory of U.S. Greenhouse Gas Emissions and Sinks.* Retrieved August 21, 2019, from https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks

U.S. Global Change Research Program. (2018). *Fourth National Climate Assessment*. Retrieved January 16, 2020, from https://nca2018.globalchange.gov/downloads/NCA4_2018_FullReport.pdf

United States Census Bureau. (2018). *2013-2017 American Community Survey 5-Year Estimates*. Retrieved July 2, 2018, from American FactFinder: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

United States Department of Agriculture. (2003, October 20). *Introduced, Invasive, and Noxious Plants - California State Listed Noxious Weeds*. Retrieved from United States Department of Agriculture: https://plants.usda.gov/java/noxious?rptType=State&statefips=06

United States Fish and Wildlife. (2013). *Migratory Bird Treaty Act Protected Species (10.13 List)*. Retrieved from Migratory Bird Program: https://www.fws.gov/birds/management/managed-species/migratory-bird-treaty-act-protected-species.php

Watershed Conservation Authority. (2011, March 28). *Duck Farm River Park*. Retrieved from Watershed Conservation Authority: https://www.wca.ca.gov/duck_farm_river_park

Watershed Conservation Authority. (2013, April). *Emerald Necklace Feasibility Study and Implementation Plan.* Retrieved from https://www.wca.ca.gov/emerald_necklace_greening_and_trails

Watershed Conservation Authority. (2016, October). *Emerald Necklace Feasibility Study & Implementation Plan*. Retrieved from Emerald Necklace: https://www.wca.ca.gov/emerald_necklace_greening_and_trails

Watershed Conservation Authority. (n.d.). *Who Are We.* Retrieved from https://www.wca.ca.gov/who_we_are

Western Regional Climate Center. (2019). Retrieved June 2018, from Western Regional Climate Center: https://wrcc.dri.edu/

Appendix A. Section 4(f) De Minimis Determination

A1 Section 4(f) *De Minimis* Determination

This section of the document discusses *de minimis* impact determinations under Section 4(f). Section 6009(a) of SAFETEA-LU amended Section 4(f) legislation at 23 United States Code (USC) 138 and 49 USC 303 to simplify the processing and approval of projects that have only *de minimis* impacts on lands protected by Section 4(f). This amendment provides that once the U.S. Department of Transportation (USDOT) determines that a transportation use of Section 4(f) property, after consideration of any impact avoidance, minimization, and mitigation or enhancement measures, results in a *de minimis* impact on that property, an analysis of avoidance alternatives is not required and the Section 4(f) evaluation process is complete. FHWA's final rule on Section 4(f) *de minimis* findings is codified in 23 Code of Federal Regulations (CFR) 774.3 and CFR 774.17.

Responsibility for compliance with Section 4(f) has been assigned to the Department pursuant to 23 USC 326 and 327, including *de minimis* impact determinations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a project action.

A *de minimis* impact is one that, after taking into account any measures to minimize harm (such as avoidance, minimization, mitigation or enhancement measures), results in either:

- A Section 106 finding of no adverse effect or no historic properties affected on a historic property under the National Historic Preservation Act (NHPA); or
- A determination that the project would not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f).

The impacts of a transportation project on a park, recreation area, or wildlife and waterfowl refuge that qualifies for Section 4(f) protection may be determined to be *de minimis* if:

1. The transportation use of the Section 4(f) property, together with any impact avoidance, minimization, and mitigation or enhancement measures incorporated into the project, does not adversely affect the activities, features, or attributes that qualify the resource for protection under Section 4(f);
2. The public has been afforded an opportunity to review and comment on the effects of the project on the protected activities, features, or attributes of the Section 4(f) property; and
3. The official(s) with jurisdiction over the property, after being informed of the public comments and FHWA's intent to make the *de minimis* impact finding, concur in writing that the project will not adversely affect the activities, features, or attributes that qualify the property for protection under Section 4(f).

Historic resources of national, state, or local significance are identified during the process required under Section 106 of the NHPA and its implementing regulations. Historic resources of national, state, or local significance identified during the Section 106 process that are listed or eligible for listing in the NRHP must then be considered in the Section 4(f) (Office of Planning Environment and Realty, 2012). As discussed in the following section, the project would result in a use of the Union Pacific Railroad (UPRR) and a Gabrielino trade route, which are both historic properties that are protected under the provisions of Section 4(f). The project would have no adverse effect

on the UPRR and the Gabrielino trade route under Section 106 of the NHPA. Therefore, the UPRR and Gabrielino trade route have been determined to incur Section 4(f) *de minimis* impacts.

For historic resources of national state, or local significance, the official with jurisdiction over the property has been informed of the intent to make a *de minimis* impact determination. After

Caltrans initiated formal consultation with the official(s) with jurisdiction over the UPRR and the Gabrielino trade route, and informed the agency that Caltrans intended to make *de minimis* impact determinations for the historic resources. During the consultation process, the relevant information from this report was provided to the agency for their concurrence that the project would not adversely affect the activities, features, or attributes that qualifies the property for protection under Section 4(f).

A1.1 Union Pacific Railroad

Information provided in this section was obtained from the Finding of No Adverse Effect (FNAE) (GPA Consulting, 2020a) and Historic Property Survey Report (HPSR) (GPA Consulting, 2020b) prepared for the project.

Applicability of Section 4(f) for Union Pacific Railroad

The Area of Potential Effects (APE) for the project, which is shown in Attachment B to the HPSR, includes UPRR tracks (Resource # P-19-186112 on the APE Map). The UPRR was historically part of the Southern Pacific Railroad's Los Angeles Division and is associated with the development of the Los Angeles area in the late nineteenth and early twentieth century. This property was assumed eligible for listing in the National Register of Historic Places and California Register of Historical Resources for the purposes of this project only due to its large size and the project's limited potential for effects. Therefore, the UPRR tracks are a protected resource under the provisions of Section 4(f). It is also presumed to be a historical resource for the purposes of CEQA. The official with jurisdiction is the State Historic Preservation Officer (SHPO).

The segment of UPRR within the APE is located north of Valley Boulevard, intersecting Temple Avenue in the City of La Puente on Assessor's Parcel Number (APN) 8564-007-800 and 8563-008-800 (see **Figure A6.11-1**). The historic property boundary corresponds to the limits of the existing railroad right of way (ROW). The segment of UPRR within the APE consists of three parallel lines of at-grade, standard gauge track. The tracks are currently part of the UPRR Alhambra Subdivision, which UPRR shares with Metrolink.

All three lines consist of steel rails embedded in concrete and steel plates where they cross Temple Avenue. Outside the roadway, each line consists of steel rails and crushed rock ballast (i.e., the bed for railroad tracks that is produced from crushed granite or other rock materials). The northernmost line has concrete ties east of Temple Avenue and wood ties to the west; the center line has concrete ties east and west of Temple Avenue; and the southernmost line has wood ties east and west of Temple Avenue. The segment features typical at-grade crossing signals, gates, equipment boxes, and roadway striping. The signals and gates are installed into the sidewalks and central, raised median along Temple Avenue.

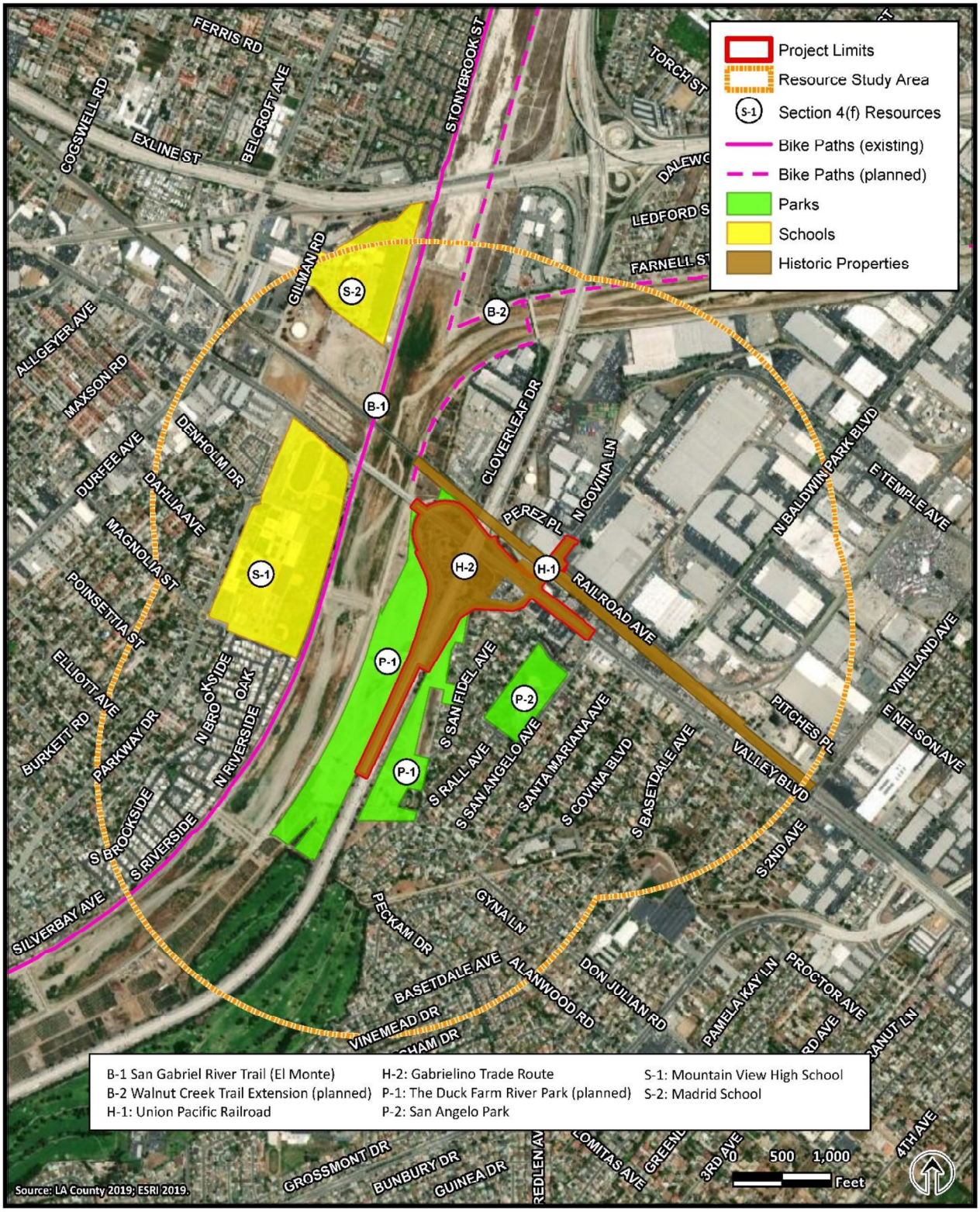


Figure A6.11-1: Section 4(f) Resources

This page is intentionally left blank.

Character-defining features of the UPRR include the alignment, steel rails, wood ties, and crushed rock ballast. Within the APE, the assumed-eligible historic property retains integrity of location, design, and association. Integrity of materials and workmanship have been compromised by the introduction of new materials in lieu of replacement in kind, such as the concrete ties. The aspects of setting and feeling have changed over time, but these aspects are not essential to convey the historic significance of the property.

Description of Use for Union Pacific Railroad

The project would include the following improvements that have the potential to affect the segment of UPRR within the APE:

- The existing two-lane configuration (SB side) on Temple Avenue would be widened to three lanes to enhance capacity and improve traffic flow through the Valley Boulevard signalized intersection.
- Improvements to Temple Avenue would also include pedestrian safety and operational improvements to the three-track joint UPRR/Metrolink railroad at-grade crossing on Temple Avenue, including crosswalk improvements and the widening of the at-grade crossing.

To accomplish the widening and improvements, portions of the at-grade crossing would be reconstructed, ties and ballast east and west of the existing roadbed would be removed, and the amount of track embedded in concrete and steel plates would be increased. The total size of permanent easements required from the UPRR would be 2,888 square feet west of Temple Avenue and 2,554 square feet east of Temple Avenue (see **Figure A6.11-2**). The easement to the west would accommodate the added third lane heading SB on Temple Avenue and a new sidewalk. The easement to the east would accommodate a new sidewalk crossing the tracks. The new sidewalk would be Americans with Disabilities Act (ADA)-compliant. The existing, non-compliant sidewalks on the east and west sides would be eliminated. Changes to the immediate setting would include reconstructing and enlarging center medians on Temple Avenue, restriping, and installing new signals and equipment.

De Minimis Use Explanation for Union Pacific Railroad

The project has the potential to directly and indirectly affect the segment of UPRR within the APE due to physical changes resulting from the modification of the intersection of Temple Avenue and the railroad line, ADA-compliant upgrades to pedestrian routes, and visual changes resulting from additional modifications to Temple Avenue in the immediate vicinity. Specifically, it has the potential to affect the historic property in the following ways:

i. Physical destruction of or damage to all or part of the property – Slivers of ballast and both wood and concrete ties would be removed and replaced by concrete and steel plates and paving to the east and west of the Temple Avenue to accommodate the road widening and pedestrian improvements;
ii. Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary of the Interior's Standards (SOIS) for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines – The proposed alterations

to the segment of the historic property in the APE include providing ADA-compliant access across the tracks along the east (NB) side of Temple Avenue;

iii. Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance – While the use would not be changed, some of the physical features within its setting would be modified; and

iv. Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features – New visual features would be introduced adjacent to the property and in its general vicinity.

The proposed work related to the historic property was analyzed for compliance with the SOIS for Rehabilitation. Caltrans determined that the project complies with the Rehabilitation Standards. After completion of the project, the segment of UPRR within the APE would retain the same aspects of integrity as it exhibits presently: location, design, and association.

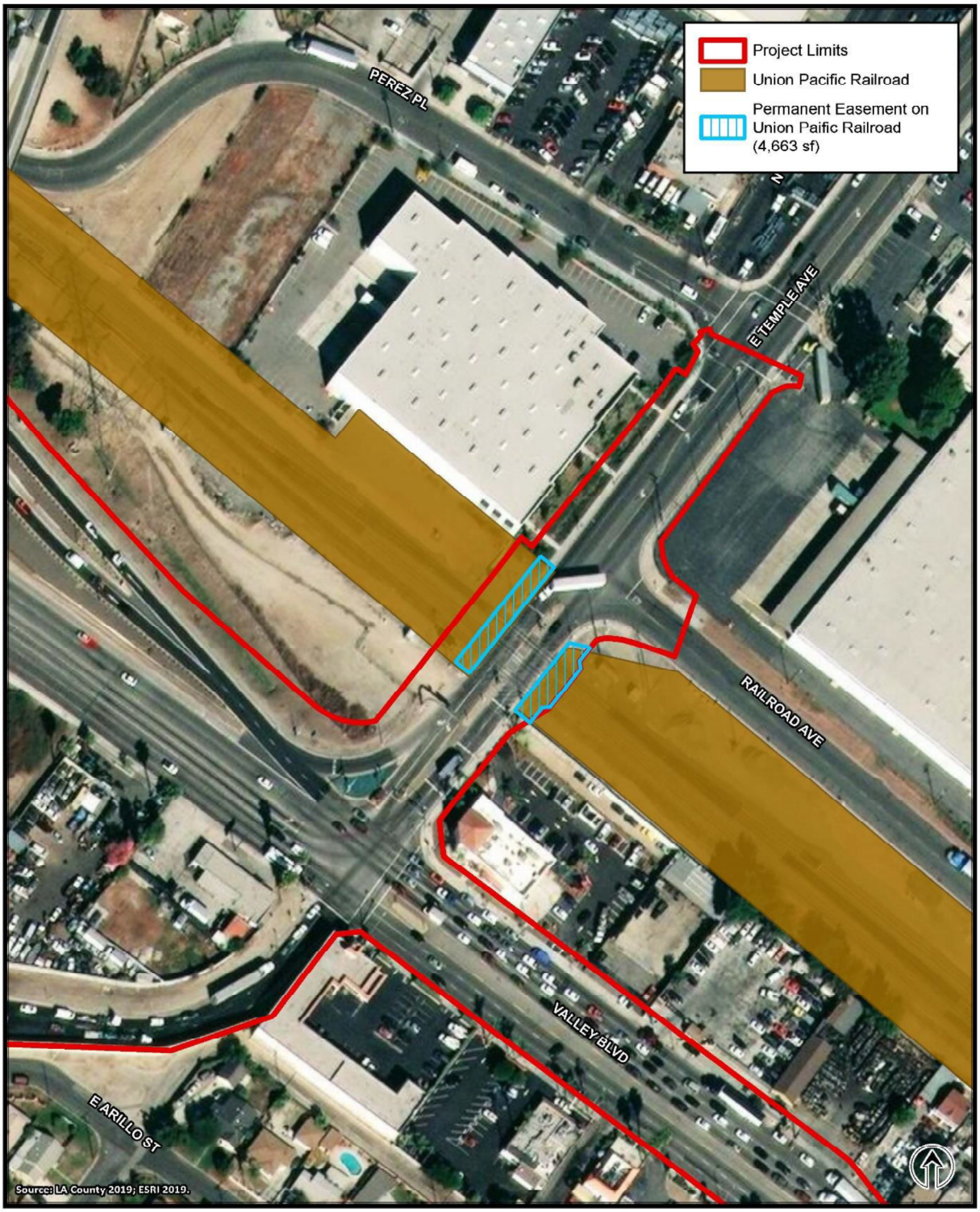


Figure A6.11-2: Union Pacific Railroad

This page is intentionally left blank.

Integrity of materials and workmanship would be minimally impacted by limited removal of wood ties and ballast, but these aspects of integrity have already been compromised. The limited removal of wood ties and ballast would not result in substantial change to the historic property's current integrity. Setting and feeling have also already been previously compromised. The project would have no substantial impact on these aspects of integrity, as it would replace modern features with similar modern features. As a whole, the large linear resource would continue to convey its significance under Criterion A. Criterion A is one of four criteria for eligibility in the National Register of Historic Places and is satisfied for properties that have made a significant contribution to historic events (36 CFR part 60.4).

To ensure that the project continues to comply with the Rehabilitation Standards as design and construction progress, an SOIS Action Plan was prepared. The SOIS Action Plan identifies the specific tasks during each stage of the undertaking that will be required to ensure the work complies with the Rehabilitation Standards, as well as the responsible parties for ensuring that each task is completed.

Based on the analysis above, Caltrans has determined that the proposed undertaking complies with the Secretary of the Interior's Standards for Rehabilitation. Therefore, Caltrans proposes that a Finding of No Adverse Effect without Standard Conditions through the use of the Secretary of the Interior's Standards for the Treatment of Historic Properties is appropriate.

Because physical changes would be made to the UPRR and 4,663 square feet of permanent easements would be required within the historic property boundary, the project would result in the actual use of the Section 4(f) property. However, as described above, the project would have no adverse effect on the UPRR under Section 106 of the NHPA. Therefore, the UPRR has been determined to incur Section 4(f) *de minimis* impacts. Section 106 and *de minimis* documentation was sent to the SHPO, as the official with jurisdiction over the historic site. Written notification was provided to the SHPO that a non-response for the purposes of a "No Adverse Effect" determination will be treated as the written concurrence for a *de minimis* finding.

This Section 4(f) *de minimis* determination is an appendix to the draft environmental document for the project. An opportunity for public review and comment was provided during circulation of the draft environmental document in accordance with 23 CFR 771.111. No public comments related to the use of the historic property were provided during the public circulation period. Written concurrence from SHPO was requested on February 19, 2021 after the public notice period and after the public has an opportunity to comment on the *de minimis* impact finding.

Avoidance, Minimization, and/or Mitigation Measures

The project would result in a Finding of No Adverse Effect on UPRR with Standard Conditions through the use of the Secretary of the Interior's Standards for the Treatment of Historic Properties. No avoidance, minimization, and/or mitigation measures are required to make the *de minimis* finding for the UPRR resource.

Section 4(f) Finding for UPRR

For historic resources, a Section 4(f) *de minimis* finding is defined when the Section 106 determination is either "no adverse effect" or "no historic properties affected". The project would result in physical changes to the UPRR and would require permanent easements on the historic

property, which would have no adverse effect on the UPRR under Section 106 of the NHPA. All work would comply with the Standards for Rehabilitation outlined in the Secretary of the Interior's Standards for the Treatment of Historic Properties (36 CFR part 68). Therefore, the UPRR has been determined to incur Section 4(f) *de minimis* impacts.

A1.2 Gabrielino Trade Route

Applicability of Section 4(f) for Gabrielino Trade Route

The APE for the project, which is shown in Attachment B to the HPSR, includes a Gabrielino trade route. The Gabrieleño Band of Mission Indians – Kizh Nation (Tribe) considers the trade route to follow Valley Boulevard as part of a cultural landscape. This property was assumed eligible for listing in the National Register of Historic Places for the purposes of this project only. It is also presumed to be a Tribal Cultural Resource for the purposes of CEQA. Therefore, the Gabrielino trade route is a protected resource under the provisions of Section 4(f). The official with jurisdiction is the SHPO.

The portion of the Gabrielino trade route within the APE is located along Valley Boulevard, bordered by the San Gabriel River to the west and San Angelo Avenue to the east, and encompasses the Direct APE (see **Figure A6.11-1**). Due to the highly developed built environment of the interchange and surround areas, no physical remnants of the original unpaved Gabrielino trade route along Valley Boulevard (formerly Mission Road) are visible on the ground surface within the APE.

Description of Use for Gabrielino Trade Route

The project would include the following improvements along Valley Boulevard that have the potential to affect the Gabrielino trade route within the APE (see **Figure A6.11-3**):

- Construction of new overhead signage for the revised freeway on-ramp configurations, retaining walls, sidewalks, and pedestrian ramps
- Roadway modifications, including construction of a new signalized intersection, dedicated turn lanes, and widened shoulders for a future bike lane
- Drainage modifications

To accomplish these improvements, excavation would be required along Valley Boulevard to a maximum depth of 35 feet, including road construction (excavation depth of 3 feet), storm drains (8 feet), and footings for overhead signs and traffic signal poles (35 feet). Temporary and permanent easements would be required along WB Valley Boulevard on parcels (APNs 8564-012-003 and 8564-012-004).

De Minimis Use Explanation for Gabrielino Trade Route

The project has the potential to affect the portion of the Gabrielino trade route within the APE due to excavation and earth-moving activities along Valley Boulevard. Specifically, the project has the potential to unearth previously undiscovered physical remnants associated with the trade route. Although the identification of intact archaeological deposits in these soils prior to construction is unlikely due to previous ground disturbances; the Tribe is concerned with secondary deposits and

the presence of a trail/trade route in the APE and the identification of burials (and other items) within 0.2 mile of the APE on the same terrace above the San Gabriel River. No physical remnants of the original unpaved Gabrielino trade route are visible on Valley Boulevard (formerly Mission Road).

The high level of prior disturbance within the APE is indicative of a lack of sensitivity for buried physical remnants associated with the trade route. However, out of an abundance of caution, Caltrans will implement a phased cultural resources identification plan approach that includes archaeological and tribal monitoring by the Kizh Nation within the Direct APE during final design and construction phases of the project (**AVM-CUL-1**). Caltrans has prepared and will implement a monitoring and unanticipated discovery plan. If previously unidentified cultural materials are unearthed during construction, it is Caltrans' policy that work be halted in that area until a qualified archaeologist can assess the significance of the find. Additional archaeological surveys will be needed if project limits are extended beyond the present survey limits.

In the event of a discovery of cultural materials or human remains, **AVM-CUL-2** would be implemented during construction, consistent with State of California Public Resources Code 5097.94, 5097.95, 5097.99 and State of California Health and Safety Code 7050.5.

Because physical changes would be made to the Gabrielino trade route, the project would result in the actual use of the Section 4(f) property. However, the project would have no adverse effect on the Gabrielino trade route under Section 106 of the NHPA with implementation of measures to minimize harm. Therefore, the Gabrielino trade route has been determined to incur Section 4(f) *de minimis* impacts. Section 106 and *de minimis* documentation was sent to the SHPO, as the official with jurisdiction over the tribal cultural resource. Written notification was provided to the SHPO that a non-response for the purposes of a "No Adverse Effect" determination will be treated as the written concurrence for a *de minimis* finding.

Avoidance, Minimization, and/or Mitigation Measures

As discussed in Section 2.2.11, Caltrans will implement a phased cultural resources identification plan approach that includes archaeological and tribal monitoring within the Direct APE during final design and construction phases of the project (**AVM-CUL-1**). Caltrans has prepared a post-review discovery and monitoring plan to outline the steps needed in the event of the discovery of archaeological or tribal cultural resources during construction. In the event that previously unknown buried human remains are encountered during construction, **AVM-CUL-2** would be implemented (see Section 2.2.11).

Section 4(f) Finding for Gabrielino Trade Route

Historic sites are identified during the process required under Section 106 of the NHPA and its implementing regulations. Resources identified during the Section 106 process that are listed or eligible for listing in the NRHP are considered in the Section 4(f) and for avoidance alternatives or avoidance, minimization and/or mitigation measures to be developed and assessed (Office of Planning Environment and Realty, 2012). With implementation of measures to minimize harm, the project would have no adverse effect on the Gabrielino trade route under Section 106 of the NHPA. Therefore, the Gabrielino trade route has been determined to incur Section 4(f) *de minimis* impacts.

This page is intentionally left blank.

Figure A6.11-3: Gabrielino Trade Route

A2 Resources Evaluated Relative to the Requirements of Section 4(f): No-Use Determinations

Section 4(f) of the Department of Transportation Act of 1966, codified in federal law at 49 USC 303, 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."

This section of the document discusses parks, recreational facilities, wildlife refuges, and historic properties found within or next to the project area that do not trigger Section 4(f) protection because: 1) they are not publicly owned, 2) they are not open to the public, 3) they are not eligible historic properties, or 4) the project does not permanently use the property and does not hinder the preservation of the property.

A2.1 Resources Not Protected Under Section 4(f)

During the identification of parks and recreational areas near the project site, resources were identified, but were not further evaluated if they did not meet the criteria qualifying them for protection under Section 4(f). Resources that were initially considered are listed in **Table A6.11-1**, Section 4(f) Resources Not Protected Under Section 4(f).

Table A6.11-1: Section 4(f) Resources Not Protected Under Section 4(f)

Property Name	Amenities	Why Resource Is Not Protected Under Section 4(f)
California Country Club	18-hole golf course	The golf course is privately owned. The property is not a Section 4(f) property; therefore, the provisions of Section 4(f) do not apply
Brookside Park	Open lawn and playground	This park is privately owned and located within the Brookside Country Club mobile home park. The property is not a Section 4(f) property; therefore, the provisions of Section 4(f) do not apply.

A2.2 Section 4(f) Resources with No Use

The resources shown in **Table A6.11-2**, Section 4(f) Resources with a No Use Determination, have been determined to not result in a Section 4(f) Use because the project does not permanently use the property and does not hinder the preservation of the property, or the proximity impacts do not result in constructive use. The location of each resource is also shown on **Figure A6.11-1**.

Table A6.11-2: Section 4(f) Resources with a No Use Determination

Resource Number	Property Name	Distance from Project Limits	Official with Jurisdiction	Project Impacts	Section 4(f) Use Determination
Bike Paths					
B-1	San Gabriel River Trail	0.2 mile	Los Angeles County Department of Public Works Road Maintenance Division	The project would have no impact on this resource because project improvements would avoid this resource, and no proximity impacts are anticipated because of the distance from the resource to the project limits. The property is a Section 4(f) property, but no "use" will occur. Therefore, the provisions of Section 4(f) do not apply.	No Use
B-2	Walnut Creek Nature Trail Connection (Planned)	Less than 0.1 mile	City of Baldwin Park	The project would have no impact on the planned Walnut Creek Nature Trail Connection because project improvements would avoid this resource. With implementation of avoidance, minimization, and mitigation measures, no proximity impacts are anticipated. The property is a Section 4(f) property, but no "use" will occur. Therefore, the provisions of Section 4(f) do not apply.	No Use
Parks					
P-1	Duck Farm River Park (planned)	Adjacent to Maximum Disturbance Limit	Watershed Conservation Authority and Rivers and Mountains Conservancy	The project would have no impact on the planned Duck Farm River Park because project improvements would avoid this resource. With implementation of avoidance, minimization, and mitigation measures, no proximity impacts are anticipated. The property is a Section 4(f) property, but no "use" will occur. Therefore, the provisions of Section 4(f) do not apply.	No Use
P-2	San Angelo Park	0.1 mile	Los Angeles County Parks and Recreation	The project would have no impacts on this resource because project improvements would avoid this resource, and no proximity impacts are anticipated because of the distance from the resource to the project limits. The property is a Section 4(f) property, but no "use" will occur.	No Use

Resource Number	Property Name	Distance from Project Limits	Official with Jurisdiction	Project Impacts	Section 4(f) Use Determination
				Therefore, the provisions of Section 4(f) do not apply.	
Schools					
S-1	Mountain View High School	0.2 mile	El Monte Union High School District	The project would have no impacts on these resources because project improvements would avoid these resources, and no proximity impacts are anticipated because of the distance from the resources to the project limits. The property is a Section 4(f) property, but no "use" will occur. Therefore, the provisions of Section 4(f) do not apply.	No Use
S-2	Madrid Middle School	0.4 mile	Mountain View Elementary School District		

For these resources, no use is anticipated because of the distance from the resource to the project limits, and/or because measures to minimize harm would be implemented, which would prevent any proximity impacts after mitigation that would be so severe that the activities, features, and/or attributes that qualify those properties for protection under Section 4(f) would be substantially impaired. Substantial impairment occurs when the activities, features, and/or attributes of the property are substantially diminished resulting in the value of the resource in terms of its Section 4(f) significance being meaningfully reduced or lost.

A review of the technical analyses completed for the project did not identify any project-related proximity impacts that would be so severe after implementation of avoidance, minimization, and mitigation measures as to result in substantial impairment of the activities, features, and/or attributes that qualify the properties listed in **Table A6.11-2** for protection under Section 4(f).

A2.3 Section 4(f) Resources within Proximity to the Project Limits

Resources located within 0.5-mile of the proposed improvements were evaluated to assess constructive use, and whether any project-related effects would result in proximity impacts that, after mitigation, would be so severe that the activities, features, and/or attributes that qualify those properties for protection under Section 4(f) would be substantially impaired.

The six resources identified in **Table A6.11-2** are within 0.5-mile of the project limits and would qualify for protection under Section 4(f). However, no permanent use or temporary use were identified at these resources. For four of these resources, no proximity impacts are anticipated because of the distance from the resources to the project limits. Therefore, no use of these resources would be required to implement the project, and no further analysis is required. However, the Duck Farm River Park is adjacent to the Maximum Disturbance Limit (MDL) and the Walnut Creek Nature Trail Connection is less than 0.1 mile of the MDL; therefore, proximity impacts at these resources are analyzed below.

Duck Farm River Park

The Duck Farm River Park is a planned project in the Emerald Necklace Master Plan, which would span approximately 31 acres and extend along a 1-mile stretch of the San Gabriel River (Watershed Conservation Authority, 2016; Watershed Conservation Authority, 2011). The park would be located at 255 San Fidel Avenue in La Puente and would span approximately thirteen parcels west and east of Interstate 605 (I-605) (APNs 8110-029-910, 8110-029-904, 8110-029-905, 8110-029-906, 8110-029-907, 8110-029-908, 8115-002-907, 8110-021-900, 8110-001-901, 8110-021-902, 8110-021-903, 8110-017-900, 8110-001-272) (see **Figure A6.11-1**).

Once completed, the park would consist of a 1.5-mile trail, overlook of the San Gabriel River, native planting, demonstration garden, dry-stream, picnic area, interpretive stations, and farmhouse. In addition, rehabilitation of an existing equestrian center and other site improvements are proposed. The Duck Farm River Park would be operated and maintained by the Watershed Conservation Authority (WCA), a Joint Power Authority consisting of the Los Angeles County Flood Control District (LACFCD) and the Rivers and Mountains Conservancy (RMC). The park is proposed to be developed in phases, which include Phase 1A, Phase 1B, and Phase 2. Construction of Phase 1, located west of I-605, began in March 2019 and is expected to last until

April 2021. This portion of the park is anticipated to open to the public in Summer 2021. The improvements proposed under Phase 1B are anticipated to begin in Summer 2021 and end in November 2023. Funding sources and construction schedules for Phase 2 are currently undetermined.

The nearest project improvements to the Duck Farm River Park (west of I-605) would include replacing the existing "horseshoe" SB on-ramp with a three-lane on-ramp. All improvements would be constructed within existing ROW and the project would not permanently use the future park property. However, there is potential for proximity impacts because the Duck Farm River Park is adjacent to the MDL for the project. Construction of the project is anticipated to begin in March 2022 and end March 2024. Phase 1A and 1B of the Duck Farm River Park are expected to be completed in April 2021 and November 2023, respectively; therefore, it is anticipated that portions of the park would be open to the public during construction of the project.

There would be no changes to accessibility of the planned park. In addition, there would be no impacts related to vegetation or wildlife, as no vegetation removal or habitat disturbance would result from the project. Visual, noise, and air quality impacts would not result in a substantial impairment because no severe proximity impacts at the Duck Farm River Park are identified in the IS/EA ND/FONSI, as summarized in the analysis below.

During construction, the presence of staged equipment and stockpiled construction-related materials would result in short-term visual impacts adjacent to the Duck Farm River Park. These impacts would be temporary in nature and all construction equipment and materials would be removed upon completion of the project. Therefore, visual impacts would not result in severe proximity impacts at the Duck Farm River Park.

Once the Duck Farm River Park is open to the public, the existing I-605 transportation corridor would contribute to background noise levels in the park. Construction of the project, which would include the movement of vehicles, operation of equipment, and earth-disturbing activities, would contribute to temporarily elevated noise and vibration impacts at the park. These activities would occur along the northeastern boundary of the Phase I development, which would include a vegetated riparian area that provides a buffer between the freeway and the proposed trails. Compliance with Caltrans Standard Specifications Section 14-8.02 (2018) would be required to minimize construction noise impacts on sensitive land uses adjacent to the project site. Construction noise is also regulated by the Caltrans Standard Specifications Section in Section 14-8.02. Noise and vibration from construction activities would not result in any adverse impacts with the implementation of avoidance, minimization, and mitigation measures discussed in **Section 2.3.6**, Noise, of the IS/EA ND/FONSI. Following construction, temporary noise and vibration impacts associated with construction would cease. Therefore, noise impacts would not result in severe proximity impacts at the Duck Farm River Park.

Short-term air quality impacts may result from construction activities because of vehicle and equipment emissions, and dust from earth-disturbing activities. However, following construction, short-term air quality impacts associated with construction would cease. Additionally, the South Coast Air Quality Management District (SCAQMD) has established rules for reducing fugitive dust emissions. Fugitive dust and exhaust emissions from construction activities would not result in any adverse air quality impacts with the implementation of the avoidance and minimization

measures discussed in **Section 2.3.5**, Air Quality, of the IS/EA ND/FONSI and standard construction measures. Therefore, air quality impacts would not result in severe proximity impacts at the Duck Farm River Park.

As discussed above, none of the potential proximity impacts would result in the substantial impairment of the activities, features, or attributes of Duck Farm River Park. The property is a Section 4(f) property, but no "use" will occur. Therefore, the provisions of Section 4(f) do not apply.

Walnut Creek Nature Trail Connection

The City of Baldwin Park is proposing to construct a Class I bike path along the northern bank of Walnut Creek beside an existing maintenance access road used by Los Angeles County. The bike path would extend from Walnut Creek Nature Park (701 Frazier Street) to the San Gabriel River in the City of Baldwin Park (APNs 8564-012-901, 8564-012-920, 8564-012-908, 8564-009-908, 8564-014-905, and 8564-012-801) (see **Figure A6.11-1**). The City of Baldwin Park is currently obtaining approval from Los Angeles County and estimates that the bike path will be constructed by the end of 2020.

The nearest project improvements to the bike path include construction of a new signalized intersection and widening of Valley Boulevard to five total lanes with three left turn lanes onto the SB on-ramp. All improvements would be constructed within existing ROW and the project would not permanently use the future bike path property. However, there is potential for proximity impacts because the Walnut Creek Nature Trail Connection is within 500 feet of the MDL for the project. As discussed above, construction of the project is anticipated to begin in March 2022 and end March 2024. The Walnut Creek Nature Trail Connection is expected to be completed by the end of 2020; therefore, it is anticipated that the bike path would be open to the public during construction of the project.

There would be no changes to accessibility of the planned bike path. In addition, there would be no impacts related to vegetation or wildlife, as no vegetation removal or habitat disturbance would result from the project. Visual, noise, and air quality impacts would not result in a substantial impairment because no severe proximity impacts at the Walnut Creek Nature Trail Connection are identified in the IS/EA ND/FONSI, as summarized in the analysis below.

During construction, the presence of staged equipment and stockpiled construction-related materials would result in short-term visual impacts adjacent to the Walnut Creek Nature Trail Connection. These impacts would be temporary in nature and all construction equipment and materials would be removed upon completion of the project. Therefore, visual impacts would not result in severe proximity impacts at the Walnut Creek Nature Trail Connection.

Once the Walnut Creek Nature Trail Connection is open to the public, the existing I-605 transportation corridor would contribute to background noise levels at the bike path. Construction of the project, which would include the movement of vehicles, operation of equipment, and earth-disturbing activities, would contribute to temporarily elevated noise and vibration impacts at the bike path. These activities would occur near the southern extent of the bike path that would travel along the eastern side of the San Gabriel River. As described above, compliance with Caltrans Standard Specifications Section 14-8.02 (2018) would be required to minimize construction noise impacts on sensitive land uses adjacent to the project site. Construction noise is also regulated

by the Caltrans Standard Specifications Section in Section 14-8.02. Noise and vibration from construction activities would not result in any adverse impacts with the implementation of avoidance, minimization, and mitigation measures discussed in **Section 2.3.6**, Noise, of the IS/EA ND/FONSI. Following construction, temporary noise and vibration impacts associated with construction would cease. Therefore, noise impacts would not result in severe proximity impacts at the Walnut Creek Nature Trail Connection.

Short-term air quality impacts may result from construction activities because of vehicle and equipment emissions, and dust from earth-disturbing activities. However, following construction, short-term air quality impacts associated with construction would cease. Additionally, the SCAQMD has established rules for reducing fugitive dust emissions. Fugitive dust and exhaust emissions from construction activities would not result in any adverse air quality impacts with the implementation of the avoidance and minimization measures discussed in **Section 2.3.5**, Air Quality, of the IS/EA ND/FONSI and standard construction measures. Therefore, air quality impacts would not result in severe proximity impacts at the Walnut Creek Nature Trail Connection.

As discussed above, none of the potential proximity impacts would result in the substantial impairment of the activities, features, or attributes of the Walnut Creek Nature Trail Connection. The property is a Section 4(f) property, but no "use" will occur. Therefore, the provisions of Section 4(f) do not apply.

A2.4 Avoidance, Minimization, and/or Mitigation Measures

The following avoidance, minimization, and mitigation measures will be implemented to minimize harm at resources within proximity to the project:

- **AVM-AQ-1**. During clearing, grading, earthmoving, or excavation operations, fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in South Coast Air Quality Management District (SCAQMD) Rule 403. All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust. The areas disturbed by clearing, grading, earthmoving, or excavation operations will be minimized so as to prevent excessive amounts of dust. These control techniques will be indicated in project specifications. Visible dust beyond the property line emanating from the project will be prevented to the maximum extent feasible.
- **AVM-AQ-2**. All trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.
- **AVM-AQ-3**. The contractor will adhere to Caltrans Standard Specifications for Construction (Section 14.9-02).
- **AVM-AQ-4**. Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per

manufacturers' specifications.

- **AVM-N-1**. Sound control will conform to the provisions in Section 14-8.02, Noise Control, of the Caltrans Standard Specifications (2018). According to requirements of these specifications, construction noise cannot exceed 86 dBA L_{max} at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m.
- **AVM-N-2**. All equipment will have sound-control devices no less effective than those provided on the original equipment. Each internal combustion engine used for any purpose on the job or related to the job will be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine will be operated on the job site without an appropriate muffler. Additionally, construction methods or equipment that will provide the lowest level of noise impact will be used and idling equipment will be turned off.
- **N-1**. Based on the studies completed to date, the Department intends to incorporate noise abatement in the form of (a) barriers(s) at: the edge of the shoulder of northbound I-605 from PM R18.819 to PM R19.166, with respective lengths and average heights of 0.5 mile and 14 feet. Calculations based on preliminary design data show that the barrier(s) will reduce noise levels by 5 to 7 dBA for 39 residences at a cost of $1,566,093. These measures may change based on input received from the public. If conditions have substantially changed during final design, noise abatement may not be constructed. The final decision on noise abatement will be made upon completion of the project design.

A3 References

GPA Consulting. (2020b). *Draft Historic Property Survey Report.* Los Angeles, California: California Department of Transportation.

GPA Consulting. (2020a). *Finding of No Adverse Effect with Standard Conditions Secretary of the Interior's Standards for the Treatment of Historic Properties for the I-605 Valley Boulevard Interchange Improvements Project.* Ventura.

Watershed Conservation Authority. (2011, March 28). *Duck Farm River Park*. Retrieved from Watershed Conservation Authority: https://www.wca.ca.gov/duck_farm_river_park

Watershed Conservation Authority. (2016, October). *Emerald Necklace Feasibility Study & Implementation Plan*. Retrieved from Emerald Necklace: https://www.wca.ca.gov/emerald_necklace_greening_and_trails

This page is intentionally left blank.

Appendix B. Title VI Policy Statement

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-6130
FAX (916) 653-5776
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

August 2020

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.*"

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a nondiscriminatory manner.

Related federal statutes, remedies, 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, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 324-8379 or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi.

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 Civil Rights, at 1823 14th Street, MS-79, Sacramento, CA 95811; (916) 324-8379 (TTY 711); or at <Title.VI@dot.ca.gov>.

Original signed by
Toks Omishakin
Director

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

This page is intentionally left blank.

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS-49
SACRAMENTO, CA 94273-0001
PHONE (916) 654-6130
FAX (916) 653-5776
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

Agosto de 2020

DECLARACIÓN DE POLÍTICA DE NO DISCRIMINACIÓN

El Departamento de Transporte de California, bajo el Título VI de la Ley de Derechos Civiles de 1964, asegura que "*Ninguna persona en los Estados Unidos, debido a su raza, color u origen nacional, será excluída de participar, ni se le negarán los beneficios, o será objeto de discriminación, en ningún programa o actividad que reciba ayuda financiera federal.*"

Caltrans hará todos los esfuerzos para asegurar que no exista discriminación en ninguno de sus servicios, programas y actividades, ya sea que reciban fondos del gobierno federal o no, y que los servicios y beneficios sean justamente distribuidos a todas las personas sin importar su raza, color, u origen nacional. Adicionalmente, Caltrans facilitará la participación significativa en el proceso de planeación de los programas de transporte de manera no discriminatoria.

Los estatutos federales relacionados, los remedios, y la ley estatal refuerzan estas protecciones para incluir el sexo, la discapacidad, la religión, la orientación sexual y la edad.

Para información u orientación sobre cómo presentar una queja o para obtener más información relacionada con el Título VI, por favor comuníquese con el Gerente del Título VI al teléfono (916) 324-8379 o visite la siguiente página de Internet: https://dot.ca.gov/programs/civil-rights/title-vi.

Para obtener esta información en un formato alternativo como el Braille o en un lenguaje diferente al inglés, por favor póngase en contacto con la Oficina de Derechos Civiles del Departamento de Transporte de California, al 1823 14th Street, MS-79, Sacramento, CA 95811; al teléfono (916) 324-8379 (Teléfono de Texto TTY: 711); o al email: Title.VI@dot.ca.gov

Original signed by
Toks Omishakin
Director

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

This page is intentionally left blank.

Appendix C. Avoidance, Minimization, and/or Mitigation Summary

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] which follows) would be implemented. During project design, avoidance, minimization, and /or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/engineering staff will ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented. **Note:** Some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR. Avoidance and minimization measures are denoted with AVM. Measures without the AVM designation refer to mitigation measures.

Measure	Responsible Branch/Staff	Timing/Phase
Avoidance and Minimization Measures		
AVM-ROW-1: After project construction is complete, TCEs used for the Build Alternative would be restored to their original pre-project conditions to the extent feasible.	Caltrans resident engineer	Post-construction
AVM-UT-1: Prior to construction, Caltrans and Metro would coordinate with the utility owner/operator if any disruptions to utility service during relocations would be scheduled to ensure that relocations would not adversely affect customer service or utility operations.	Caltrans and Metro	Prior to construction
AVM-UT-2: Prior to final design, Caltrans and Metro would coordinate with impacted utility owners to ensure all utilities are accurately identified and provide feedback on the conceptual relocation designs where applicable.	Caltrans and Metro	Prior to final design
AVM-UT-3: Prior to final design, Caltrans and Metro would ensure relocation of existing utilities would comply to the maximum extent feasible with Caltrans' standards and policies related to encroachments into State right of way.	Caltrans and Metro	Prior to final design
AVM-ES-1: Prior to construction, coordination with local emergency service providers and communication with the surrounding community would be conducted by Caltrans and Metro to minimize impacts during construction.	Caltrans, Metro, and emergency service providers	Prior to construction
AVM-TR-1: Prior to construction, Caltrans and Metro will implement an effective Traffic Management Plan, that would include the following elements: • Construction staging plans • Public awareness campaign • Analysis of impacts to traffic	Caltrans and Metro	Prior to construction

Measure	Responsible Branch/Staff	Timing/Phase
• Options for lane closures • Alternate route strategies		
AVM-TR-2: Prior to construction, Caltrans and Metro will coordinate with local agencies including municipalities, emergency services, and law enforcement on road and freeway closures, and traffic detours to minimize disruptions to access, circulation, and parking.	Caltrans, Metro, emergency service providers, and law enforcement	Prior to construction
AVM-TR-3: Prior to construction, Caltrans and Metro will stagger the closure of consecutive on/off ramps.	Caltrans and Metro	Prior to construction
AVM-TR-4: Prior to construction, Caltrans and Metro will coordinate with local municipalities and County of Los Angeles to adjust signal timing on arterial streets during construction to minimize traffic congestion.	Caltrans, Metro, local municipalities, and County of Los Angeles	Prior to construction
AVM-TR-5: Prior to construction, Caltrans and Metro will provide detour routes for temporary closure of shared-use paths.	Caltrans and Metro	Prior to construction
AVM-TR-6: Prior to construction, Caltrans and Metro will provide appropriate signage as needed throughout construction. Construction Contractor will maintain appropriate signage to direct pedestrians, bicyclists, and vehicular traffic via alternate routes. Disabled access will be maintained during construction.	Caltrans resident engineer and Metro	Prior to construction
AVM-TR-7: Prior to construction, Caltrans and Metro will coordinate with public transportation agencies (Metro bus service and Foothill Transit) to provide rerouting information, including operating schedules, to the public at least one month in advance to minimize impacts.	Caltrans, Metro, and Foothill Transit	Prior to construction
AVM-VA-1: Where feasible, existing trees and vegetation would be pruned and protected in place to provide a vertical hierarchy with new landscaping. In addition, new landscaping would be installed at the ramp interchanges after reconfiguration. Vegetation would be planted within bioswales to increase the success of the BMP and to maintain lush visual presence.	Caltrans and Metro	During and post-construction
AVM-VA-2: New barriers would receive a minimum fractured fin treatment (type of texture treatment for concrete) to deter graffiti.	Caltrans and Metro	During construction
AVM-VA-3: Application of aesthetics (including the noise barriers) and landscape in the project area would follow the I-605 Corridor Aesthetics Master Plan.	Caltrans and Metro	During construction
AVM-CUL-1: Caltrans will implement a phased cultural resources identification plan approach that includes archaeological and tribal monitoring within the Direct APE. Caltrans has prepared a post-review discovery and monitoring plan to outline	Caltrans resident engineer and qualified archaeologist	During construction

Measure	Responsible Branch/Staff	Timing/Phase
the steps needed in the event of the discovery of archaeological or tribal cultural resources during construction. 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.		
AVM-CUL-2: If human remains are discovered, California Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall stop in any area or nearby area suspected to overlie remains, and the County Coroner contacted. If the remains are thought by the coroner to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), who, pursuant to PRC Section 5097.98, will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact Claudia Harbert, Caltrans District 7 Cultural Resources Environmental Branch Chief, so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.	Caltrans resident engineer	During construction
AVM-CUL-3: Monitoring will be conducted for the following activities at the specified intervals/milestones to ensure compliance with the Rehabilitation Standards. The qualified monitor must meet the Secretary of Interior's Professional Qualification Standards (PQS) for architectural history and/or historic architecture or be Caltrans staff under the direction of a Caltrans PQS Principal Architectural Historian. • Review and approve plans, including plans related to the at-grade crossing at 60 and 95 percent completion, in the form of a memo prior to the start of construction. • Be on-call to inspect and consult on unanticipated impacts to the historic property that may occur during construction. Any impacts or issues will be documented in construction monitoring reports. • Visit the historic property post-construction to document that the work was completed according to the approved plans, any recommendations provided during construction were incorporated, and that the project overall meets the Secretary of Interior Standards.	Caltrans resident engineer and qualified monitor	During construction
AVM-WQ-1: During construction, Caltrans' Resident Engineer or designated contractor will ensure that all applicable construction site BMPs follow the latest edition of the Caltrans Construction Site BMP Manual to address temporary impacts associated with project construction (California Department of Transportation, 2017), including those associated with waste management, non-	Caltrans resident engineer	During construction

Measure	Responsible Branch/Staff	Timing/Phase
storm water management, tracking controls, and other BMPs as applicable. In addition to applicable BMPs in the Caltrans Construction Site BMP Manual, the following measures will also be implemented: • Good housekeeping • Erosion control • Sediment control		
AVM-WQ-2: During construction, Caltrans' Resident Engineer or designated contractor will ensure compliance with the provision of the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order No. 2009-0009-DWQ, NPDES No. CAS000002 as amended by Order No. 2010-0014-DWQ and Order No. 2012-006-DWQ) and any subsequent amendment or renewal, as they relate to construction activities for the project. This will include submission of the Permit Registration Documents, including a Notice of Intent, risk assessment, site map, SWPPP, annual fee, and signed certification statement to the SWRCB via the Stormwater Multi-Application and Report Tracking System at least seven days prior to the start of construction. Construction activities will not commence until a Waste Discharger Identification number is received from the Stormwater Multi-Application and Report Tracking System. The SWPPP will be prepared by a qualified SWPPP developer and will meet the requirements of the Construction General Permit: • Identifying potential pollutant sources associated with construction activities; • Identifying non-storm water discharges; • Developing a water quality monitoring and sampling plan; • Implementing and maintaining BMPs to reduce or eliminate pollutants associated with construction sites.	Caltrans resident engineer	During construction
AVM-WQ-3: Permanent Design Pollution Prevention and treatment BMPs will be implemented to minimize downstream effects, stabilize slopes, control runoff, and treat water quality volume generated from new impervious surface area. The project will include the construction and integration of 3 biofiltration swales into aesthetics, landscape, and revegetation plans within the project area.	Caltrans resident engineer	During construction
AVM-WQ-4: Procedures in the Caltrans Stormwater Quality Handbooks, Project Planning and Design Guide will be followed for implementing and constructing treatment BMPs (three biofiltration swales) to the Maximum Extent Practicable. Additionally, all treatment BMPs will be consistent with the requirements of applicable permits, including the Caltrans MS4 permit, and will be inspected/monitored to ensure effectiveness.	Caltrans resident engineer	During construction

Measure	Responsible Branch/Staff	Timing/Phase
AVM-GEO-1: During construction, exposed soils may be more susceptible to erosion due to the lack of any barrier and the introduction of water from rain events and/or construction activities. Erosion and sediment control measures will be implemented as required by construction permits and the project SWPPP. Implementation of BMPs would help minimize the effects of unwanted water intrusion into exposed soils.	Caltrans resident engineer	During construction
AVM-GEO-2: During construction, the Resident Engineer will ensure that safe work practices in accordance with Caltrans and Cal/OSHA are implemented to mitigate the risk to workers. This includes sloping and/or shoring of excavations to prevent collapse of unstable soils. Sloping and/or shoring of excavations would be constructed in accordance with Caltrans Shoring Manual, Cal/OSHA, and any local standards.	Caltrans resident engineer	During construction
AVM-GEO-3: During final design, a quality assurance/quality control plan will be prepared and implemented during construction. The quality assurance/quality control plan would include observation, monitoring, and testing by a geotechnical engineer and/or engineering geologist during construction to confirm that geotechnical/geologic recommendations are followed, or if different site conditions are encountered, ensure appropriate changes are made to accommodate such issues. The geotechnical engineer will prepare field observation reports while grading and construction activities are underway.	Geotechnical engineer and/or engineering geologist	During final design
AVM-HW-1: Site Investigations. Limited shallow site investigations will be conducted for the following parcels: • APN 8563-008-800 • APN 8564-012-003 • APN 8564-012-004 • APN 8564-007-008 • APN 8564-007-800 The site investigation work plan will include ADL and parcel-specific investigation. The site investigation will extend to the total lateral and vertical extent of all proposed soil removals.	Caltrans resident engineer	Prior to construction
AVM-HW-2: Health and Safety Plan/Soil Management Plan. A Health and Safety/Soil Management Plan will be developed for earthwork conducted within the boundaries of parcel 8564-007-008 (formerly Alcoa Fastening Systems/Fairchild Fasteners facility) based on a Covenant and Environmental Restriction with the Los	Caltrans resident engineer	Prior to construction

Measure	Responsible Branch/Staff	Timing/Phase
Angeles RWQCB. The plan must be approved by Los Angeles RWQCB prior to project construction.		
AVM-HW-3: Lead Compliance Plan. Prior to construction, a Lead Compliance Plan will be developed by a Certified Industrial Hygienist, to protect workers from exposure to lead associated with aerially deposited lead (ADL), and traffic stripe and pavement makings. The Lead Compliance Plan would include procedures for the handling, management, sampling, and disposal of material containing ADL and traffic stripe and pavement markings.	Caltrans resident engineer	Prior to construction
AVM-HW-4: Aerially Deposited Lead. Soils located within Caltrans right of way have the potential to contain ADL. During the Final Design phase, soil sampling and analysis for ADL will be conducted in unpaved locations within the project area that have not been previously characterized, to determine the proper handling and disposal requirements. Soil determined to contain lead concentrations exceeding stipulated thresholds must be managed in accordance with Caltrans Standard Specifications, Section 14 11.08 Material Containing Hazardous Waste Concentrations of Aerially Deposited Lead (2015) and under the July 1, 2016, ADL Agreement between Caltrans and the DTSC. This ADL Agreement allows such soils to be safely reused within the project limits, as long as all requirements of the ADL Agreement are met.	Caltrans resident engineer	During final design
AVM-HW-5: Treated Wood Waste. Utility poles and railroad ties may contain creosote and pentachlorophenol. During construction, treated wood objects will be handled as treated wood waste and managed per Chapter 34, Title 22 California Code of Regulations Sections 67386.1 through 67386.12, "Alternative Management Standards for Treated Wood Waste." All treated wood waste will be properly disposed at a landfill permitted to accept treated wood waste.	Caltrans resident engineer	During construction
AVM-HW-6: Paint and Thermoplastic Striping. Paint used for traffic striping and pavement marking may contain lead chromate. During construction, sampling, analysis, removal, and disposal of any traffic striping and pavement materials will be completed in accordance with Construction Program Procedure Bulletin 99 2, and Caltrans Standard Specifications, Section 14 11.12. Removal of Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue and Section 36 4 Residue Containing Lead from Paint and Thermoplastic (2015) and be consistent with the requirements within Caltrans Construction Manual, Chapter 7 107E Removing Yellow Traffic Stripe and Pavement Marking with Hazardous Waste Residue (2017). Before disposal, the contractor is required to sample the removed material for proper waste classification. Yellow traffic stripe and pavement marking	Caltrans resident engineer	During construction

Measure	Responsible Branch/Staff	Timing/Phase
that is characterized as hazardous waste requires disposal to a DTSC permitted Class I disposal facility.		
AVM-HW-7: Asbestos-Containing Materials and Lead-Based Paint. Asbestos-containing materials and lead-based paint may be present in structures disturbed by the project. Therefore, prior to any disturbance, structures and the surrounding soil will be sampled and analyzed for asbestos-containing material and lead-based paint.	Caltrans resident engineer	Prior to construction
AVM-AQ-1: During clearing, grading, earthmoving, or excavation operations, fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in South Coast Air Quality Management District (SCAQMD) Rule 403.	Caltrans resident engineer	During construction
AVM-AQ-2: All trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.	Caltrans resident engineer	During construction
AVM-AQ-3: The contractor will adhere to Caltrans Standard Specifications for Construction (Section 14.9-02).	Caltrans resident engineer	During construction
AVM-AQ-4: Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications.	Caltrans resident engineer	During construction
AVM-N-1: Sound control will conform to the provisions in Section 14-8.02, Noise Control, of the Caltrans Standard Specifications (2018). According to requirements of these specifications, construction noise cannot exceed 86 dBA L_{max} at 50 feet from the job site activities from 9:00 p.m. to 6:00 a.m.	Caltrans resident engineer	During construction
AVM-N-2: All equipment will have sound-control devices no less effective than those provided on the original equipment. Each internal combustion engine used for any purpose on the job or related to the job will be equipped with a muffler of a type recommended by the manufacturer. No internal combustion engine will be operated on the job site without an appropriate muffler. Additionally, construction methods or equipment that will provide the lowest level of noise impact will be used and idling equipment will be turned off.	Caltrans resident engineer	During construction
AVM-BIO-1: To confirm the presence/absence of overwintering monarch butterfly, a qualified biologist would survey all suitable refuge sites (typically eucalyptus trees and food genera plants) within 48 hours of construction and within 100 feet from	Qualified biologist	Within 48 hours of construction

Measure	Responsible Branch/Staff	Timing/Phase
where tree and vegetation removal and tree trimming, or excavation would be conducted.		
AVM-BIO-2: If monarch butterflies are found in the BSA, measures would be implemented to avoid impacts on these species, including but not limited to, installation and maintenance of a 100-foot buffer around the roost sites. Construction activities would not be allowed within the buffer area until a qualified biologist confirms that the monarch butterflies have left the area.	Qualified biologist	During construction
AVM-BIO-3: The project area would be demarcated with visible fencing in order to ensure the construction activities remain within the BSA.	Qualified biologist	Prior to and during construction
AVM-BIO-4: Construction in areas with trees, vegetation, and structures that may provide nesting habitat for birds and raptors would be reduced to the maximum extent feasible.	Caltrans resident engineer	During construction
AVM-BIO-5: Trimming and removal of vegetation and trees would be minimized and performed outside of the typical nesting season (February 1 to September 1), to the extent feasible.	Caltrans resident engineer	During construction outside of the nesting season (February 1 to September 1)
AVM-BIO-6: In the event that trimming, or removal of vegetation and trees must be conducted during the nesting season, nesting bird surveys would be completed within 500 feet of the construction area by a qualified biologist no more than 48 hours prior to trimming or clearing activities to determine if nesting birds are within the affected vegetation. Nesting bird surveys would be repeated if trimming or removal activities are suspended for five days or more.	Qualified biologist	Within 48 hours of trimming or removal of vegetation and trees
AVM-BIO-7: If nesting birds are found in the construction zone, measures to ensure that the birds and/or their nests are not harmed would be implemented, including but not limited to, installation and maintenance of appropriate buffers (typically 150 feet for song birds and 500 feet for raptors) until nesting activity has ended.	Qualified biologist	During construction
AVM-BIO-8: In the event that any bird species is observed foraging within the construction site, it would be allowed to move away from the site prior to initiating any construction activities that could result in direct injury or disturbance of the individual.	Caltrans resident engineer	During construction
AVM-BIO-9: Where feasible, tree removal (if any) would be conducted in October, which is outside of the maternal and non-active seasons for bats.	Caltrans resident engineer	During construction

Measure	Responsible Branch/Staff	Timing/Phase
AVM-BIO-10: During the summer months (June to August) prior to construction, a thorough bat roosting habitat assessment would be conducted of all trees, swallow nests, and structures within 100 feet of the construction area. Visual and acoustic surveys would be conducted for at least two nights during appropriate weather conditions to assess the presence of roosting bats. If presence is detected, a count and species analysis would be completed to help assess the type of colony and usage.	Qualified biologist	During summer months (June to August) prior to construction
AVM-BIO-11: No fewer than 30 days prior to construction, and during the non-breeding and active season (typically October), bats would be safely evicted from any roosts to be impacted by the project under the direction of a qualified biologist. Once bats have been safely evicted, exclusionary devices would be installed to prevent bats from returning and roosting in these areas prior to removal. Roosts that would not be impacted by the project would be left undisturbed.	Qualified biologist	Within 30 days prior to construction and during the non-breeding and active season for bats (typically October)
AVM-BIO-12: No fewer than two weeks prior to construction, all excluded areas would be surveyed to determine whether exclusion measures were successful and to identify any outstanding concerns. Exclusionary measures would be monitored throughout construction to ensure they are functioning correctly and would be removed following construction.	Qualified biologist	Within two weeks prior to construction
AVM-BIO-13: If the presence or absence of bats cannot be confirmed in potential roosting habitat, a qualified biologist would be onsite during removal or disturbance of this area. If the biologist determines that bats are being disturbed during this work, work would be suspended until bats have left the vicinity on their own or can be safely excluded under direction of the biologist. Work would resume only once all bats have left the site and/or approval to resume work is given by a qualified biologist.	Qualified biologist	During construction
AVM-BIO-14: In the event that a maternal colony of bats is found, no work would be conducted within 100 feet of the maternal roosting site until the maternal season is finished or the bats have left the site, or as otherwise directed by a qualified biologist. The site would be designated as a sensitive area and protected as such until the bats have left the site. No activities would be authorized adjacent to the roosting site. Combustion equipment, such as generators, pumps, and vehicles, would not to be parked nor operated under or adjacent to the roosting site. Construction personnel would not be authorized to enter areas beneath the colony, especially during the evening exodus (typically between 15 minutes prior to sunset and one hour following sunset).	Qualified biologist	During construction

Measure	Responsible Branch/Staff	Timing/Phase
AVM-BIO-15: The project area would be demarcated with visible fencing in order to ensure the construction activities remain within the BSA.	Qualified biologist	Prior to and during construction
AVM-BIO-16: Invasive vegetation removed from the BSA would be treated and disposed of in a manner following the recommendations of the California Invasive Plant Council to prevent the spread of invasive species on site or off site. Best management practices may include, but are not limited to, identification of existing invasive species, avoidance of invasive species in erosion control, staff training, equipment cleaning when entering and exiting the project area, and monitoring.	Qualified biologist	During construction
AVM-BIO-17: New landscaping materials, including erosion control seed mixes and other plantings, would be composed of non-invasive species and would be clear of weeds, and all erosion control and landscape planting would be conducted in a manner that would not result in the spread of invasive species.	Caltrans resident engineer	During construction
AVM-BIO-18: Plants listed in the Pest Ratings of Noxious Weed Species and Noxious Weed Seed (United States Department of Agriculture, 2003) would not be used as part of the project.	Caltrans resident engineer	During construction
AVM-GHG-1: All construction equipment shall use low sulfur fuel as required by California Code of Regulations (CCR) Title 17, Section 93114.	Caltrans resident engineer	During construction
AVM-GHG-2: To the extent locally available, alternative fuels such as renewable diesel shall be used for construction equipment.	Caltrans resident engineer	During construction
AVM-GHG-3: On-road construction vehicles shall comply with CCR Title 13, Section 2485, which limits idling of diesel-fueled commercial motor vehicles that operate in the State of California with gross vehicular weight ratings of greater than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies the following: 1. Drivers of said vehicles shall not idle the vehicle's primary diesel engine for greater than five minutes at any location, except as noted in Subsection (d) of the regulation. 2. Drivers of said vehicles shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than five minutes at any location when within 100 feet of a restricted area, except as noted in Subsection (d) of the regulation. **3.** Signs must be posted in the designated queuing areas and job sites to remind drivers of the five-minute idling limit. The specific requirements and exceptions	Caltrans resident engineer	During construction

Measure	Responsible Branch/Staff	Timing/Phase
in the regulation can be reviewed at the following web site: www.arb.ca.gov/msprog/truck-idling/2485.pdf.		
AVM-GHG-4: Off-road diesel equipment shall comply with the five-minute idling restriction identified in Section 2449(d)(3) of the California Air Resources Board's In-Use Off-Road Diesel regulation: www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf.	Caltrans resident engineer	During construction
AVM-GHG-5: Truck haul trips shall be scheduled outside of peak morning and evening commute hours.	Caltrans resident engineer	During construction
AVM-GHG-6: Construction waste shall be reduced, and the use of recycled materials shall be maximized (reduces consumption of raw materials, reduces landfill waste, and encourages cost savings).	Caltrans resident engineer	During construction
AVM-GHG-7: Measures to reduce consumption of potable water shall be incorporated during construction.	Caltrans resident engineer	During construction
AVM-GHG-8: The right size equipment shall be utilized for the job.	Caltrans resident engineer	During construction
AVM-GHG-9: To the extent locally available, equipment with new technologies (e.g., off-road equipment meeting Tier 3, or newer, emissions standards and electric-powered equipment) shall be used.	Caltrans resident engineer	During construction
AVM-GHG-10: Existing construction environmental training shall be supplemented with information regarding methods to reduce GHG emissions related to construction.	Caltrans resident engineer	During construction
AVM-GHG-11: Caltrans shall specify the use of alternative bridge construction (e.g., reduce construction windows and use more precast elements that reduce need for additional falsework, forms, bracing, etc.).	Caltrans resident engineer	During construction
AVM-GHG-12: Caltrans shall specify the use of recycled materials (e.g., tire rubber).	Caltrans resident engineer	During construction
AVM-GHG-13: Large removed trees shall be salvaged for lumber or similar on-site beneficial uses other than standard wood-chipping (e.g., used in roadside landscape projects or green infrastructure components).	Caltrans resident engineer	During construction
AVM-GHG-14: Caltrans shall specify on-site recycling of existing project features (e.g., metal beam guard railing, light standards, sub-base granular material, or native material that meet Caltrans specifications for incorporation into new work).	Caltrans resident engineer	During construction

Measure	Responsible Branch/Staff	Timing/Phase
AVM-GHG-15: Caltrans shall specify the use of pavement materials that reduce rolling resistance of highway surfaces while still maintaining design and safety standards.	Caltrans resident engineer	During construction
AVM-GHG-16: The need for transport of earthen materials shall be reduced by balancing cut and fill quantities.	Caltrans resident engineer	During construction
AVM-GHG-17: Caltrans shall specify the utilization of cold in-place recycling. This pavement rehabilitation treatment is typically used on low traffic-volume, hot mix asphalt pavements to extend the pavement service life and to recycle natural resources. The treatment also reduces emissions and energy use associated with processing and hauling these materials: https://www.dot.ny.gov/programs/climate-change/activities.	Caltrans resident engineer	During construction
AVM-GHG-18: The need for electric lighting during construction shall be reduced by using ultra-reflective sign materials that are illuminated by headlights.	Caltrans resident engineer	During construction
Mitigation Measures		
N-1: Based on the studies completed to date, the Department intends to incorporate noise abatement in the form of (a) barriers(s) at: the edge of the shoulder of northbound I-605 from PM R18.819 to PM R19.166, with respective lengths and average heights of 0.5 mile and 14 feet. Calculations based on preliminary design data show that the barrier(s) will reduce noise levels by 5 to 7 dBA for 39 residences at a cost of $1,566,093. These measures may change based on input received from the public. If conditions have substantially changed during final design, noise abatement may not be constructed. The final decision on noise abatement will be made upon completion of the project design.	Caltrans and Metro	Final design
PAL-1: A Paleontological Mitigation Plan, prepared according to Caltrans Standard Environmental References Guidelines, will be finalized by a qualified Principal Paleontologist when final engineering design details are available and more-specific information on the location and vertical and horizontal extent of project excavation activities is known.	Qualified principal paleontologist	Pre-construction
PAL-2: A qualified principal paleontologist working for a paleontological specialist approved by Caltrans will be notified at least 15 days in advance of the start of any earth-moving activity in areas underlain by a paleontologically highly sensitive rock unit. The qualified principal paleontologist will be retained to implement the practices and procedures discussed in the Paleontological Mitigation Plan prepared for this project.	Qualified principal paleontologist	At least 15 days prior to earth-moving activities

Measure	Responsible Branch/Staff	Timing/Phase
PAL-3: Within 10 days prior to the start of earth-moving activities, the principal paleontologist, his or her designated representative (e.g., paleontological field supervisor), or a paleontological monitor, along with the project engineer and paleontological coordinator, will provide a 1-hour employee environmental awareness training session for all construction contractor and subcontractor representatives, particularly employees to be involved with project-related earth-moving activities. The program will establish lines of communication, procedures for cooperation and coordination, and measures to ensure worker safety during paleontological monitoring and fossil recovery. Attendance will be required of heavy-equipment operators before they will be allowed to conduct any earth-moving activity at the project site. A written request for such a training session will be submitted to the project engineer at least 10 days before the start of earth-moving activities.	Qualified principal paleontologist (or designated representative or paleontological monitor), Caltrans resident engineer, and paleontological coordinator	Within 10 days of the start of earth-moving activities
PAL-4: Before earth-moving activities begin, paleontological specialist staff members will conduct a preconstruction field survey of the project construction zone, and any exposed fossil remains will be recovered.	Qualified paleontological specialist	Prior to earth-moving activities
PAL-5: A qualified paleontological monitor working under the direction of the principal paleontologist or his or her designated representative (i.e., paleontological field supervisor) will monitor earth-moving activities whenever they occur in areas underlain by paleontologically highly sensitive rock units. In addition, spot checking of low-sensitivity units will also be undertaken to ensure that the transition points between the high- and low-sensitivity units are not inadvertently overlooked. No such earth-moving activity will be allowed without written authorization from the project engineer and the presence of a paleontological monitor. The project engineer will arrange for the paleontological monitor to be at the project site when needed. Monitoring will include inspecting freshly exposed strata to allow for the discovery and subsequent recovery of larger fossil remains, as well as the collection and processing of rock and sediment samples to allow for the recovery of smaller fossil remains too small to be observed in the field.	Qualified paleontological monitor	During construction
PAL-6: If an unusually large or productive fossil occurrence is found, the paleontological monitor will immediately notify the project engineer of the need to have earth-moving activities avoid the fossil site until the remains have been recovered. If necessary to ensure the paleontological monitor is not diverted from the monitoring task and to expedite fossil recovery and reduce the potential for any construction delay, additional personnel (i.e., paleontological recovery team) also working under the direction of the principal paleontologist or his or her designated representative will be assigned to recover the occurrence. The recovery team will	Qualified paleontological monitor and Caltrans resident engineer	During construction

Measure	Responsible Branch/Staff	Timing/Phase
establish an exclusionary or buffer zone with a 60-foot radius to temporarily stop or divert earth-moving activities around the fossil site while fossil removal is being conducted. As appropriate, Caltrans staff members will examine and modify the dimensions of the exclusionary zone. Earth-moving activities will not proceed through the fossil site until authorized by the paleontological recovery team member.		
BIO-1: If it is determined that the monarch roosting habitat would be impacted as a result of the project, replanting of eucalyptus, or native trees approved by the Landscape Architect such as Fremont cottonwood (*Populus fremontii*) or western sycamore (*Platanus racemosa*), also utilized by the monarch butterfly, would be required.	Caltrans and Metro	During and post-construction

Note: Avoidance and minimization measures are denoted with AVM. Measures without the AVM designation refer to mitigation measures.

Appendix D. List of Acronyms and Abbreviations

Acronym	Definition
°F	Fahrenheit
23 CFR 772	NEPA/23 Code of Federal Regulations Part 772
AB	Assembly Bill
AB 32	Assembly Bill 32
AB 52	Assembly Bill 52
ACHP	Advisory Council of Historic Preservation
ACM	asbestos-containing materials
ADA	Americans with Disabilities Act
ADL	aerially deposited lead
ADT	average daily traffic
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
ARB	Air Resources Board
ARPA	Archaeological Resources Protection Act
Basin	Los Angeles Basin
BIOS	Biogeographic Information and Observation System
BMP	Best Management Practice
BSA	Biological Study Area
C/NR	Conservation and Natural Resources
CAFE	Corporate Average Fuel Economy
Cal/OSHA	California Division of Occupational Safety and Health Administration
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
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CH4	methane
CIP	Corridor Improvement Project
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide

Acronym	Definition
CO Protocol	Transportation Project-Level Carbon Monoxide Protocol
CO2	carbon dioxide
COMM	Commercial and Sport Fishing
CRHR	California Register of Historical Resources
CTP	California Transportation Plan
CWA	Clean Water Act
DOGGR	Division on Oil, Gas, and Geothermal Resources
DSA	disturbed soil area
DTSC	Department of Toxic Substance Control
EAP	Early Action Project
EB	eastbound
EDR	Environmental Data Resources
EO	Executive Order
ESA	Environmentally Sensitive Area
EST	Estuarine Habitat
FCAA	Federal Clean Air Act
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Programs
GCCOG	Gateway Cities Council of Governments
GHG	greenhouse gas
Guidance	Transportation Conformity Guidance for Quantitative Hot-Spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas
GWR	Ground Water Recharge
H&SC	Health and Safety Code
H2S	hydrogen sulfide
HFCs	hydrofluorocarbons
HREC	Historical Recognized Environmental Condition
I-10	Interstate 10
I-105	Interstate 105
I-5	Interstate 5
I-605	Interstate 605
IND	Industrial Service Supply

Acronym	Definition
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
ISA	Initial Site Assessment
LA Metro	Los Angeles County Metropolitan Transportation Authority
LACDPW	Los Angeles County Department of Public Works
lbs	pounds
LCFS	Low Carbon Fuel Standard
LEDPA	least environmentally damaging practicable alternative
LOS	level of service
MAR	Marine Habitat
MBTA	Migratory Bird Treaty Act
MIGR	Migration of Aquatic Organisms
MLD	Most Likely Descendent
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
MS4s	Municipal Separate Storm Sewer Systems
MSAT	mobile source air toxics
MTCO2e	metric tons of carbon dioxide equivalent
MUN	Municipal and Domestic Supply
N2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NAHC	Native American Heritage Commission
NAV	Navigation
NB	northbound
ND	Negative Declaration
NEPA	National Environmental Policy Act
NES	Natural Environment Study
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NNL	National Natural Landmarks
NO2	nitrogen dioxide
NOAA Fisheries Service	National Oceanic and Atmospheric Administration's National Marine Fisheries Service
NOx	nitrogen oxides

Acronym	Definition
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O3	ozone
OHWM	ordinary high water mark
OSHA	Occupational Safety and Health Act
PA	Programmatic Agreement
PB	lead
PM	particulate matter
PM10	particles of 10 micrometers or smaller
PM2.5	particles of 2.5 micrometers and smaller
POAQC	project of air quality concern
ppb	parts per billion
ppm	parts per million
PRC	Public Resources Code
PROC	Industrial Process Supply
RAP	Relocation Assistance Program
RARE	Rare, Threatened, or Endangered Species
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
REC-1	Water Contact Recreation
REC-2	Non-Contact Water Recreation
ROG	reactive organic gases
ROW	right of way
RTP	Regional Transportation Plans
RWQCB	Regional Water Quality Control Board
SB	southbound
SB 32	Senate Bill 32
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SDC	Seismic Design Criteria
SF6	sulfur hexafluoride
SGVCOG	San Gabriel Valley Council of Governments
SHELL	Shellfish Harvesting
SHPO	State Historic Preservation Officer

Acronym	Definition
SIP	State Implementation Plan
SLR	sea-level rise
SMAQMD	Sacramento Metropolitan Air Quality Management District
SO2	sulfur dioxide
SPWN	Spawning, Reproduction, and/or Early Development
SR-60	State Route 60
SSC	Species of Special Concern
SWMP	Storm Water Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCE	temporary construction easements
TCWG	Transportation Conformity Working Group
TMDL	Total Maximum Daily Loads
TSCA	Toxic Substances Control Act
U.S.	United States
U.S. EPA	United States Environmental Protection Agency
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
USC	United States Code
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGRCP	U.S. Global Change Research Program
v/l/h	vehicles per lane per hour
VMT	vehicle miles traveled
VOCs	volatile organic compounds
WARM	Warm Freshwater Habitat
WB	westbound
WDR	Waste Discharge Requirement
WET	Wetlands Habitat
WILD	Wildlife Habitat
WLA	Waste Load Allocation
WPCP	Water Pollution Control Program

This page is intentionally left blank.

Appendix E. Air Quality Conformity

2019 Federal Transportation Improvement Program

Los Angeles County
State Highway
Including Amendment 1-5
(In $000`s)

ProjectID	County	Air Basin	Model	RTP ID	Program	Route	Begin	End	Signage Begin	Signage End	System	Conformity Category	Amendment
LA0G1119	Los Angeles	SCAB		REG0703	PLN40	605	16.9	19.8			S	NON-EXEMPT	1
Description:							PTC	187,800			Agency	LOS ANGELES COUNTY MTA	
Improvements to the I-605/SR-91 Interchange consist of adding an additional general purpose lane, adding auxiliary lanes, and on/off ramp improvements.													

Fund	ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
MEASURE R 20H - HIGHWAY CAPITAL	8,000	3,200	122,600	133,800	5,200	6,000		122,600				133,800
SB1TRADE CORRIDOR ENHANCEMENT	3,000	29,000		32,000		32,000						32,000
STIP ADVANCE CON-RIP	22,000			22,000		22,000						22,000
LA0G1119 Total	33,000	32,200	122,600	187,800	5,200	60,000		122,600				187,800

ProjectID	County	Air Basin	Model	RTP ID	Program	Route	Begin	End	Signage Begin	Signage End	System	Conformity Category	Amendment
LA0G1457	Los Angeles	SCAB		REG0703	NCR88	605	19.17	19.45			S	NON-EXEMPT	0
Description:							PTC	17,031			Agency	LOS ANGELES COUNTY MTA	
I-605 Valley Blvd Interchange Improvements: The project involves the reconfiguration of SB I-605 ramp by removing the horseshoe on-ramp and adding two lanes to the on-ramp. The project will also reconstruct the SB I-605 loop off and on-ramps. Lastly, the project will add a WB through lane on Valley Blvd west of Temple Ave and add a two lane left turn pocket for SB I-605 on-ramp on WB Valley Blvd.													

Fund	ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
MEASURE R 20H - HIGHWAY CAPITAL	1,879	1,646	13,506	17,031	626	626	1,176	7,302	7,301			17,031
LA0G1457 Total	1,879	1,646	13,506	17,031	626	626	1,176	7,302	7,301			17,031

ProjectID	County	Air Basin	Model	RTP ID	Program	Route	Begin	End	Signage Begin	Signage End	System	Conformity Category	Amendment
LAE0574	Los Angeles	SCAB		LAE0574	NCRH3	605	20.2	20.6			S	EXEMPT - 93.127	0
Description:							PTC	1,920			Agency	IRWINDALE	
Route 605: CONSTRUCT I-605 INTERCHANGE IMPROVEMENTS IN IRWINDALE (No lane addition). Utilizing Toll Credits.													

Fund	ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
DEMO-SAFETEA-LU	652		948	1,600	652		948					1,600
AGENCY	320			320	320							320
LAE0574 Total	972		948	1,920	972		948					1,920

ProjectID	County	Air Basin	Model	RTP ID	Program	Route	Begin	End	Signage Begin	Signage End	System	Conformity Category	Amendment
LA000512	Los Angeles	SCAB		LA000512	CAR60	710	3.6	5			S	NON-EXEMPT	3
Description:							PTC	1,511,187			Agency	LONG BEACH	
BRIDGE NO. 53C0065, OCEAN BLVD, OVER ENTRANCE CHANNEL, UP RR, 1.0 MI E STATE ROUTE 47. Replace existing 5 lane Gerald Desmond Bridge (GDB) with new 6 lane bridge.													

Fund	ENG	R/W	CON	Total	Prior	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	Total
PROJECTS OF NATIONAL AND REGIONAL SIGNIFICANCE	22,078	73,715	4,207	100,000	95,793	4,207						100,000
SURFACE TRANS PROG	5,782			5,782	5,782							5,782
STP LOCAL - REGIONAL			11,315	11,315	11,315							11,315
TRANSPORTATION INFRASTRUCTURE FINANCE & INNOVATION ACT	1,834	190,665	132,501	325,000	325,000							325,000
PROP "C25" FUNDS			17,306	17,306	17,306							17,306
PORT FUNDS	11,880	14,640	246,298	272,818	272,818							272,818
CORRIDOR MOBILITY PROGRAM			153,657	153,657	153,657							153,657

Print Date: 3/21/2019 10:50:16 AM

Page: 11 of 14

TABLE 2 Continued

#	COUNTY	LEAD AGENCY	RTP ID	SYSTEM	ROUTE	DESCRIPTION	COMPLETION YEAR	COST ($1,000's)	FISCAL IMPACT	REASON FOR AMENDMENT
	LOS ANGELES	LOS ANGELES COUNTY MTA (METRO)	NEW: 1163S004	STATE HIGHWAY	I-605	PROPOSED IMPROVEMENTS ON THE I-605 CONNECTOR SOUTH ST. OFF RAMP BY ADDING RIGHT TURN LANE.	2021	$36,000		REORGANIZATION OF I-605 CORRIDOR IMPROVEMENT PROJECTS INTO UPDATED ENTRIES. CHANGES INCLUDE REMOVAL AND REPLACEMENT OF EXISTING RTP 1M1004 AND 1162S015 WITH THE FOLLOWING NEW RTP PROJECTS: 1163S008, 1163S005, 1163S006, 1163S007, 1163S012, 1163S003, 1163S004, 1163S009, 1163S010, 1163S011, 1163S013 AND 1163S014.
	LOS ANGELES	LOS ANGELES COUNTY MTA (METRO)	NEW: 1163S009	STATE HIGHWAY	I-605	THE PROJECT INVOLVES THE RECONFIGURATION OF SB I-605 RAMP BY REMOVING THE HORSE-SHOE ON-RAMP AND ADDING TWO LANES TO THE ON-RAMP. THE PROJECT WILL ALSO RECON-STRUCT THE SB I-605 LOOP OFF AND ON-RAMPS. LASTLY, THE PROJECT WILL ADD A WB THROUGH LANE ON VALLEY BLVD WEST OF TEMPLE AVE AND ADD A TWO LANE LEFT TURN POCKET FOR SB I-605 ON-RAMP ON WB VALLEY BLVD.	2022	$17,050		
	LOS ANGELES	LOS ANGELES COUNTY MTA (METRO)	NEW: 1163S010	STATE HIGHWAY	I-605	IMPROVEMENTS TO I-605 FROM FAIRTON ST UC TO SLAUSON AVENUE, I-105 FROM BELLFLOWER BLVD OC TO STUDEBAKER ROAD, AND ON I-5 FROM 1 MILE SOUTH OF FLORENCE AVE TO RIO HONDO CHANNEL WHICH INCLUDE, ONE ADDITIONAL GENERAL PURPOSE, HOT, OR HOV LANE IN EACH DIREC-TION ALONG I-605, ONE HOV LANE IN EACH DIRECTION ALONG I-5, HOT OR HOV DIRECT CONNECTOR FROM I-605 TO I-105, AUX LANES WHERE NECESSARY, AND RECONFIGU-RATION OF INTERCHANGES AND LOCAL ARTERIAL STREETS LA-605 PM R6.36/R11.4 LA-5 PM 5.8/9.5 LA-105 PM R16.6/R18.2]	2031	$2,200,000		

U.S. Department of Transportation
Federal Highway Administration

California Division

650 Capitol Mall, Suite 4-100
Sacramento, CA 95814
(916) 498-5001
(916) 498-5008 (FAX)

November 20, 2020

In Reply, Refer To:
HDA-CA

John Bulinski, District Director
California Department of Transportation
District 7
100 South Main Street, Suite 100
Los Angeles, CA 90012-3606

Attention: Andrew Yoon

SUBJECT: Project Level Conformity Determination for the I-605 Valley Blvd. Interchange Improvement Project (MPO FTIP ID LA0G1457)

Dear Mr. Bulinski:

On October 30, 2020, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a complete request for a project level conformity determination for the I-605 Valley Blvd. Interchange Improvement Project. The project is in an area that is designated Non-Attainment or Maintenance for Ozone, Carbon Monoxide (CO) and Particulate Matter (PM10, PM 2.5).

The project level conformity analysis submitted by Caltrans indicates that the project-level transportation conformity requirements of 40 CFR Part 93 have been met. The project is included in the Southern California Association of Governments' (SCAG) current Regional Transportation Plan (RTP) and Transportation Improvement Program (TIP), as amended. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

As required by 40 CFR 93.116 and 93.123, the localized PM2.5 and PM10 analyses are included in the documentation. The analyses demonstrate that the project will not create any new violations of the standards or increase the severity or number of existing violations.

Based on the information provided, FHWA finds that the I-605 Valley Blvd. Interchange Improvement Project conforms with the State Implementation Plan (SIP) in accordance with 40 CFR Part 93.

If you have any questions pertaining to this conformity finding, please contact Mr. Joseph Vaughn by phone at (916) 498-5346 or by email at Joseph.Vaughn@dot.gov.

Sincerely,

ANTONIO JOHNSON

Digitally signed by ANTONIO JOHNSON
Date: 2020.11.23 08:36:11 -08'00'

Tashia J. Clemons
Director, Planning and Environment
Federal Highway Administration

Appendix F. SHPO Concurrence

State of California • Natural Resources Agency — Gavin Newsom, *Governor*

DEPARTMENT OF PARKS AND RECREATION — Armando Quintero, *Director*
OFFICE OF HISTORIC PRESERVATION
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 17, 2021

VIA EMAIL

In reply refer to: FHWA_2021_0217_001

Mr. David Price
Section 106 Coordinator
Cultural Studies Office
Caltrans Division of Environmental Analysis
1120 N Street, MS-27
Sacramento, CA 95814

Subject: Finding of No Adverse Effect with Minor Phasing for the Interstate 605/Valley Boulevard Interchange Improvements Project in Los Angeles County.

Dear Mr. Price:

On February 17, 2021, the Office of Historic Preservation (OHP) received a letter from the California Department of Transportation (Caltrans) for the above referenced undertaking. Caltrans is initiating consultation with the State Historic Preservation Officer (SHPO) in accordance with 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* (Section 106 PA), as well as the *Memorandum of Understanding between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92* (5024 MOU). Pursuant to Stipulation X.B.2.b of the Section 106 PA, Caltrans is seeking SHPO comment on a finding of no adverse effect without standard conditions. Enclosed with Caltrans' letter is a Historic Property Survey Report (HPSR) and attachments.

Caltrans, in cooperation with the Los Angeles County Metropolitan Transportation Authority, the San Gabriel Valley Council of Governments, Gateway Cities Council of Governments, the Los Angeles County Department of Public Works, and the City of Industry, propose to improve mobility and relieve congestion, capacity constraints, and other related deficiencies on I-605 at the Valley Boulevard interchange. The interchange suffers from high accident rate locations, inadequate truck turn oaths, nonstandard lane and shoulder widths along loop ramps, and noncompliant Americans with Disabilities Act facilities. The Undertaking would include improvements to Valley Boulevard, Temple

Avenue, and the I-605 southbound (SB) loop off-ramp and I-605 northbound (NB) off-ramp onto Valley Boulevard, and the I-605 SB on-ramp, I-605 NB loop on-ramp from EB Valley Boulevard, the I-605 NB on-ramp from WB Valley Boulevard and SB Temple Avenue. There are two alternatives under consideration: one No-Build alternative (Alternative 1) and one build alternative (Alternative 2). A more detailed description of the undertaking and area of potential effects (APE) is located on page one and two of the HPSR.

Caltrans' efforts to identify historic properties that may be affected by the undertaking identified the Union Pacific Railroad (UPRR; former Southern Pacific Railroad tracks; P-19- 186112) and the Valley Boulevard (prehistoric trade route) within the area of potential effects (APE) and requiring evaluation according to the National Register of Historic Places (NRHP) criteria. Pursuant to Stipulation VIII.C.4 of the Section 106 PA, Caltrans assumes the UPRR as eligible for listing on the NRHP under Criteria A and B for the purposes of this undertaking only due to its large size and limited potential for effects. Caltrans will also assumes Valley Boulevard as eligible for listing on the NRHP under Criterion A for the purposes of this undertaking only due to its size and undertaking's limited potential to cause effects to the property.

Caltrans has applied the Criteria of Adverse Effect, pursuant to Stipulation X.A. of the Section 106 PA and has determined that as currently proposed, the undertaking will have no adverse effect to the UPRR or Valley Boulevard. Following completion of the undertaking, both properties will retain the same aspects of integrity that they presently exhibit. Caltrans will follow the Secretary of the Interior's Rehabilitation Standards (SOIS) for both properties. In the case of the Union Pacific Railroad, Caltrans will also implement a SOIS Action Plan.

However, due to tribal concerns related to the cultural importance and potential archaeological sensitivity of the Valley Boulevard prehistoric trade route, Caltrans District 7 has determined that a minor phased approach to the Undertaking is appropriate, pursuant to Stipulation XII.B of the Section 106 PA. Though the potential to encounter archaeological deposits during the undertaking is very low, Caltrans cannot conduct subsurface testing below the roadway prior to project implementation due to the developed and heavily trafficked nature of the area. As such, in accordance with Stipulation XII.B Caltrans is proposing a minor phased approach out of an abundance of caution and respect for the Gabrieleño Band of Mission Indians—Kizh Nation's input. Caltrans will implement archaeological and tribal monitoring as non-standard conditions in the direct APE/Archaeological Monitoring Area (AMA) in addition to implementing a Phased Cultural Resources Identification Plan. Caltrans Cultural Studies Office (CSO) approved the use of minor phasing on December 17, 2020 The Phased Identification Plan will guide Caltrans District 7's continued consultation with CSO and SHPO on these findings per Stipulation X.B.2 of the Section 106 PA.

Pursuant to Stipulation X.B.2.a of the Section 106 PA, Caltrans has found that the proposed undertaking will have no adverse effect to historic properties. Based on review

of the submitted documentation, and the proposed conditions to implement archaeological and tribal monitoring and Phased Identification Plan, **I do not object** to this finding. If you have any questions, please contact State Historian Natalie Lindquist at natalie.lindquist@parks.ca.gov or Associate State Archaeologist Alicia Perez at alicia.perez@parks.ca.gov .

Sincerely,

Julianne Polanco
State Historic Preservation Officer

This page is intentionally left blank.

Appendix G. Species Lists

List of Species Observed in the BSA

Scientific Name	Common Name	Native Status
Plant Species		
ANGIOSPERMS (EUDICOTS)		
ADOXACEAE	MOSCHATEL FAMILY	
Sambucus nigra ssp. *Caerulea*	blue elderberry	native
ANACARDIACEAE	SUMAC FAMILY	
Schinus molle	Peruvian pepper tree	invasive non-native
APOCYNACEAE	DOGBANE FAMILY	
Nerium oleander	oleander	non-native
ASTERACEAE	ASTER FAMILY	
Artemisia californica	California sagebrush	native
Baccharis salicifolia	mule fat	native
Lactuca serriola	prickly lettuce	non-native
Sonchus oleraceous	common sow thistle	non-native
BIGNONIACEAE	TRUMPET-CREEPER FAMILY	
Jacaranda mimosifolia	blue jacaranda	non-native
CHENOPDIACEAE	GOOSEFOOT FAMILY	
Salsola tragus	Russian thistle	invasive non-native
EUPHORBIACEAE	SPURGE FAMILY	
Ricinus communis	castor bean	invasive non-native
FABACEAE	PEA FAMILY	
Acacia redolens	bank catclaw	non-native
Acmispon glaber	deerweed	native
Parkinsonia aculeata	Mexican palo verde	non-native
GERANIACEAE	GERANIUM FAMILY	
Erodium cicutarium	red stemmed filaree	invasive non-native
LAMIACEAE	MINT FAMILY	
Rosmarinus officinalis	rosemary	non-native
Salvia greggii	autumn sage	non-native
LYTHRACEAE	LOOSESTRIFE FAMILY	
Lagerstroemia indica	crape myrtle	non-native
MALVACEAE	MALLOW FAMILY	
Malva parviflora	cheeseweed	non-native
MYRTACEAE	MYRTLE FAMILY	
Callistemon viminalis	dwarf bottlebrush	non-native
Eucalyptus citriodora	lemon scented gum	non-native

Eucalyptus polyanthemos	silver dollar gum	non-native
POLYGONACEAE	BUCKWHEAT FAMILY	
Eriogonum fasciculatum	California buckwheat	native
SOLANACEAE	POTATO FAMILY	
Datura wrightii	jimson weed	native
Nicotiana glauca	tree tobacco	invasive non-native
VERBENACEAE	VERBENA FAMILY	
Lantana montevidensis	trailing lantana	non-native
Lantana urticoides	West Indian shrubverbena	non-native
ANGIOSPERMS (MONOCOTS)		
ARECACEAE	PALM FAMILY	
Washingtonia robusta	Mexican fan palm	invasive non-native
POACEAE	GRASS FAMILY	
Bromus sp.	Unknown brome	unknown
Hordeum murinum	foxtail barley	invasive non-native
Muhlenbergia rigens	deer grass	native
Pennisetum setaceum	fountaingrass	invasive non-native
GYMNOSPERMS		
PINACEAE	PINE FAMILY	
Pinus canariensis	Canary Island pine	non-native
PTERIDOPHYTES		
SELAGINELLACEAE	SPIKE-MOSS FAMILY	
unknown moss	unknown	unknown

Scientific Name	Common Name	Native Status
Wildlife Species		
BIRDS		
Columba livia	rock dove	non-native
Mimus polyglottos	northern mockingbird	native
Passer domesticus	house sparrow	non-native
Sayornis nigricans	black phoebe	native
Sturnus vulgaris	European starling	native
Zenaida macroura	mourning dove	native
INVERTEBRATES		
Apis mellifera	European honey bee	non-native
MAMMALS		
Mephitis	striped skunk	native

USFWS Species List

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
http://www.fws.gov/carlsbad/

In Reply Refer To:
Consultation Code: 08ECAR00-2019-SLI-0338
Event Code: 08ECAR00-2021-E-01122
Project Name: I-605/Valley Interchange Improvement Project

January 20, 2021

Subject: Updated list of threatened and endangered species that may occur in your proposed project location 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: 08ECAR00-2019-SLI-0338
Event Code: 08ECAR00-2021-E-01122
Project Name: I-605/Valley Interchange Improvement Project
Project Type: TRANSPORTATION
Project Description: Improvements to the I-65/Valley Interchange
Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@34.05341051158449,-118.00379583829314,14z

Counties: Los Angeles County, California

Endangered Species Act Species

There is a total of 4 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.

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. The location of the critical habitat is not available. 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. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5945	Endangered
Southwestern Willow Flycatcher *Empidonax traillii extimus* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/6749	Endangered

Flowering Plants

NAME	STATUS
Nevin's Barberry *Berberis nevinii* There is **final** critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/8025	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

NOAA Fisheries Service Species List

National Marine Fisheries Service Species List

Quad Name **El Monte**
Quad Number **34118-A1**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) - **X**
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -
Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

National Marine Fisheries Service Species List

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH -
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
See list at left and consult the NMFS Long Beach office
562-980-4000

MMPA Cetaceans -
MMPA Pinnipeds -

This page is intentionally left blank.

Appendix H. List of Technical Studies

List of Technical Studies

The technical studies listed below were used in the preparation of this Initial Study with Negative Declaration/Environmental Assessment with Finding of No Significant Impact.

Air Quality Study Report (February 2020)

Prepared by Ambient

Air Quality Conformity Analysis (November 2020)

Archaeological Study Report (May 2020)

Prepared by Duke CRM

Historical Properties Survey Report (May 2020)

Prepared by GPA Consulting

Initial Site Assessment (December 2019)

Prepared by Group Delta

Natural Environment Study (Minimal Impacts) (August 2019)

Prepared by GPA Consulting

Noise Abatement Decision Report (February 2020)

Prepared by NCM Engineering

Noise Study Report (January 2020)

Prepared by Ambient

Stormwater Data Report (October 2019)

Prepared by WKE, Inc.

Traffic Operations Analysis Report (December 2019)

Prepared by Intueor Consulting

Visual Impact Assessment Technical Memorandum (May 2019)

Prepared by California Department of Transportation, District 7

This page is intentionally left blank.

Appendix I. Comments on Draft Environmental Document

GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians
recognized by the State of California as the aboriginal tribe of the Los Angeles basin

Adopt Mitigative Declaration Study / Mitigated Negative Declaration

Date: July 2, 2020

Project Name: 07-LA-605 (PM R18.9/R19.5) Interstate 605/Valley Boulevard Interchange Improvement Project

Good Afternoon Ron Kosinski,

We have received your Notice of the Adopt Mitigative Negative Declaration for the Los Angeles County. Our Tribal Government would like to be consulted if any ground disturbance will be conducted for this project. NA-1-1

Sincerely,
Gabrieleno Band of Mission Indians/Kizh Nation
(1844) 390-0787 Office

Andrew Salas, Chairman
Albert Perez, treasurer I
Nadine Salas, Vice-Chairman
Martha Gonzalez Lemos, treasurer II
Dr. Christina Swindall Martinez, secretary
Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723 www.gabrielenoindians@yahoo.com gabrielenoindians@yahoo.com

Comment Letter NA-1: Kizh Nation

Response NA-1-1: Thank you for your comment to I-605 Valley Boulevard Interchange Project. We can confirm that there will be ground disturbance. A monitoring and discovery plan will be in place prior to construction as part of our ongoing consultation.

From: ROBERT TORRES
To: Roach, Jason P@DOT
Subject: Interstate 605/Valley Boulevard Interchange Improvements Project- Initial Study with Proposed Negative Declaration/Environmental Assessment
Date: Tuesday, July 14, 2020 2:21:15 PM

EXTERNAL EMAIL. Links/attachments may not be safe.

Hello Jason,

I am a homeowner in the vicinity of the subject project and I have the following comments on the I-605/Valley Bl Interchange Improvements Project Initial Study w/ Proposed Negative Declaration/Environmental Assessment (ISEA):

- The safety of the Valley Motel, located at 13010 Valley Blvd, La Puente, CA 91746, and directly east of the I-605 northbound Valley Bl off-ramp, has not been properly addressed in the ISEA. Currently, the westerly wall of the Valley Motel structure sits a few feet west of the 1-605 northbound Valley Bl off-ramp. No protective barrier is provided between the motel structure and the off-ramp. The off-ramp path of travel leads motorists directly into a sharp curve as they approach the motel and allows for potential collisions into the motel wall. This condition should be addressed via the proposed modification of the off-ramp. Either an adequate barrier should be installed between the motel and off-ramp to absorb the force of an on-coming semi-trailer, or the turning radius of the ramp should be modified to meet current safety standards. If this can not be achieved, consideration must be given to acquiring the Valley Motel property and removing the building to eliminate the risk of injury or death to motorists and occupants of the motel if an accident should occur. I-1-1

- Visibility of pedestrians utilizing the crosswalk at the southeast corner of Valley Blvd and Temple Ave has not been adequately addressed in the ISEA. The improvement of the I-605 northbound Valley Bl off-ramp should alleviate/address the existing lack of visibly of pedestrians by motorists exiting the off-ramp and turning east on to Valley Blvd. The Valley Motel building, located on the same corner, may currently encroach within the acceptable site triangle for signalized intersections. This situation could lead to pedestrians crossing the crosswalk being run over by motorist making a free right turn on a green light. This situation can be brought up to standard by either acquiring the subject motel and removing the building or acquiring a line of sight easement within the hotel property. I-1-2

- The establishment of a Quiet Zone along the Southern Pacific Railroad (SPRR) that crosses the northern leg of the Valley Blvd and Temple Ave intersection was not adequately discussed in the ISEA. Although the immediate surrounding uses near the rail crossing are commercial or industrial, a residential community exists within the sound radius of frequently passing freight trains. Additionally, the improvement of the intersection/interchange is an excellent opportunity to improve rail crossing safety measures that will qualify the crossing to be within a designated quiet zone per Federal Railroad Administration (FRA) requirements. The following is an excerpt from the ISEA related to mitigation of noise, that fails to address train horn noise, for your reference *N-1: Based on the studies completed to date, the Department intends to incorporate noise abatement in the form of (a) barriers(s) at: the edge of the shoulder of northbound I-605 from PM R18.819 to PM R19.166, with respective lengths and average heights of 0.5 mile and 14 feet. Calculations based on preliminary design data show that the barrier(s) will reduce noise levels by 5 to 7 dBA for 39 residences at a cost of $1,566,093. These measures may change based on input received from the public. If conditions have substantially changed during final design, noise abatement may not be constructed. The final decision on noise abatement will be made upon completion of the project design.* I-1-3

- Street Lighting is poor or completely absent along Valley Blvd, Temple Ave, under the I-605 overpass, and along the Valley Blvd bridge crossing the San Gabriel River. Such lighting deficiencies are not properly addressed in the ISEA. Valley Blvd is one of the heaviest traveled arterial corridors in the San Gabriel Valley, and will be traveled even more upon completion of the project improvements. The resulting increased traffic not only requires lighting to be installed per Caltrans and/or County standards, but for a thorough lighting analysis to be completed to identified any roadway areas which are not adequately lit. Consequently, although the Valley Blvd bridge is outside the subject project limits, there is an obligation to I-1-4

improve lighting along the bridge given that the subject project will create a condition in which motorist will enter a newly improved, brightly lit, portion of Valley Blvd and then transition into a pitch dark bridge. This dramatic transition in lighting levels impairs the human focal lens and greatly increases the risk of temporary blindness and resulting collisions. Comprehensive analysis of added lighting by the subject project needs to be adequately addressed in the ISEA. I-1-4

- Project aesthetics need to be better addresses in the ISEA and adequately consider the character and history of the surrounding areas and communities. The project area is one of the primary gateways to the East San Gabriel Valley and altering and/or improving its aesthetics should include properly identifying the culture, history, and past/present community uses. For example, identifying the community of Avocado Heights with a community monument sign, incorporating public art to recognize the communities historical equestrian use, and recognizing the historic Rancho La Puente which used to encompass the project area. In addition to cultural/historical aspects, poor aesthetics with a lack of identity negatively impacts communities by making them less appealing, lowing property values, and lowering community moral, just to name a few drawbacks. Poorly thought out aesthetics also leads to congregation of homeless encampments, which the project area currently suffers from. Aesthetics items such as proper fencing, properly enclosing public properties, and planting minimal vegetation will deter the erection of homeless encampments, trespassing on public property, and illegal dumping. In addition, the ISEA mentions that new barriers will be textured to deter graffiti, but fails to address how existing areas within the project limits, that have been historically susceptible to graffiti, will be enhanced to deter future vandalism. All areas susceptible to graffiti within the project areas should be enhance to deter such illegal activity. I-1-5
- The ISEA needs to do a better job in aligning with LA County's East San Gabriel Area Planning Effort, which I believe is led by the LA County Department of Regional Planning, in conjunction with LA County Supervisorial District 1, 4, and 5. I-1-6
- The ISEA does not mention the Duck Farm Park as a Community Facility. I-1-7
- The ISEA does not adequately analyze accident history/trends at Valley and Temple. Only Caltrans' accident database was used to analyze fwy and ramp related accidents. No analysis was provided with regard to accidents along Valley Bl or Temple Ave within or in the vicinity of the project area. I-1-8
- The ISEA does not include the potential for a joint Water Quality Project w/ the LA County or the City of Industry. Safe clean water funding could be utilized for such a project component. Properly analyzing public property to utilize for water storage or recharge would be a substantial water quality benefit that the project could produce. This would be in addition to the bioswale benefits described in AVM-VA-1 of the ISEA. The applicable section is 2.3.1, Water Quality and Storm Water Runoff. I-1-9

Thank you

Robert Torres
257 S. 2nd Ave
La Puente, CA 91790
(626) 483-1469

Comment Letter I-1: Robert Torres

Response I-1-1: Thank you for this safety observation. There is an existing guard rail installed on the vehicle approach to the wall of the building, along the right side of the off-ramp. This guardrail may not be long enough to provide effective shielding of the building wall, given the current proportion of large commercial vehicles using the off-ramp. The project plans will incorporate a lengthened guardrail that extends to the curb return at the end of the off-ramp, to provide additional shielding. Retroreflective delineators will also be added to the edge of pavement on the outside of the ramp curve and mounted above the guardrail as guidance devices.

Please note that the horizontal alignment of this ramp matches the existing condition. There are more considerations to this area to provide safe travel. No property acquisition is anticipated for the I-605/Valley Boulevard Interchange Improvement Project.

Response I-1-2: The scope of the I-605/Valley Boulevard Interchange Improvement Project does not include acquisition of this property, and existing right of way boundaries do not allow the pedestrian ramp to be brought any closer to the ramp to improve sight lines. Roadside signage on the ramp will be improved to benefit the pedestrian crossing by incorporating high-visibility activated blank-out "No Right Turn (on red)" (R3-1) signs at the signalized intersection and "Right Turning Vehicles Yield to Pedestrian" (R10-15) signs on the ramp approach to the intersection. These design features will be incorporated into the 60% plans and specifications for review by Caltrans' safety coordinator to confirm the effectiveness and improvement at this location. Your concerns are brought to our attention and will be considered during the design phase of the project.

Response I-1-3: Improvements are being made to the railroad crossing area as part of the I-605/Valley Boulevard Interchange Improvement Project to improve pedestrian, motorist, and railroad safety. In our coordination with CPUC, UPRR and Metrolink, it was stated that this grade crossing is not classified as being within a "quiet zone" due to commercial zoning.

The Noise Study Report (NSR) includes noise measurement surveys for the purposes of documenting traffic noise, which is also used for calibration of the traffic noise model. Since the area near/adjacent to the railroad is zoned for commercial it does not qualify for noise abatement. Additionally, train horn noise is regulated by the Federal Railroad Administration and is not part of the analysis in the NSR or IS/EA ND/FONSI.

Response I-1-4: Street lighting will be installed and upgraded for the interchange, Valley Boulevard, and Temple Avenue per Caltrans and County lighting standards. Please note, there is existing street lighting at the Valley/Temple and Valley/SB ramps intersections, along Temple Avenue, and along Valley Boulevard at ramps entrances and exits that will be upgraded as part of the project. There is currently no existing soffit lighting at the I-605 underpass (Rivergrade Overhead structure). As this existing structure is not being modified as part of the project, soffit lighting will not be added. There is currently no existing lighting on the San Gabriel River bridge and this bridge is outside the project limits and lighting on this river crossing would not be context-sensitive.

Response I-1-5: Project aesthetics have been developed for the I-605 Corridor and are documented in the Corridor Aesthetic Master Plan (CAMP), a document prepared through

collaboration between San Gabriel Valley COG, Gateway Cities COG, Caltrans, Metro and the City and County municipalities.

For the I-605/Valley Boulevard Interchange Improvement Project, new planting will be provided in the interchange area and along Temple Ave to replace and enhance existing vegetation and to be complimentary to the new storm water treatment BMP features.

New retaining walls and sound walls will receive architectural treatment consistent with the CAMP and receive anti-graffiti coating to deter vandalism. Ongoing maintenance of existing surfaces susceptible to graffiti, both inside and outside the project limits, will remain the responsibility of the local jurisdiction. The I-605/Valley Boulevard Interchange Improvement Project would not include a gateway sign, public art or community identifiers.

Response I-1-6: The LA County East San Gabriel Area Plan is currently in the draft stage. According to LA County's website (http://planning.lacounty.gov/site/esgvap/about/about/), the plan is scheduled to be drafted and going through the CEQA process in 2020. Then in 2021 the plan is scheduled to go through Community Review, and consultation/public hearings in 2022. Therefore, at this time there is not a document with policies and guidelines for the project to be in alignment with.

Response I-1-7: The Duck Farm River Park is identified as a Park and Recreation Facility above under the Affected Environment subsection in Section 2.2.3 and is discussed in terms of potential impacts as a Park and Recreation Facility. The Duck Farm River Park is also included in Appendix A: Section 4(f) *De Minimis* Determination.

Response I-1-8: Traffic accident data is based on available data from Caltrans' TASAS system. No other accident data was provided from City or County sources. Accident data will be requested from the LA County Sheriff's Department and City Police Department and this data will be incorporated into the design phase of the project, if provided.

Response I-1-9: The potential for a joint Water Quality Project with the LA County or the City of Industry has been reviewed and is outside the scope and schedule of the I-605/Valley Boulevard Interchange Improvement Project.

From: Don Moss
To: Roach, Jason P@DOT
Subject: I-605 / Valley Blvd IS/EA
Date: Wednesday, July 15, 2020 9:58:44 AM

EXTERNAL EMAIL. Links/attachments may not be safe.

Hello Mr. Roach,

Regarding the IS/EA planning document, please consider the following additions:

High visibility lane choice signage, sufficiently in advance of the northbound I-605 to Valley Blvd. off ramp curve, will facilitate traffic flow off the freeway. This is critical to avert issues when those drivers unfamiliar with the off ramp find themselves in the wrong lane and stuck in backed up traffic at the curve prior to the Valley Blvd. intersection. I-2-1

East bound Valley Blvd. traffic flow through the subject intersection will be substantially facilitated by adding *24/7 No Stopping, Standing or Parking* signage with red painted curbs to at least the intersection of Santa Mariana Ave. This restriction is necessary because parked or stopped vehicles blocking the curb lane result in traffic back up westerly beyond the freeway bridge structure. This addition will also facilitate the timing issues for the multiple signalized intersections required for this project. Please note that although no parking during heavy traffic flow times signage exists on Valley Blvd., those restrictions are historically unenforced. The notion of relying on enforcement alone in situations such as this is totally unrealistic as CHP does not have the staff to assign an officer to these sites on a regular basis. Further, L.A. County Sheriff deputies do not enforce these restrictions either. I-2-2

Please be aware that the only high profile vehicle ingress / egress for the Duck Farm River Park and adjacent commercial nursery operation west of I-605 and south of Valley Blvd. accesses Temple Ave. immediately south of the rail crossing. I-2-3

Please be aware that equestrian traffic from the El Monte area must use the Valley Blvd. bridge to access the unincorporated areas on the east side of the river. The stated planning for extra room to accommodate a bicycle lane must take into consideration this historic use. With equestrian uses in mind, dual height crossing signal activation buttons should be included in the design of each of the signalized intersections as appropriate. I-2-4

Thank you for your consideration of these issues in the planning process.

Don C. Moss
Avocado Heights Community Advocate

Comment Letter I-2: Don C. Moss, Avocado Heights Community Advocate

Response I-2-1: Advance guide signage (at one mile and exit ramp) to facilitate driver decisions before the exit ramp are already present on the I-605 northbound freeway. Exit ramp numbering and guide sign panels already incorporate retroreflective sheeting for visibility. Upgrades to this signage, and additional lane markings for destination information will be provided as part of the I-605 Corridor Improvement Project, and are not included as part of the I-605/Valley Boulevard Interchange Improvement Project. Destination signage along the exit ramp on the approach to the Valley Boulevard intersection is part of the I-605/Valley Boulevard Interchange Improvement Project and will be included in the design plans for this project.

Response I-2-2: Installing additional red painted curbs and 24/7 parking restriction signage along eastbound Valley Boulevard, east of Temple Avenue intersection extending down to Santa Mariana Avenue and associated parking enforcement is outside the scope of the I-605/Valley Boulevard Interchange Improvement Project and would be an ongoing LA County enforcement responsibility. It is understood and appreciated that this could help the through-flow of traffic along Valley Boulevard.

Response I-2-3: The information is noted. The driveway at this location is being reconstructed to provide safer turn movements for trucks using this access point and to enhance railroad safety.

Response I-2-4: The I-605/Valley Boulevard Interchange Improvement Project will not be affecting any equestrian routes per the LA County General Plan and the Avocado Heights Community profile. Bicycle lanes are not planned or programmed through the interchange for the I-605/Valley Boulevard Interchange Improvement Project.

SAN GABRIEL VALLEY WATER COMPANY

July 14, 2020

Mr. Jason Roach
Caltrans District 7, Division of Environmental Planning
100 South Main Street, MS-16A
Los Angeles, CA 90012
Attn: Valley Boulevard Interchange Improvements

Subject: Interstate 605/Valley Boulevard Interchange Improvements Project
Initial Study/Environmental Assessment and Notice of Intent to Adopt a Negative Declaration
File: 07-LA-605 (PM R18.9/R19.5)

Dear Mr. Roach:

San Gabriel Valley Water Company ("San Gabriel") is a public utility company regulated by and subject to the jurisdiction of the California Public Utilities Commission. San Gabriel provides public utility water service to a population of more than 258,200 in 15 cities and unincorporated areas within its Los Angeles County service area. Set forth below and in the Exhibits attached to this letter are San Gabriel's comments about the California Department of Transportation and the Los Angeles County Metropolitan Transportation Authority (collectively, "Caltrans") Interstate 605/Valley Boulevard Interchange Improvements Project ("VIP") Initial Study/Environmental Assessment ("Initial Study") with Proposed Negative Declaration/Environmental Assessment ("ND"). San Gabriel also urges that the Proposed Negative Declaration not be adopted. R-1-1

The Initial Study states that the VIP is an "Early Action Plan" of the Interstate 605 Corridor Improvement Project ("CIP") and that this project could be implemented even if no additional improvements are made within the CIP. The Initial Study only offers a general discussion of the improvements proposed for the VIP, which includes improvements to the Interstate 605 on and off ramps, Valley Boulevard, Temple Avenue, Railroad Avenue, Perez Place, and Cloverleaf Drive. Nonetheless, during many meetings and discussions over the last three years, Caltrans has made clear that the planned CIP improvements would result in significant adverse impacts to San Gabriel's public water system utility plant facilities and operations. In response, San Gabriel has expressed its concerns to Caltrans about how these adverse impacts will likely result in irreparable harm to San Gabriel's utility plant facilities and public water service operations (See Exhibits "E" and "F", hereto). R-1-2

11142 GARVEY AVENUE • P.O. BOX 6010 • EL MONTE, CALIFORNIA 91734-2010 • (626) 448-6183 • Fax (626) 448-5530

San Gabriel's service area includes portions of those areas specifically delineated within the VIP area, as shown in the Initial Study. San Gabriel owns and operates numerous water distribution and transmission mains and related public utility plant facilities in public rights-of-way and specific easements within the VIP area. Among these water mains and facilities are those which connect directly or indirectly to and function to provide water to be treated at San Gabriel's major water production, treatment, storage and distribution plant complex located at the north side of Perez Place and Cloverleaf Drive, west of Temple Avenue, identified as Plant B5. That plant is critically required to provide the treated water distributed for domestic use and public fire protection purposes for the benefit of the residents, businesses, schools, and the general public in San Gabriel's service area.

R-1-3

We must respectfully disagree with the conclusions the Initial Study presents with regard to San Gabriel's public utility plant, water facilities and properties. For example, with insufficient supporting evidence, the Initial Study claims on page 5 that "...the proposed VIP would have less than significant impacts on...utilities and service systems." Contrary to such simplistic platitudes in the Initial Study, San Gabriel has provided Caltrans with extensive amounts of information, data, maps, diagrams, and schematics that show its public utility plant, water mains, and Plant B5 complex will be significantly impacted by the VIP and CIP. The Initial Study provides only generalized and cursory information about the project and lacks sufficient details specific to its proposed improvements, including, but not limited to, the horizontal and vertical alignments of proposed new and replacement pavement, storm drain systems, and traffic signal foundations which San Gabriel already has explained to Caltrans, with detailed supporting documentation, would have significant adverse effects on the public water system and its safe operation. Therefore, Caltrans could not legitimately conclude in the Initial Study that there would be no impacts to the existing public utility plant facilities and water transmission and distribution mains in the VIP area. Please refer to the attached Exhibits, including Exhibit "A" for detailed descriptions of San Gabriel's utility plant facilities and a set of comments responding to the skimpy information presented in the Initial Study.

R-1-4

The Initial Study fails to provide any meaningful information or discussion of proposed changes in grades of the roadway surface from existing conditions to the proposed improvements. With the existing horizontal and vertical alignments of the roadway very likely to change as a result of the VIP, the changes in turn would conflict with and likely result in significant harmful impacts to San Gabriel's public utility plant facilities and water mains, including, but not limited to, the critically important water treatment

R-1-5

operations at the Plant B5 complex. Additionally, based on the unduly cursory and simplistic information presented in the Initial Study, it appears that excavations will occur at depths of 3 feet for new roadway construction, 8 feet for storm drain installations and 35 feet for traffic signal foundations within the VIP area. Since San Gabriel's water mains and facilities exist at depths averaging from 2 to 4 feet, the existing San Gabriel water mains and facilities would likely be significantly and permanently impacted and harmed by the project. Such water mains and facilities might need to be abandoned, removed from the ground, and relocated to different depths within new alignments that ensure appropriate separation between San Gabriel's public utility water mains and facilities and sewer lines, storm drains and other underground utilities.

R-1-5 (cont.)

The Initial Study also references the Caltrans Preliminary Utility Impact Report dated January 22, 2019, which, without any supporting facts, recommends that San Gabriel's existing utilities be protected in place, and that only one existing public fire hydrant be relocated. San Gabriel reviewed the information contained in the Initial Study and compiled a set of comments. Please refer to the attached Exhibits, including to Exhibit "B", for San Gabriel's comments on the Initial Study's Preliminary Utility Impact Report. That Report's Appendix C: Utility Impact Matrix presents a list of recommendations regarding San Gabriel's water mains and facilities identified within the VIP area. Please refer to Exhibit "C" for an indexed set of utility plans from Caltrans that highlights locations of San Gabriel's existing mains, along with San Gabriel's detailed comments regarding the existing public utility plant facilities and water mains. As reported in Exhibit "C", San Gabriel's existing public utility plant facilities and water mains located within the VIP area provide water service to its customers in the vicinity of the VIP area through its Plant B5 water treatment and distribution complex. San Gabriel has previously and repeatedly informed Caltrans of, and by these comments San Gabriel reiterates its grave concerns that the VIP as well as the CIP will cause permanent, significant adverse impacts to San Gabriel's existing public utility plant facilities and water mains that are required in connection with the Plant B5 complex and would likely seriously disrupt critically needed water treatment and distribution operations at Plant B5, or as Caltrans representatives have advised San Gabriel, render the Plant B5 complex completely useless.

R-1-6

For your information, Caltrans has previously provided to San Gabriel and San Gabriel has responded to preliminary plans and roadway sections for the CIP at the location of Interstate 605 and Valley Boulevard and reviewed them with Caltrans. The plans and roadway sections are provided herewith as Exhibit "D". The plans show the widening of

R-1-7

the northbound lanes of Interstate 605 and the reconfiguration of the northbound on ramps, among other planned construction work, encroaching onto San Gabriel's Plant B5 water treatment and distribution complex. Both of these planned Caltrans improvements would cause significant impacts to and result in the unacceptable disruption and, according to Caltrans representatives' own statements, a complete shut-down of operations at the Plant B5 complex and other San Gabriel public utility plant and facilities within the VIP. In response to those plans, San Gabriel met numerous times with Caltrans representatives and sent letters to the Manager of the Transportation Planning Highway Program on November 14, 2019 and January 10, 2020, copies of which are enclosed herein as Exhibits "E" and "F", respectively. In those meetings and letters, San Gabriel strongly objected to any proposed disruption, shut-down, or relocation of the Plant B5 water production, treatment, storage and distribution plant complex contemplated by Caltrans as part of the CIP. In meetings and discussions between San Gabriel and Caltrans personnel over about a 3-year period ending October 2019, San Gabriel provided Caltrans with a great deal of technical information and engineering data relating to San Gabriel's water utility plant and facilities within the CIP. Information presented in the Initial Study appears to draw on some of the information and comments San Gabriel representatives provided during those meetings and discussions, but, San Gabriel's repeatedly expressed concerns about the adverse impacts of the VIP and CIP on its public utility plant and water facilities and properties remain unaddressed by the Initial Study.

R-1-7 (cont.)

In conclusion, the Initial Study fails to adequately address the significant potential public water supply and distribution system problems, disruptions and conflicts associated with improvements planned by Caltrans within the VIP area. Indeed, no part of the VIP can be permitted without the unqualified preservation of, and without interference with, San Gabriel's needs and obligations to reliably produce, treat and distribute safe drinking water supplies and water for public fire suppression purposes for the residents, businesses, schools and the general public in its service area, free of any interference, disruption, or shut-down of its public utility plant or water facilities and without any additional cost to San Gabriel for providing public water utility service.

R-1-8

Accordingly, San Gabriel respectfully objects to Caltrans adopting the ND and instead calls on Caltrans to perform the necessary full environmental assessment and report required by CEQA and NEPA. Also, San Gabriel requests that Caltrans provide all detailed plans, profiles, notes, formal or informal studies and roadway sections for all of the proposed VIP and CIP improvements that are included in or referred to in the Initial

R-1-9

Study, so that the potential impacts on its water mains and water utility plant facilities may be fully evaluated, and so San Gabriel can provide more specific comments in response to the Initial Study. At this time, it would be helpful if the public review and comment period for the Initial Study and ND were extended so that Caltrans can provide all of the information it has about the CIP and VIP and all planned improvements to allow San Gabriel to undertake a comprehensive review and provide additional comments. R-1-9 (cont.)

Please send the additional detailed information about the VIP and CIP and the proposed Caltrans improvements to me as follows: R-1-10

San Gabriel Valley Water Company
11142 Garvey Avenue
El Monte CA, 91733
Attn: Sam Aguirre, Manager of Property and Special Projects
Telephone: (626) 448-6183

Very truly yours,

Sam Aguirre
Manager of Property and Special Projects

SA:dg
Attachments

Comment No.	Reference and Page No.	Comment Description	Recommended Correction	
1	Table 2.2-10 Potential Utility Owner List Page 65	Table indicates incorrectly that San Gabriel owns nine (9) distribution mains in the vinicity of the project.	San Gabriel owns eight (8) distribution mains and one (1) transmission main in the vicinity of the project, a 16-inch main from the City of Industry Well No. 5 to San Gabriel's Plant B5.	R-1-11
2	Table 2.2-11 Existing Local Distribution Facilties Page 65-66	Table indicates incorrectly that San Gabriel owns nine (9) distribution mains in the vinicity of the project.	San Gabriel owns eight (8) distribution mains in the vicinity of the project.	R-1-12
3	Table 2.2-12 Existing Regional Transmission Facilities Page 66	Table indicates incorrectly that San Gabriel owns zero (0) transmission mains in the vinicity of the project.	San Gabriel owns one (1) transmission main in the vicinity of the project, a 16-inch main from the City of Industry Well No. 5 to San Gabriel's Plant B5.	R-1-13
4	Temporary Impacts to Utilities Page 67	Page 67 indicates that no temporary impacts will occur to San Gabriel's water distribution and tranmission mains, and production, treatment, storage and distribution plant. San Gabriel owns and operates distribution and tranmission mains in streets proposed to be improved.	Insufficient information and detail is provided in the report that supports the determination that no temporary impacts to San Gabriel's existing water facilities will occur. The temporary impacts will need to be assessed when construction documents are available for San Gabriel to review. Mitigations may be necessary for Caltrans to avoid or minimize any temporary impact to San Gabriel's existing water facilities and operations. Mitigations can include relocation of water mains that are shallow or those that will be impacted by pavement construction operations.	R-1-14
5	Permanent Impacts to Utilities Page 68	This discussion indicates that no permanent impacts will occur to San Gabriel's water distribution and tranmission mains, and production, treatment, storage and distribution plant, without any proposed mitigation.	Insufficient information and detail is provided in the report to support that no permanent impacts to San Gabriel's existing water facilities will occur. The permanent impacts will need to be assessed when construction documents are available for San Gabriel to review. Mitigations may be necessary to eliminate any permanent impact to San Gabriel's water facilities and operations.	R-1-15
6	Section 2.2.8 Utilities/Emergency Services Page 82	Area of Potenial Effects (APE), as described on Page 82, indicates that excavations for road construction are approximately 3 feet in depth, traffic signal poles 35 feet in depth, storm drains to 8 feet. Construction at these depths at or near any location of an existing water distribution or tranmission main may have an impact to the existing water main and will require an appropriate mitigation.	The APE excavation limits need to be applied to Section 2.2.8 Utilities/Emergency Services and discussed as potential impacts to existing water utilities. APE excavations at the reported depths may impact existing water service utilities. With insufficient information and construction details provided in the Initial Study, San Gabriel cannot confirm that its utilities can be protected in place, or recommend that they be relocated.	R-1-16
7	Section 3.2.19 Determining Significance CEQA Environmental Checklist Utilities and Service Systems Page 251	The discussion of signficance of impacts to Utilities and Service Systems omits any discussion of water facilities.	This checklist needs to include an appropriate discussion of impacts to water facilities, and sufficient data and construction details are needed in the Initial Study to support the findings in this checklist.	R-1-17

Comment No.	Reference and Page No.	Comment Description	Recommended Correction
1	Section 3 - Utility Impacts 3.1 Methodology Page 3-1	The outcomes of the evaluations of impacts to existing utilities includes cursory "Protect in Place" and "Add Protection".	San Gabriel recommends that Protect in Place provide specific steps, actions and measures to be taken by the contractor to avoid damange, such as utilizing hand digging and compaction techniques around existing utilities to be protected in place. Additionally, Add Protection and Permanent Relocation for existing water main may be required where pavement, storm drain or traffic signal improvemetns requires excavations and compaction.
2	Table 3-1 Impacts on Local Distribution Facilities (Preliminary) Page 3-2	Table indicates incorrectly that San Gabriel owns nine (9) distribution mains in the vinicity of the project.	San Gabriel owns eight (8) distribution mains and one (1) transmission main in the vicinity of the project, a 16-inch main from the City of Industry Well No. 5 to San Gabriel's Plant B5.
3	Table 3-2 Impacets on Local Distribution Facilities (Preliminary) Page 3-2	Table indicates incorrectly that San Gabriel owns zero (0) transmission mains in the vinicity of the project.	San Gabriel owns one (1) transmission main in the vicinity of the project, a 16-inch main from the City of Industry Well No. 5 to San Gabriel's Plant B5.
4	Table 3-3 Coordination with Impacted Uility Owners Page 3-3	Table indicates that San Gabriel has only one impacted facility, a fire hydrant.	San Gabriel cannot confirm that only one of its facilities is impacted, because additional information regarding the vertical and horizontal limits of the proposed I-605 and Valley Boulevard Interchange Improvements are needed.
5	Section 4 - Conclusions Page 4-1	This discussion omits any discussion of potential impacts to San Gabriel's water facilities other than the location of a fire hydrant.	Additional information is required in the Preliminary Utility Impact Report to show the limits of the horizontal and vertical construction of pavement, pavement replacement, storm drains and traffic signals.

R-1-18

Exhibit "C"

San Gabriel Valley Water Company
I-605 and Valley Boulevard Interchange Improvements
Initial Study / Environmental Assessment Review Report

6/29/2020

ID No.	Utility Owner	Utility ID	Sheet No.	Size	Start Station	Start Offset	End Station	End Offset	Action Recommended in Initial Study	San Gabriel Valley Water Company Comments
1	SGVWC	33-62	5,6	8"/12"	1013+00	500' R	1030+50	500' R	Protect in Place Replace Hydrant	8-5/8" GWBR Job 2530-1E 1963 • This main is a distribution main from B5 • 15" Bore Casing under NB Off-ramp • 15" Bore Casing under Valley Blvd. & UPRR • Temple Ave. will be widened from two lanes to three on the SB side • The NB on-ramp will be widened to three lanes, which will not impact the properties on either side. • The FH to be relocated is on this main • Conflicts depend on proposed Temple Ave and Valley Blvd. intersection grades and elevations. The depth of casing is unknown and is likely shallow since it is connected to the 4" AC and 6" Steel and might not withstand the heavy external pressure from paving operations. If the main were too shallow to keep in its current location, water service from Plant B5 could be disrupted.
2	SGVWC	33-64	4,5	6"	1023+50	400' R	1022+00	1050' R	Protect in Place	4" PJGN Job 642E 1950 & 6-5/8" FWBR Job 4511E-1 1979 • This main is located in the south side of Valley Blvd. • Crosses NB Off-ramp • Does not cross 605 • The potential for conflicts depend on on/off ramp locations, grades and elevations. The 4" AC main is likely shallow and will not withstand heavy external pressure from construction equipment during grading and repaving. The 6" steel main has thin walls and may not withstand the heavy external pressure from grading and paving construction equipment. If the main would be impacted by the construction operations of the interchange project, water service from Plant B5 could be disrupted.
3	SGVWC	33-65	4,5	17"	1026+50	1000' L	1022+50	1250' R	Protect in Place	17-3/8" GWBG/GWBR/GWMR Job 6579F-4 2001 • This main is located in Valley Blvd. • The alignment is shown incorrectly on Valley Blvd. East of Temple • This main is affected by westbound Valley Blvd. Improvements, which involve repaving from San Angelo to Temple and construction of a new signal at the intersection. West of Temple the "leftmost" lane is described widen to three lanes for the southbound on-ramp. • The potenial for conflicts will depend on proposed elevation changes in the widening, the repaving of Valley Blvd. and the new southbound on-ramp and southbound loop off-ramp widened intersection grades and elevations. The main may be too shallow or too deep with any grade change resulting from the improvements, and may need to be relocated.
4	SGVWC	33-66	5,6	17"	1021+00	1050' R	1030+50	500' R	Protect in Place	17-3/8" GWBR Job 7143L-1 2005 • This main a transmission main from the City of Industry well that is treated at Plant B5. • 26" Bore Casing under UPRR on Temple • Alignment incorrect on Valley Blvd. East of Temple • Crosses Valley East of Temple Ave. • Temple Ave. will be widened from two lanes to three on the SB side • The potential for conflicts will depend on the proposed Temple Ave and Valley Blvd. grades and elevations. If the main is required to be relocated as a result of the street improvements, San Gabriel's ability to treat water produced by the City of Industry at Plant B5 may be disrupted.

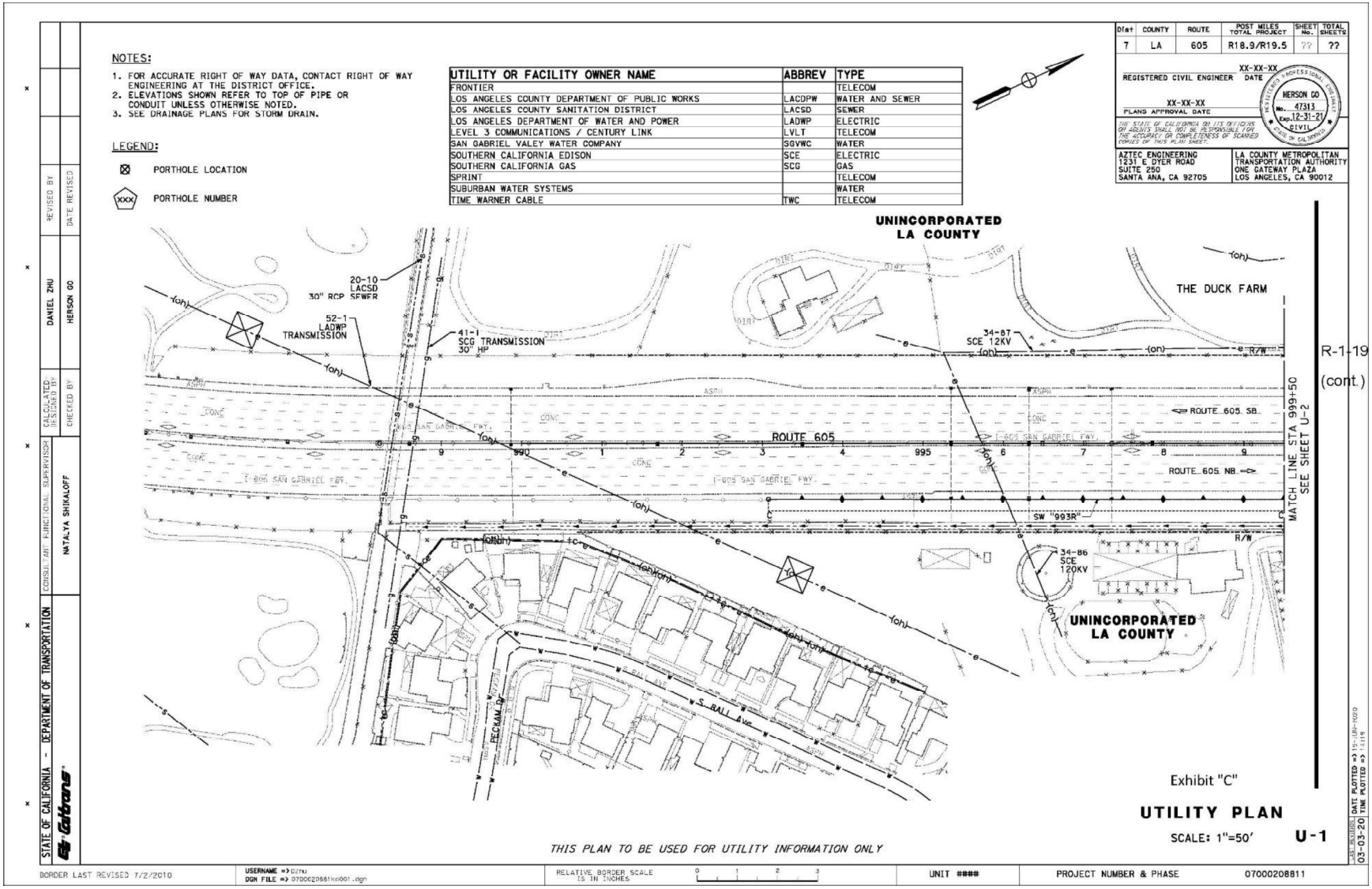
R-1-19

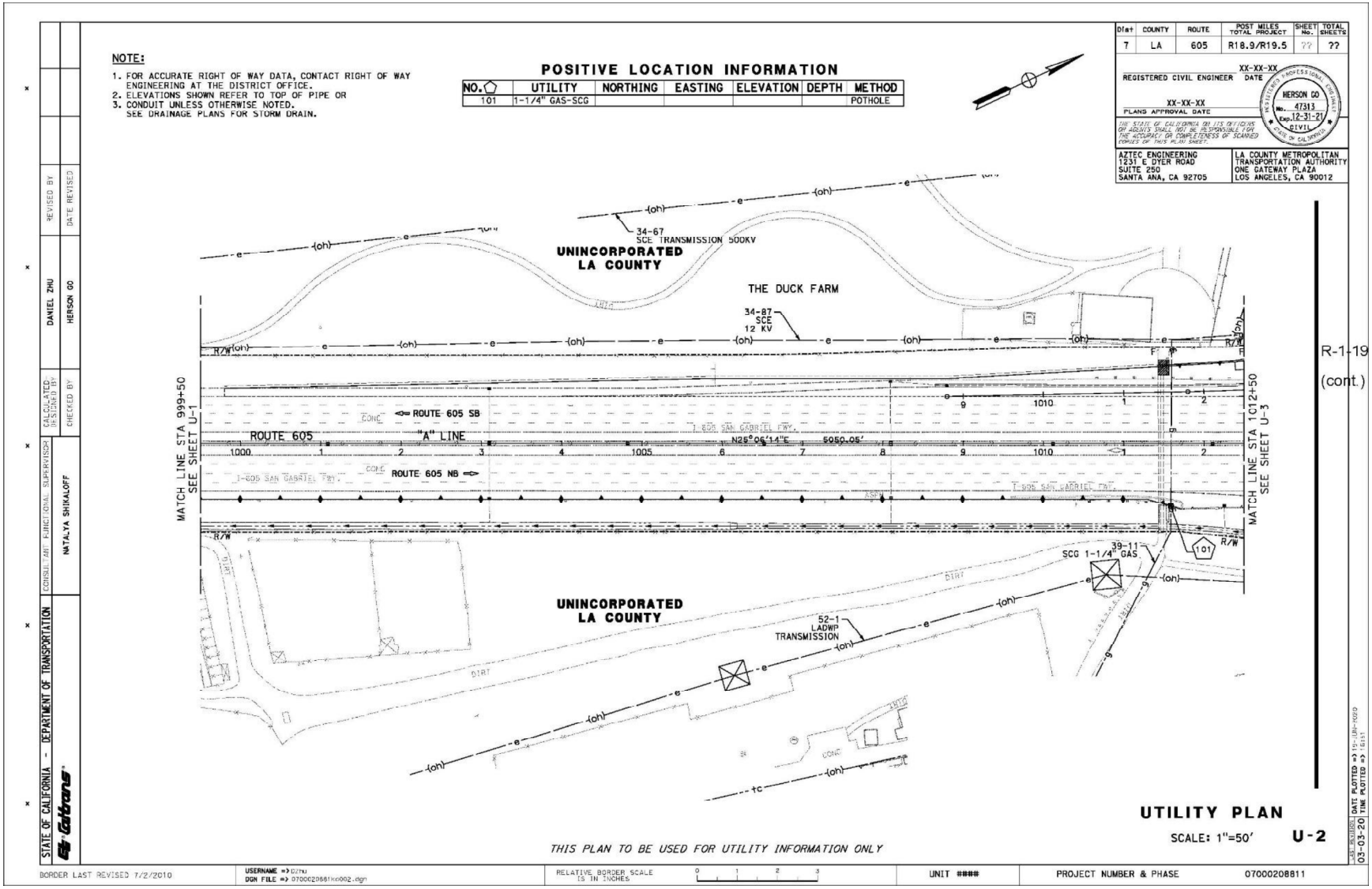
San Gabriel Valley Water Company
I-605 and Valley Boulevard Interchange Improvements
Initial Study / Environmental Assessment Review Report

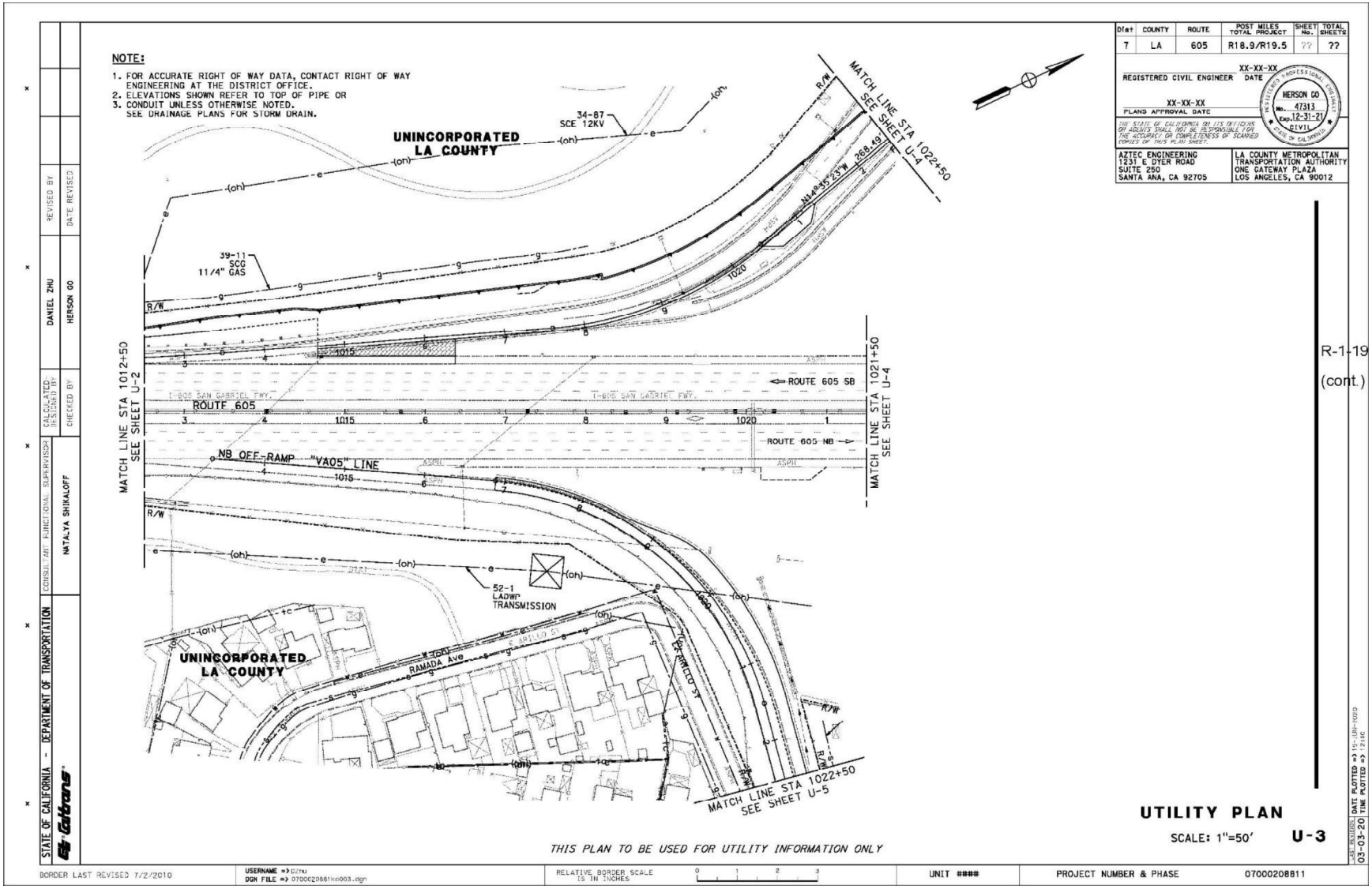
6/29/2020

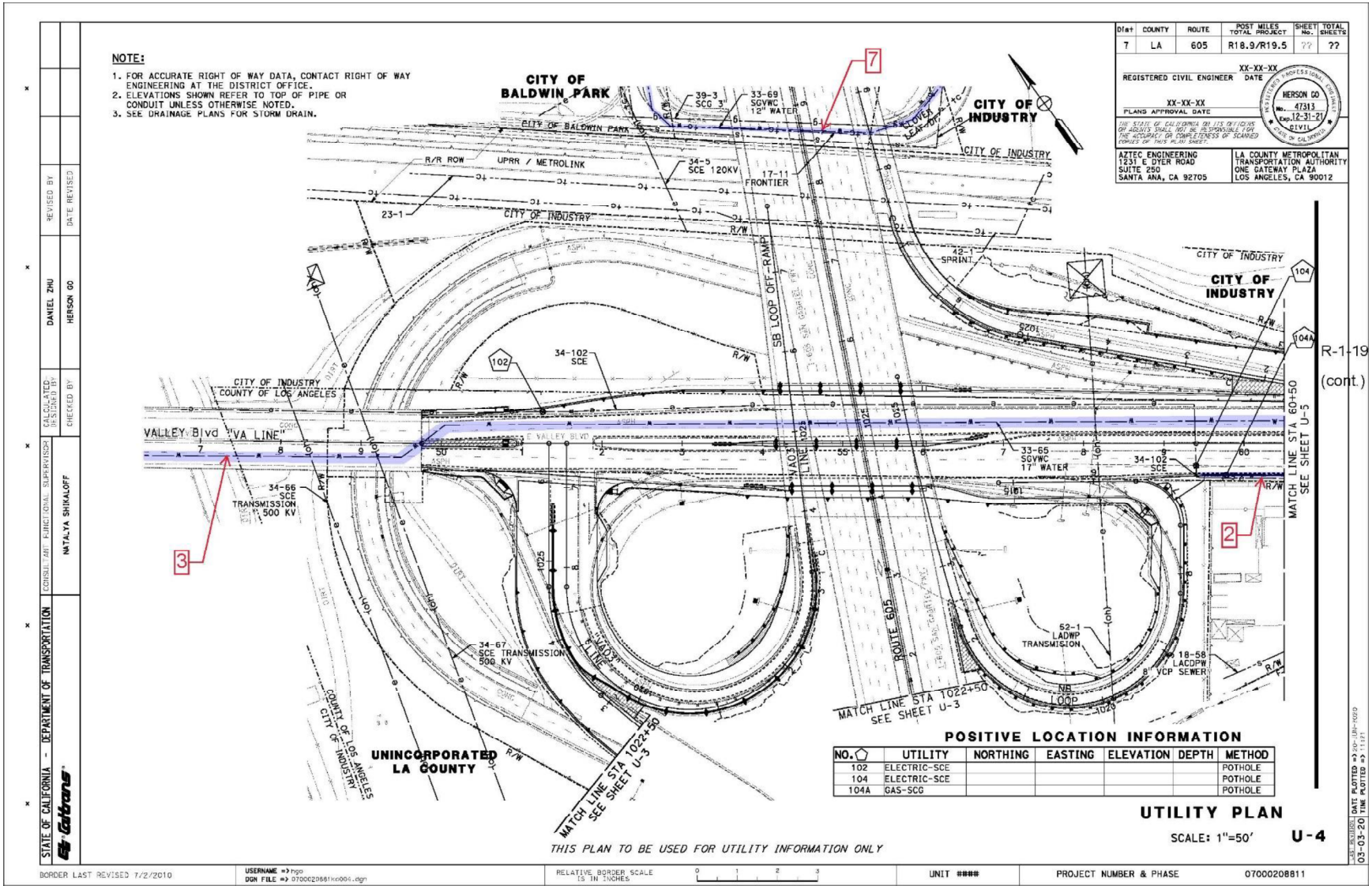
ID No.	Utility Owner	Utility ID	Sheet No.	Size	Start Station	Start Offset	End Station	End Offset	Action Recommended in Initial Study	San Gabriel Valley Water Company Comments
5	SGVWC	33-67	5	17"	1030+50	500' R	1026+50	1150' R	Protect in Place	17" CWMR Job 2550E-1E 1963 • This main is a distribution main. • The potential for conflicts will depend on the proposed Temple Ave and Railroad Ave grades and elevations. The main may be too shallow or too deep with any grade change resulting from the improvements, and as a resuilt, the main may need to be relocated.
6	SGVWC	33-68	6	17"	1030+50	850' R	1032+50	900' R	Protect in Place	17" CWMR Job 2550-1E 1963 • This main connects to 33-67 a B5 Distribution Main • North of Cloverleaf Dr • Temple Ave. will be widened from two lanes to three on the SB side • The potential for conflicts will depend on the proposed Temple Ave and Valley Blvd. grades and elevations. The main may be too shallow or too deep with any grade change resulting from the improvements, and may need to be relocated. If the main would be impacted by the construction operations of the interchange project, water service from Plant B5 could be disrupted.
7	SGVWC	33-69	4	12"	1052+75	150' R	1052+75	150' R	Protect in Place	12-3/4" GWBR Job 5506L-1 1987 • This main is a Distribution main from Plant B5. • This main does not appear to be within the project area.
8	SGVWC	33-94	6	8"	600+00	500' L	607+50	350' L	Protect in Place	This main could not be located on the provided map. These stations do not appear within the project area.
9	SGVWC	33-132	6	4"	-	-	-	-	Protect in Place	6-5/8" GWBR Job 8781L-3 • This main connects to 33-67 and Plant B5. • This main is located in an easement on Private Property • The potential for conflicts will depend on the proposed Temple Ave and Cloverleaf Dr. grades and elevations. The main may be too shallow or too deep with any grade change resulting from the improvements, and may need to be relocated. If the main would be impacted by the construction operations of the interchange project, water service from Plant B5 could be disrupted.

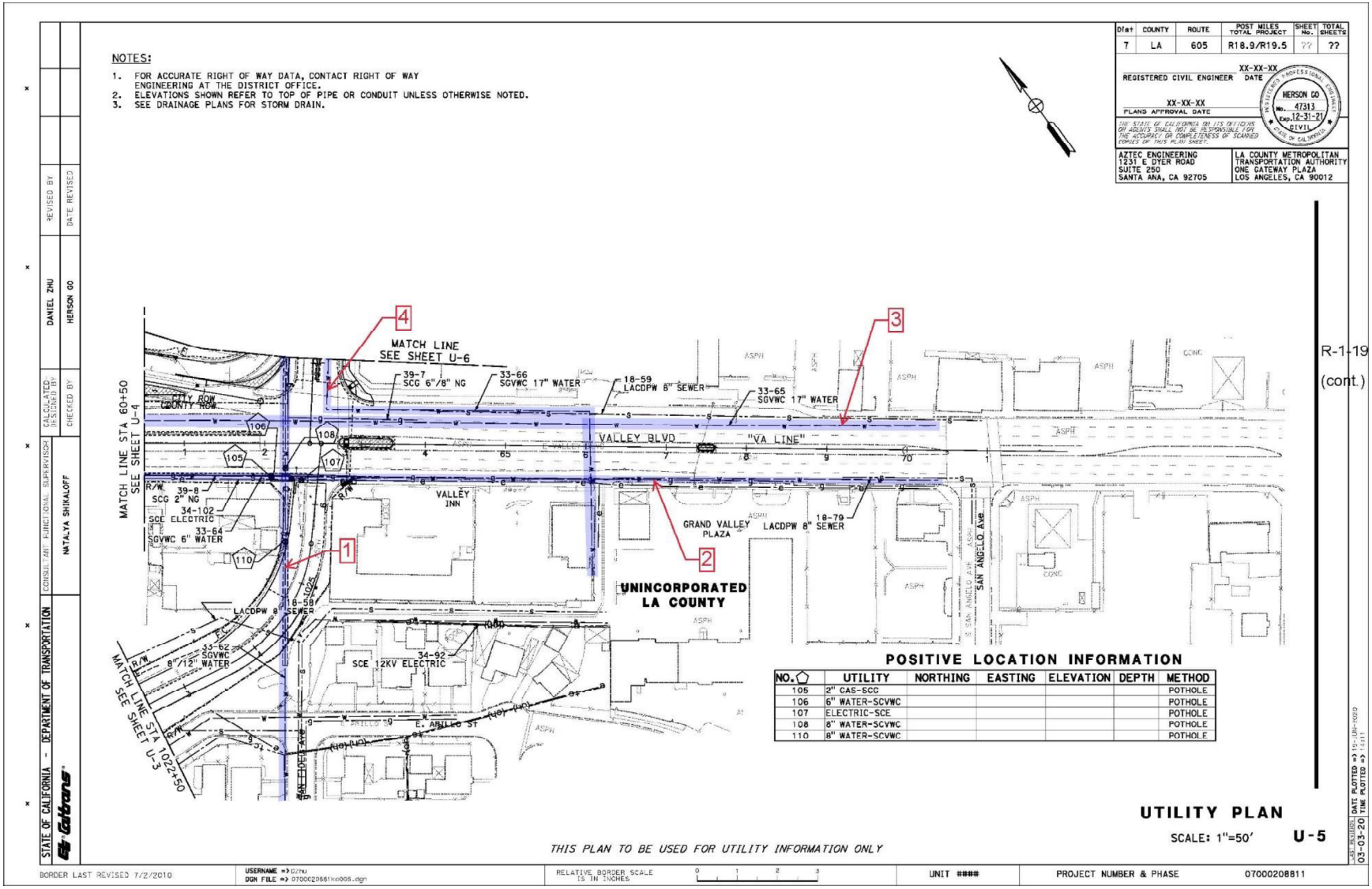
R-1-19 (cont.)

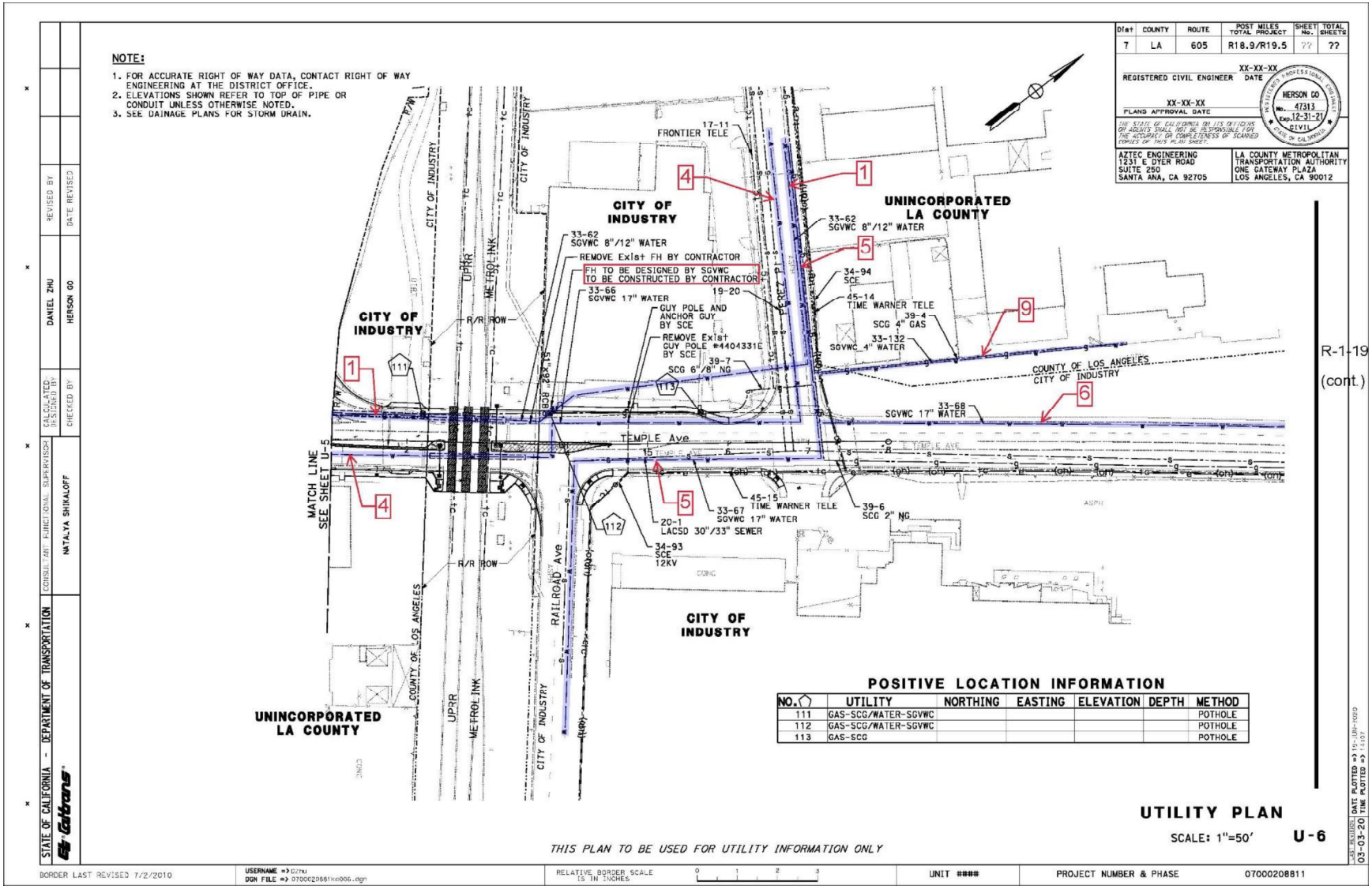

NOTES:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ELEVATIONS SHOWN REFER TO TOP OF PIPE OR CONDUIT UNLESS OTHERWISE NOTED.
3. SEE DRAINAGE PLANS FOR STORM DRAIN.
LEGEND:
PORTHOLE LOCATION
PORTHOLE NUMBER
UTILITY OR FACILITY OWNER NAME | ABBREV | TYPE
FRONTIER | | TELECOM
LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS | LACDPW | WATER AND SEWER
LOS ANGELES COUNTY SANITATION DISTRICT | LACSD | SEWER
LOS ANGELES DEPARTMENT OF WATER AND POWER | LADWP | ELECTRIC
LEVEL 3 COMMUNICATIONS / CENTURY LINK | LVLT | TELECOM
SAN GABRIEL VALEY WATER COMPANY | SGVWC | WATER
SOUTHERN CALIFORNIA EDISON | SCE | ELECTRIC
SOUTHERN CALIFORNIA GAS | SCG | GAS
SPRINT | | TELECOM
SUBURBAN WATER SYSTEMS | | WATER
TIME WARNER CABLE | TWC | TELECOM
Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS
7 | LA | 605 | R18.9/R19.5 | ?? | ??
REGISTERED CIVIL ENGINEER
XX-XX-XX DATE
XX-XX-XX PLANS APPROVAL DATE
HERSON GO No. 47313 Exp. 12-31-21 CIVIL STATE OF CALIFORNIA
AZTEC ENGINEERING 1231 E DYER ROAD SUITE 250 SANTA ANA, CA 92705
LA COUNTY METROPOLITAN TRANSPORTATION AUTHORITY ONE GATEWAY PLAZA LOS ANGELES, CA 90012
UNINCORPORATED LA COUNTY
THE DUCK FARM
20-10 LACSD 30" RCP SEWER
52-1 LADWP TRANSMISSION
41-1 SCG TRANSMISSION 30" HP
34-87 SCE 12KV
ROUTE 605
ROUTE 605 SB
ROUTE 605 NB
SW "993R"
34-86 SCE 120KV
MATCH LINE STA 999+50 SEE SHEET U-2
R-1-19 (cont.)
Exhibit "C"
UTILITY PLAN
SCALE: 1"=50'
U-1
THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
CONSULTANT FUNCTIONAL SUPERVISOR NATALYA SHIKALOFF
CALCULATED-DESIGNED BY DANIEL ZHU
CHECKED BY HERSON GO
REVISED BY
DATE REVISED
BORDER LAST REVISED 7/2/2010
RELATIVE BORDER SCALE IS IN INCHES
UNIT ####
PROJECT NUMBER & PHASE 07000208811
03-03-20


NOTE:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ELEVATIONS SHOWN REFER TO TOP OF PIPE OR
3. CONDUIT UNLESS OTHERWISE NOTED. SEE DRAINAGE PLANS FOR STORM DRAIN.
POSITIVE LOCATION INFORMATION
NO. | UTILITY | NORTHING | EASTING | ELEVATION | DEPTH | METHOD
101 | 1-1/4" GAS-SCG | POTHOLE
Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS
7 | LA | 605 | R18.9/R19.5 | ?? | ??
REGISTERED CIVIL ENGINEER
PLANS APPROVAL DATE
HERSON GO No. 47313 Exp.12-31-21 CIVIL
AZTEC ENGINEERING 1231 E DYER ROAD SUITE 250 SANTA ANA, CA 92705
LA COUNTY METROPOLITAN TRANSPORTATION AUTHORITY ONE GATEWAY PLAZA LOS ANGELES, CA 90012
34-67 SCE TRANSMISSION 500KV
UNINCORPORATED LA COUNTY
THE DUCK FARM
34-87 SCE 12 KV
ROUTE 605
"A" LINE
ROUTE 605 SB
ROUTE 605 NB
I-605 SAN GABRIEL FWY.
N25°06'14"E 5050.05'
MATCH LINE STA 999+50 SEE SHEET U-1
MATCH LINE STA 1012+50 SEE SHEET U-3
39-11 SCG 1-1/4" GAS
52-1 LADWP TRANSMISSION
UNINCORPORATED LA COUNTY
DIRT
CONC
ASPH
R/W
R-1-19 (cont.)
UTILITY PLAN
SCALE: 1"=50'
U-2
THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
CONSULTANT FUNCTIONAL SUPERVISOR: NATALYA SHIKALOFF
CALCULATED/DESIGNED BY: DANIEL ZHU
CHECKED BY: HERSON GO
REVISED BY
DATE REVISED
DATE PLOTTED => 03-03-20
BORDER LAST REVISED 7/2/2010
USERNAME => D2tkl
DGN FILE => 07000208811ke002.dgn
RELATIVE BORDER SCALE IS IN INCHES
UNIT ####
PROJECT NUMBER & PHASE 07000208811


NOTE:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ELEVATIONS SHOWN REFER TO TOP OF PIPE OR
3. CONDUIT UNLESS OTHERWISE NOTED. SEE DRAINAGE PLANS FOR STORM DRAIN.
UNINCORPORATED LA COUNTY
34-87 SCE 12KV
39-11 SCG 11/4" GAS
MATCH LINE STA 1022+50 SEE SHEET U-4
MATCH LINE STA 1012+50 SEE SHEET U-2
MATCH LINE STA 1021+50 SEE SHEET U-4
ROUTE 605
I-605 SAN GABRIEL FWY.
ROUTE 605 SB
ROUTE 605 NB
NB OFF-RAMP "VA05" LINE
52-1 LADWP TRANSMISSION
RAMADA Ave
S. ARNELO ST.
MATCH LINE STA 1022+50 SEE SHEET U-5
THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY
R-1-19 (cont.)
UTILITY PLAN
SCALE: 1"=50'
U-3
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DANIEL ZHU
HERSON GO
NATALYA SHIKALOFF
AZTEC ENGINEERING 1231 E DYER ROAD SUITE 250 SANTA ANA, CA 92705
LA COUNTY METROPOLITAN TRANSPORTATION AUTHORITY ONE GATEWAY PLAZA LOS ANGELES, CA 90012
PROJECT NUMBER & PHASE 07000208811


NOTE:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ELEVATIONS SHOWN REFER TO TOP OF PIPE OR CONDUIT UNLESS OTHERWISE NOTED.
3. SEE DRAINAGE PLANS FOR STORM DRAIN.
CITY OF BALDWIN PARK
CITY OF INDUSTRY
CITY OF BALDWIN PARK
CITY OF INDUSTRY
R/R ROW
UPRR / METROLINK
39-3 SCG 3"
33-69 SCWC 12" WATER
34-5 SCE 120KV
17-11 FRONTIER
23-1
42-1 SPRINT
SB LOOP OFF-RAMP
34-102 SCE
CITY OF INDUSTRY
COUNTY OF LOS ANGELES
VALLEY Blvd "A" LINE
34-66 SCE TRANSMISSION 500 KV
33-65 SCWC 17" WATER
MATCH LINE STA 60+50 SEE SHEET U-5
R-1-19 (cont.)
34-67 SCE TRANSMISSION 500 KV
ROUTE 605
52-1 LADWP TRANSMISSION
18-58 LACDPW VCP SEWER
NB LOOP
MATCH LINE STA 1022+50 SEE SHEET U-3
UNINCORPORATED LA COUNTY
POSITIVE LOCATION INFORMATION
NO. | UTILITY | NORTHING | EASTING | ELEVATION | DEPTH | METHOD
102 | ELECTRIC-SCE | POTHOLE
104 | ELECTRIC-SCE | POTHOLE
104A | GAS-SCG | POTHOLE
UTILITY PLAN
SCALE: 1"=50'
U-4
THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NATALYA SHKALOFF
DANIEL ZHU
HERSON GO
AZTEC ENGINEERING 1231 E DYER ROAD SUITE 250 SANTA ANA, CA 92705
LA COUNTY METROPOLITAN TRANSPORTATION AUTHORITY ONE GATEWAY PLAZA LOS ANGELES, CA 90012
PROJECT NUMBER & PHASE 07000208811


NOTES:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ELEVATIONS SHOWN REFER TO TOP OF PIPE OR CONDUIT UNLESS OTHERWISE NOTED.
3. SEE DRAINAGE PLANS FOR STORM DRAIN.
Dist | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET No. | TOTAL SHEETS
7 | LA | 605 | R18.9/R19.5 | ?? | ??
REGISTERED CIVIL ENGINEER DATE
PLANS APPROVAL DATE
HERSON GO No. 47313 Exp. 12-31-21 CIVIL
AZTEC ENGINEERING 1231 E DYER ROAD SUITE 250 SANTA ANA, CA 92705
LA COUNTY METROPOLITAN TRANSPORTATION AUTHORITY ONE GATEWAY PLAZA LOS ANGELES, CA 90012
MATCH LINE SEE SHEET U-6
MATCH LINE STA 60+50 SEE SHEET U-4
MATCH LINE STA 1022+50 SEE SHEET U-3
VALLEY BLVD
"VA LINE"
VALLEY INN
GRAND VALLEY PLAZA
UNINCORPORATED LA COUNTY
SAN ANGELO Ave
E. ANGELO ST
SCE 12KV ELECTRIC
LACDPW 8" SEWER
SCG 2" NG
SCE ELECTRIC
SGVWC 6" WATER
SGVWC 8" 12" WATER
POSITIVE LOCATION INFORMATION
NO. | UTILITY | NORTHING | EASTING | ELEVATION | DEPTH | METHOD
105 | 2" GAS-SCG | POTHOLE
106 | 6" WATER-SGVWC | POTHOLE
107 | ELECTRIC-SCE | POTHOLE
108 | 8" WATER-SGVWC | POTHOLE
110 | 8" WATER-SGVWC | POTHOLE
R-1-19 (cont.)
UTILITY PLAN
SCALE: 1"=50' U-5
THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DANIEL ZHU
HERSON GO
NATALYA SHIKALOFF
BORDER LAST REVISED 7/2/2010
PROJECT NUMBER & PHASE 07000208811


NOTE:
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ELEVATIONS SHOWN REFER TO TOP OF PIPE OR CONDUIT UNLESS OTHERWISE NOTED.
3. SEE DAINAGE PLANS FOR STORM DRAIN.
CITY OF INDUSTRY
UNINCORPORATED LA COUNTY
33-62 SGVWC 8"/12" WATER
REMOVE Exist FH BY CONTRACTOR
FH TO BE DESIGNED BY SGVWC TO BE CONSTRUCTED BY CONTRACTOR
33-66 SGVWC 17" WATER
GUY POLE AND ANCHOR GUY BY SCE
REMOVE Exist GUY POLE #4404331E BY SCE
17-11 FRONTIER TELE
34-94 SCE
45-14 TIME WARNER TELE
39-4 SCG 4" GAS
33-132 SGVWC 4" WATER
39-7 SCG 6"/8" NG
COUNTY OF LOS ANGELES
CITY OF INDUSTRY
33-68 SGVWC 17" WATER
TEMPLE Ave
MATCH LINE SEE SHEET U-5
45-15 TIME WARNER TELE
33-67 SGVWC 17" WATER
39-6 SCG 2" NG
20-1 LACSD 30"/33" SEWER
34-93 SCE 12KV
R/R ROW
RAILROAD Ave
UPRR
METROLINK
POSITIVE LOCATION INFORMATION
NO. | UTILITY | NORTHING | EASTING | ELEVATION | DEPTH | METHOD
111 | GAS-SCG/WATER-SGVWC | POTHOLE
112 | GAS-SCG/WATER-SGVWC | POTHOLE
113 | GAS-SCG | POTHOLE
R-1-19 (cont.)
UTILITY PLAN
SCALE: 1"=50'
U-6
THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DANIEL ZHU
HERSON GO
NATALYA SHIKALOFF
AZTEC ENGINEERING 1231 E DYER ROAD SUITE 250 SANTA ANA, CA 92705
LA COUNTY METROPOLITAN TRANSPORTATION AUTHORITY ONE GATEWAY PLAZA LOS ANGELES, CA 90012
PROJECT NUMBER & PHASE 07000208811

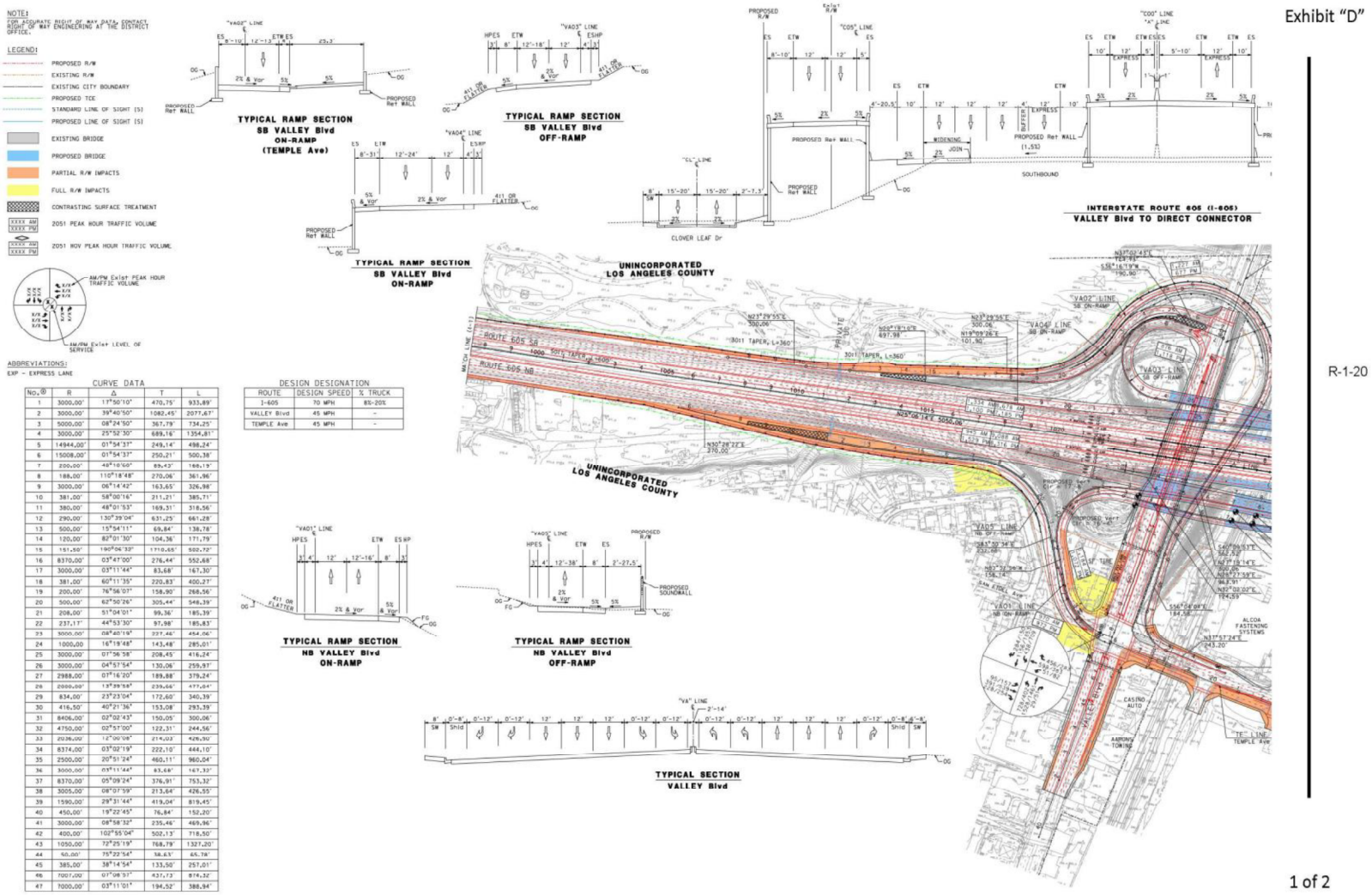
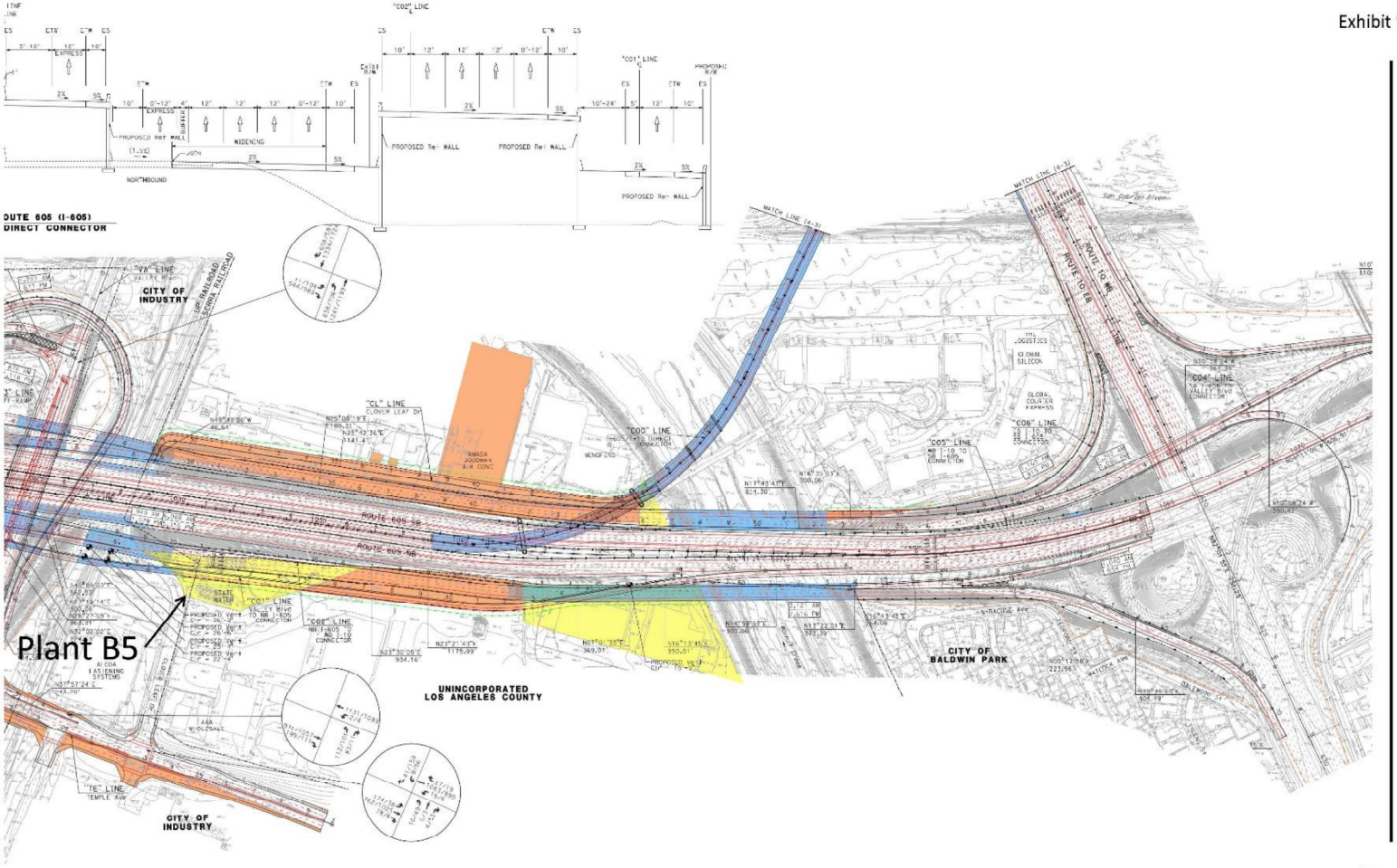


Exhibit "D"
R-1-20
1 of 2
TYPICAL RAMP SECTION
SB VALLEY Blvd
ON-RAMP
(TEMPLE Ave)
TYPICAL RAMP SECTION
SB VALLEY Blvd
OFF-RAMP
TYPICAL RAMP SECTION
SB VALLEY Blvd
ON-RAMP
INTERSTATE ROUTE 605 (I-605)
VALLEY Blvd TO DIRECT CONNECTOR
UNINCORPORATED
LOS ANGELES COUNTY
ROUTE 605 SB
ROUTE 605 NB
TYPICAL RAMP SECTION
NB VALLEY Blvd
ON-RAMP
TYPICAL RAMP SECTION
NB VALLEY Blvd
OFF-RAMP
TYPICAL SECTION
VALLEY Blvd
LEGEND:
PROPOSED R/W
EXISTING R/W
EXISTING CITY BOUNDARY
PROPOSED TCE
STANDARD LINE OF SIGHT (S)
PROPOSED LINE OF SIGHT (S)
EXISTING BRIDGE
PROPOSED BRIDGE
PARTIAL R/W IMPACTS
FULL R/W IMPACTS
CONTRASTING SURFACE TREATMENT
2051 PEAK HOUR TRAFFIC VOLUME
2051 HOV PEAK HOUR TRAFFIC VOLUME
AM/PM Exist PEAK HOUR TRAFFIC VOLUME
AM/PM Exist LEVEL OF SERVICE
ABBREVIATIONS:
EXP - EXPRESS LANE
CURVE DATA
DESIGN DESIGNATION
ROUTE | DESIGN SPEED | % TRUCK
I-605 | 70 MPH | 85-20%
VALLEY Blvd | 45 MPH | -
TEMPLE Ave | 45 MPH | -

Exhibit "D"



R-1-20
(cont.)

2 of 2

EXHIBIT "E"

SAN GABRIEL VALLEY WATER COMPANY

November 14, 2019

Mr. Isidro Panuco
Manager, Transportation Planning Highway Program
Los Angeles County Metropolitan Transportation Authority ("Metro")
One Gateway Plaza
Los Angeles, CA 90012

Subject: I-605 Corridor Improvement Project
City of Industry, CA

Dear Mr. Panuco:

Thank you for meeting with us on October 24, 2019 about impacts to San Gabriel Valley Water Company ("San Gabriel") facilities from Metro's proposed I-605 Corridor Improvement Project (the "Project"). This letter is intended to follow up on that meeting and our previous discussions and communications about this matter.

Our primary concern is focused on your stated intention to acquire and relocate San Gabriel's Plant B5 ("Plant B5") water production, storage, pumping and treatment plant and related utility plant, equipment, property and rights. Because of the strategic importance of Plant B5 in San Gabriel's operations as a public water utility and the company's related legal duties and responsibilities, we respectfully ask that you direct your efforts toward other alternatives rather than interfering with, acquiring, or relocating this critically important public drinking water supply facility.

You stated at the meeting that Metro wishes to relocate San Gabriel's water treatment plant to a nearby site that you would identify and acquire for San Gabriel's needs. In addition, you said Metro would pay for all costs to: (i) identify and assess any replacement site for suitability, (ii) acquire a suitable alternative site and design and construct all the utility plant facilities, (iii) integrate the new site and new facilities into our existing operations, and (iv) abandon the old site. However, you have declined to make any commitment whatsoever to commence doing so or to fully compensate San Gabriel. R-1-21

In addition, there are other serious and complex obstacles that cause us great concerns about any proposed relocation including:

1. Operations at Plant B5 are governed by a Project Agreement implemented by the United States Environmental Protection Agency ("EPA") between water entities, including San Gabriel, and certain responsible parties for the purpose of design, construction, operation, maintenance and management of groundwater extraction, treatment and distribution of public water supplies. The Project Agreement implements EPA's remedial action plan for removal of contaminated groundwater in the EPA-designated Baldwin Park Operable Unit ("BPOU") of the San Gabriel Valley Superfund Sites in Los Angeles County, California, of which San Gabriel is a principal party. Any proposed relocation of Plant B5 could well impose unrealistic and unduly burdensome risks and costs on San Gabriel and on its duties and performance of its responsibilities under the Project Agreement.

11142 GARVEY AVENUE • P.O. BOX 6010 • EL MONTE, CALIFORNIA 91734-2010 • (626) 448-6183 • Fax (626) 448-5530

2. As of now, there is no known suitable replacement site that meets all of the requirements for the EPA's adopted BPOU groundwater cleanup remedy as they currently exist at Plant B5. As a result, it is highly uncertain that San Gabriel would be able to relocate these facilities and fulfill both the EPA-mandated groundwater cleanup remedy and San Gabriel's responsibility for providing safe and reliable drinking water to the public.

3. Metro's forced relocation of Plant B5 would create unanticipated disputes, controversies, and other as yet unforeseen consequences, including, but not limited to, significant costs and losses for San Gabriel.

4. Because of the Project's likely adverse environmental impacts on Plant B5 and elsewhere, you have indicated that Metro will probably need to conduct a full environmental impact assessment. However, Metro has failed to formally notify San Gabriel (to be addressed to the undersigned) of Metro's intention to initiate any such assessment. Therefore, we ask that Metro give San Gabriel notice of any intention to prepare an environmental assessment for the Project to allow San Gabriel to better understand Metro's plans and have the opportunity to respond and provide Metro with San Gabriel's questions and concerns about the adverse environmental effects of the Project.

R-1-21 (cont.)

San Gabriel has cooperated to the fullest extent possible in providing Metro with detailed technical information and data about our operations and facilities. Based on our preliminary review of potential impacts from the proposed Project, particularly with respect to Plant B5, we conclude that those impacts will likely result in irreparable harm to San Gabriel and its operations. Accordingly, we must object to any interference with, or relocation of, Plant B5. Lastly, we have made it abundantly clear that any overhang of Metro roadways and bridges on, over, or near Plant B5 will prevent unhindered and proper operation, repair, expansion, replacement, and maintenance of facilities at that site.

San Gabriel looks forward to the opportunity to review and comment on Metro's environmental impact assessment, and all related studies and documents for the Project which you informed us will be available in the near future. Please call me should you have need for additional information. Thank you.

Very truly yours,

Samuel Aguirre
Property Manager

cc: C. Saint
H. T. Rahimian
M. Hynes
L. Wang
R. F. Norton

EXHIBIT "F"

SAN GABRIEL VALLEY WATER COMPANY

January 10, 2020

Mr. Isidro Panuco
Manager, Transportation Planning Highway Program
Los Angeles County Metropolitan Transportation Authority ("Metro")
One Gateway Plaza, MS: 99-22-9
Los Angeles, CA 90012

Re: I-605 Corridor Improvement Project
City of Industry, CA

Dear Mr. Panuco:

Thank you and your consultants for meeting with us over the last three years to discuss impacts to San Gabriel Valley Water Company ("San Gabriel") facilities from Metro's Interstate 605 Corridor Improvement Project ("Project").

As you know, San Gabriel possesses a critical interest in the Project. The Project's potential impacts to San Gabriel's facilities, particularly its Plant B5 ("Plant B5") water production, storage, pumping, and treatment plant and related utility plant, equipment, property, and rights are potentially devastating. Given this interest, San Gabriel has cooperated with Metro to the fullest extent possible on the Project. R-1-22

Most recently, in my November 14, 2019 letter to you, I emphasized the strategic importance of San Gabriel's Plant B5 not only to San Gabriel's operations, but also to the Main San Gabriel Basin and to the public. Among other things, as I mentioned, operations at Plant B5 are governed by a Project Agreement implemented by the United States Environmental Protection Agency for the design, construction, operation, maintenance, and management of groundwater extraction, treatment, and distribution of public water supplies. Indeed, Plant B5 represents property which is already appropriated to public use. (Code Civ. Proc., §§ 1235.180, 1240.510 *et seq.*, 1240.610 *et seq.*)

11142 GARVEY AVENUE • P.O. BOX 6010 • EL MONTE, CALIFORNIA 91734-2010 • (626) 448-6183 • Fax (626) 448-5530

California law forbids condemnation of land in such a manner as to "unreasonably interfere with or impair the continuance of a public use." (*Ibid.*) My November 14th letter urged Metro to reconsider any Project alternative requiring Metro to acquire and relocate Plant B5. The Project, as currently configured, will cause irreparable harm to San Gabriel, the Main San Gabriel Basin, and the public. (See Caltrans Right-of-Way Manual, § 13.03.01.03 [Utility Facility Avoidance].)

San Gabriel's preference always has been that Plant B5 be left alone. Metro's required relocation impact study surely will bear out the serious and complex obstacles should Metro seek to relocate Plant B5 - - not to mention the extraordinary relocation expense to Metro. (49 C.F.R. §§ 24.205(a), 24.301, 24.303, 24.304; 25 Cal. Code Regs. §§ 6038, 6090.)

R-1-22
(cont.)

San Gabriel looks forward to meeting with you again to continue our mutual efforts of advancing the public interest. Please contact me so that we can schedule our next meeting.

Very truly yours,

Samuel Aguirre
Property Manager

SA:dg
Via Email & U.S. Mail
cc: C. Saint
H. T. Rahimian
M. Hynes
L. Wang
R. F. Norton

Comment Letter R-1: San Gabriel Valley Water Company

Response R-1-1: This comment has been noted for the record.

Response R-1-2: Section 1.5 of the IS/EA describes the I-605/Valley Boulevard Interchange Improvement Project and Section 1.6 describes project improvements that would occur under both the No Build Alternative and Build Alternative. Implementation of the I-605/Valley Boulevard Interchange Improvement Project is independent of implementation of the I-605 Corridor Improvement Project (I-605 CIP). This comment about SGVWC's concerns about how the planned improvements may result in impacts to the SGVWC's utility plant facilities and public water service operations has been noted for the record.

Response R-1-3: This comment has been noted for the record.

Response R-1-4: The production, treatment, storage, and distribution plant will not be impacted by the I-605/Valley Boulevard Interchange Improvement Project. Section 2.2.8 Utilities/Emergency Services, and Section 3.2.19 Utilities and Service Systems have been updated to include information related to the relocation of the fire hydrant along Temple Avenue and the relocation of the 6 inch waterline along Valley Boulevard in front of SF Wheel & Tire and ASAP Towing properties. As the design of the project progresses, temporary and permanent impacts to SGVWC facilities associated with relocating a fire hydrant along Temple Avenue and relocating the 6 inch waterline along Valley Boulevard in front of the SF Wheel & Tire and ASAP Towing properties, due to the proposed storm drain facilities, will be discussed and coordinated with the Water Company. Contract plans and specifications will be made available during final design for review by SGVWC to evaluate these impacts and coordinate mitigation measures, as appropriate.

Response R-1-5: Final construction excavation depths in the vicinity of the existing water mains and facilities will be determined during final design. Location of existing waterlines at points of potential conflict will be determined through positive location potholing during final design. Plans and specification documents will be made available to SGVWC during final design for review of potential impacts and coordination of mitigation measures, if needed.

Response R-1-6: The Project Development Team acknowledges receipt of the comments provided in Exhibit B and Exhibit C, for the IS/EA and the Preliminary Utility Impact Report. Please find the response to comments specific to "Exhibit B" below in comment R-1-18, and "Exhibit C" below in comment R-1-19.

Response R-1-7: This comment has been noted for the record. The team has reviewed Exhibits D, E, and F, provided by the SGVWC which include preliminary plans and roadway sections (Exhibit D), and two letters from SGVWC to LA Metro (Exhibits E and F) which are specific to improvements that would be incorporated as part of the I-605 CIP, and are not part of the I-605/Valley Boulevard Interchange Improvement Project. The production, treatment, storage, and distribution plant will not be impacted by the I-605/Valley Boulevard Interchange Improvement Project. As the design of the project progresses, temporary and permanent impacts to SGVWC facilities will be discussed and coordinated with the Water Company. Contract plans and specifications will be made available during final design for review by SGVWC to evaluate these impacts and coordinate mitigation measures, as appropriate.

Response R-1-8: This comment has been noted for the record. As the design of the project progresses, temporary and permanent impacts to SGVWC facilities will be discussed and coordinated with the Water Company. Contract plans and specifications will be made available during final design for review by SGVWC to evaluate these impacts and coordinate mitigation measures, as appropriate.

Response R-1-9: The appropriate level of environmental document for this project was determined by the Project Development Team to be a CEQA Initial Study with a Negative Declaration, and a NEPA Environmental Assessment. Although the comment period has not been extended, every effort will be made to continue coordinating with the SGVWC as the project progresses. Contract plans and specifications will be made available during final design for review by SGVWC to evaluate these impacts and coordinate mitigation measures, as appropriate.

Response R-1-10: This comment has been noted for the record. Additional information will be sent to the provided contact information, as necessary.

Response R-1-11: Table 2.2-10 of the IS/EA ND/FONSI has been updated with the corrected information provided by SGVWC.

Response R-1-12: Table 2.2-11 of the IS/EA ND/FONSI has been updated with corrected information provided by SGVWC.

Response R-1-13: Table 2.2-12 of the IS/EA ND/FONSI has been updated with corrected information provided by SGVWC.

Response R-1-14: The production, treatment, storage and distribution plant will not be impacted by the I-605/Valley Boulevard Interchange Improvement Project. As the design of the project progresses, temporary impacts to SGVWC facilities associated with relocating a fire hydrant along Temple Avenue and relocating the 6 inch waterline along Valley Boulevard in front of the SF Wheel & Tire and ASAP Towing properties, due to the proposed storm drain facilities, will be discussed and coordinated with the Water Company. Contract plans and specifications will be made available during final design for review by SGVWC to evaluate these impacts and coordinate mitigation measures, as appropriate. In general, roadway pavement reconstruction is at or above original grade so permanent impacts to existing facilities is not anticipated. Shallow facilities in conflict with roadway excavation activities can be maintained in place with concrete protection slabs. Positive location potholing will be used during final design to position traffic signals and overhead signs that require piled foundations.

Response R-1-15: The production, treatment, storage and distribution plant will not be impacted by the I-605/Valley Boulevard Interchange Improvement Project. As the design of the project progresses, permanent impacts to SGVWC facilities will be discussed and coordinated with the Water Company. Contract plans and specifications will be made available during final design for review by SGVWC to evaluate these impacts and coordinate mitigation measures as appropriate. Standard specifications indicate the contractor's responsibility to protect existing facilities and will be included in the plans and specifications. As mentioned in previous comment response, in general, roadway pavement reconstruction is at or above original grade so permanent impacts to existing facilities is not anticipated. Shallow facilities in conflict with roadway excavation activities can be maintained in place with concrete protection slabs. Positive location potholing will be used

during final design to position traffic signals and overhead signs that require piled foundations.

Response R-1-16: Final roadway construction excavation depths (i.e. roadway pavement structural section thicknesses) and other construction excavation depths in the vicinity of the existing transmission and distribution mains will be determined in final design. Location of existing waterlines at points of potential conflict will be determined through positive location potholing during final design. Plans and specification documents will be made available during the final design for review of potential impacts and coordination of mitigation measures, if needed.

Response R-1-17: Reference to relocation of the water line/fire hydrant along Temple Avenue and the six inch water line along Valley Boulevard has been added to Section 3.2.19, question a. If any additional permanent impacts to SGVWC facilities are identified as the design of the project progresses, these impacts will be discussed and coordinated with the Water Company. Plans and specifications will be made available to SGVWC during the final design for review of potential impacts and coordination of mitigation measures, if needed.

Response R-1-18: The provided comments in Exhibit B are specific to the Preliminary Utility Impact Report that was prepared for the I-605/Valley Boulevard Interchange Improvement Project. The comments on Exhibit B have been reviewed and does not warrant any additional information within the IS/EA ND/FONSI to be updated. However, the comments in Exhibit B have been incorporated into the Final Utility Impact Report, dated August 2020.

Response R-1-19: Thank you for providing detailed comments regarding SGVWC's eight local distribution water lines, and one regional water transmission facility in Exhibit C. As the design of the project progresses, potential temporary and permanent impacts to SGVWC facilities, including those identified within Exhibit C, will be discussed and coordinated with the Water Company. Contract plans and specifications will be made available during final design for review by SGVWC to evaluate these impacts and coordinate mitigation measures as appropriate. Standard specifications indicate that it is the contractor's responsibility to protect existing facilities and will be included in the plans and specifications.

Response R-1-20: This comment has been noted for the record. The preliminary plans and roadway sections included as Exhibit D are specific to improvements that would be incorporated as part of the I-605 Corridor Improvement Project (I-605 CIP) project, and are not part of the I-605/Valley Boulevard Interchange Improvement Project.

Response R-1-21: This comment has been noted for the record. The letter included as Exhibit E that was sent to LA Metro on November 14, 2019 in response to, and for the purposes of, proposed improvements for the I-605 CIP has been received and acknowledged by the I-605/Valley Boulevard Interchange Improvement Project Development Team. The SGVWC's primary concern about Plant B5 has been acknowledged by the I-605/Valley Boulevard Interchange Improvement Project. The production, treatment, storage, and distribution plant will not be impacted by the I-605/Valley Boulevard Interchange Improvement Project.

Response R-1-22: This comment has been noted for the record. The letter included as Exhibit F was sent to LA Metro on January 10, 2020 in response to the I-605 CIP, and ongoing correspondence regarding SGVWC's concerns about Plant B5. This letter has been received and acknowledged by the I-605/Valley Boulevard Interchange Improvement Project Development

Team. The production, treatment, storage, and distribution plant will not be impacted by the I-605/Valley Boulevard Interchange Improvement Project.

LOS ANGELES COUNTY
SANITATION DISTRICTS
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

July 15, 2020

Ref. DOC 5759194

Mr. Jason Roach
Senior Environmental Planner
Division of Environmental Planning
Caltrans District 7
100 South Main Street, MS-16A
Los Angeles, CA 90012

Dear Mr. Roach:

NOI Response for Interstate 605/Valley Boulevard Interchange Improvement Project

The Los Angeles County Sanitation Districts (Districts) received a Notice of Availability of Initial Study/ Environmental Assessment and a Notice of Intent to Adopt a Negative Declaration (NOI) for the subject project on June 15, 2020. The proposed project site is located within the jurisdictional boundary of District No. 15. We offer the following comment:

- The proposed project may impact existing and/or proposed Districts' facilities (e.g. trunk sewers, recycled waterlines, etc.) over which it will be constructed. Districts' facilities are located directly under and/or cross directly beneath the proposed project alignment. The Districts cannot issue a detailed response to or permit construction of, the proposed project until project plans and specification that incorporate Districts' facilities are submitted for our review. To obtain copies of as-built drawings of the Districts' facilities within the project limits, please contact the Districts' Engineering Counter at engineeringcounter@lacsd.org or (562) 908-4288, extension 1205. When project plans that incorporate our facilities have been prepared, please submit copies of the same to the Engineering Counter for our review and comment. R-2-1

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717 or at araza@lacsd.org.

Very truly yours,

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

cc: R. Paracuelles
A. Howard
Engineering Counter

DOC 5807340.D15

Comment Letter R-2: LA County Sanitation District

Response R-2-1: Layout and Utility plans, and specifications will be provided to LACSD for review at the final design phase.

From: Cuevas, Eduardo
To: Roach, Jason P@DOT
Subject: LADWP Comment on 605/Valley Interchange Project
Date: Thursday, July 16, 2020 12:35:28 PM

EXTERNAL EMAIL. Links/attachments may not be safe.

Hello Jason,

To follow up on our earlier discussion, I am submitting the comment below on the Interstate 605/Valley Blvd. Interchange Improvements Project.

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments on the Interstate 605/Valley Blvd. Interchange Improvements Project. Due to the fact that an LADWP transmission line crosses the proposed project area, we would like to request the following information and potential coordination regarding this project: (1) Please clarify what equipment will be used in proximity of the transmission line conductors and towers. If they are in proximity, we will need to bid work authorities and have patrolmen issue them onsite. (2) Please share project plans that would allow us to determine whether any of the work may have an impact on the transmission line tower footers or the area surrounding them. Please contact Mr. Graham Peace, (graham.peace@ladwp.com | 818-771-5031) and Mr. Nick Demos (Nick.Demos@ladwp.com | 213-367-4470) regarding this requested information.

R-3-1

Also, this is the link to the online comment submittal form that I had trouble accessing from my computer: https://www.metro.net/projects/i-605-corridor-hot-spots-program/i-605valley-blvd-ea/. I was ultimately able to access it from a mobile device.

Please feel free to contact me if you have any questions. I can also assist with disseminating the requested information to the aforementioned LADWP Power System contacts.

I appreciate your help!

Thank you,

Eduardo "Ed" Cuevas
Environmental Planning and Assessment
Los Angeles Department of Water and Power
111 N. Hope St., Room 1044
Los Angeles, CA 90012
(213) 367-3553 | eduardo.cuevas@ladwp.com

----------Confidentiality Notice----------
This electronic message transmission contains information from the Los Angeles Department of Water and Power, which may be confidential. If you are not the intended recipient, be aware that any disclosure, copying, distribution or use of the content of this information is prohibited. If you have received this communication in error, please notify us immediately by e-mail and delete the original message and any attachment without reading or saving in any manner.

Comment Letter R-3: Los Angeles Dept of Water and Power

Response R-3-1: (1) Standard earthwork, pavement and retaining wall construction equipment will be used in the vicinity of the transmission lines and tower, along the I-605 northbound on-ramp. Contractor will follow standard procedures and precautions that will be incorporated into the project Special Provisions.

(2) Layouts, Construction Details, Utility Plans and Typical Sections at the locations where transmission lines and towers are present can be provided at PS&E phase to LADPW for their review.

We welcome the opportunity to coordinate the information.