Alameda County Transportation Commission

INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION

Alameda CTC Rail Safety Enhancement Project

Project Location: City of San Leandro, Unincorporated Alameda County, City of Hayward, Alameda, California (APN: Marina Boulevard – 75-105-35, 75-93-6, Washington Avenue – 77C-1315-6, 77B-1163-13, 77B-1163-12, 77C-1315-5, Hesperian Boulevard – 77D-1487-32, 77D-1490-9, 77D-1490-17, Lewelling – 414-1-68, 414-31-78, Leidig Court – 453-0095-030-00, 453-0095-031-00, 078C-0418-033-00, Tennyson High School Pedestrian Crossing – 452-40-6, Tennyson Road – 453-95-31, 78C-418-33, Industrial Parkway – 83-460-10-2, 83-460-8, 78G-2651-4, 78G-2651-6-2)

General Plan Designation: City of San Leandro (Marina Boulevard – General Commercial, Washington Avenue – Light Industrial, Industrial Transition, Low-Medium Density Residential, General Commercial , Hesperian Boulevard – Medium Density Residential, General Commercial, Medium-High Density Residential), Unincorporated Alameda County (Lewelling Boulevard – Public, Commercial District, Neighborhood Corridor), City of Hayward (Leidig Court – Neighborhood Commercial, Tennyson High School Pedestrian Crossing – Public, Medium Density Residential, Tennyson Road – Public, Mixed Use Land Use, Suburban Density Residential Use, Industrial Parkway – Industrial, Low Density Residential Land Use)

Project Description: The project proposes safety improvements to several existing at-grade rail crossings: three in the City of San Leandro, one in unincorporated Alameda County, and four in the City of Hayward, California. The improvements are designed to increase safety for motorists and pedestrians. Site conditions vary between crossings. The Hesperian Boulevard, Lewelling Boulevard, Industrial Parkway crossings take place on major arterials while the rest of the crossings are located on one- or two-lane streets. Each crossing location is paved and surrounded by walls or fencing. Safety improvements at the crossings include installation of new security gates/fencing, medians, pavement markings, and roadside signals. Additional improvements include Americans with Disabilities Act (ADA) detectable pavers, “No Trespassing” signs, and installation of new sidewalks.

April 2023

PREPARED FOR:

Alameda County Transportation Commission

PREPARED BY:

Circlepoint
42 S First Street, Suite D
San José, CA 95113

INITIAL STUDY

Table of Contents

Technical Memoranda

All technical memoranda are incorporated by reference into the Initial Study. The technical memoranda for the project are available upon request.

List of Figures

List of Tables

List of Acronyms and Abbreviations

°F	Fahrenheit
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACFD	Alameda County Fire Department
ACSO	Alameda County Sheriff's Office
ADA	Americans with Disabilities Act
Alameda CTC	Alameda County Transportation Commission
APE	Area of Potential Effects
BAAQMD	Bay Area Air Quality Management District
BMPs	Best Management Practices
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CFR	Code of Federal Regulation
CH_4	Methane
CHRIS	California Historical Resources Information System
CNEL	Community Noise Equivalent Level
CO_2	Carbon Dioxide
CO2e	Carbon Dioxide Equivalents
CRHR	California Register of Historical Resources
CWA	Clean Water Act
dB	Decibel
dBA	Scale
DPM	Diesel particulate matter
DTSC	Department of Toxic Substances Control
EBMUD	East Bay Municipal Utility District
EIR	Environmental Impact Report

FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zones
FHWA	Federal Highway Administration
FIRMs	Flood Insurance Rate Maps
FMMP	Farmland Mapping and Monitoring Program
HFCs	hydrofluorocarbons
HFD	Hayward Fire Department
HPD	Hayward Police Department
I-580	Interstate 580
I-880	Interstate 880
in/sec	inch per second
IS/MND	Initial Study and Mitigated Negative Declaration
Ldn	Day-Night Noise Level
MBTA	Migratory Bird Treaty Act
MND	Mitigated Negative Declaration
MPO	Metropolitan Planning Organization
MRP	Municipal Regional Stormwater NPDES Permit
MRZ	Mineral Resource Zone
MT	metric tons
MTC	Metropolitan Transportation Commission
N_2O	nitrous oxide
NAHC	Native American Heritage Commission
ND	Negative Declaration
NFIP	the National Flood Insurance Program
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWIC	Northwest Information Center
O_3	ozone
PFCs	perfluorocarbons
PM	particulate matter
PM_{10}	respirable particulate matter

$PM_{2.5}$	fine particulate matter
PPV	peak particle velocity
RCNM	Roadway Construction Noise Model
ROG	organic gases
ROW	right of way
RPS	Renewables Portfolio Standard
RWQCB	Regional Water Quality Control Board
SF_6	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFHAs	Special Flood Hazard Areas
SFPUC	San Francisco Public Utilities Commission
SHPO	State Historic Preservation Office
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act of 1975
SPRR	Southern Pacific Railroad
SSMP	Sewer System Management Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resource Control Board
TAC	Toxic air contaminants
TDM	Transportation Demand Management
U.S. EPA	United States Environmental Protection Agency
UPRR	Union Pacific Railroad
USACE	United States Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
UWMP	Urban Water Management Plan
WEAP	Worker Environmental Awareness Program

INITIAL STUDY

1. Introduction

An application for proposed safety improvements at several existing at-grade rail crossings in the City of San Leandro, unincorporated Alameda County, and the City of Hayward has been submitted to the respective planning departments for discretionary review. The Alameda County Transportation Commission (Alameda CTC), as Lead Agency, has determined that the project is subject to the California Environmental Quality Act (CEQA), and that the preparation of an Initial Study is required.

This Initial Study evaluates the potential environmental effects that could result from the construction and operation of the proposed Project. This Initial Study has been prepared in accordance with CEQA (Public Resources Code §21000 et seq.), and the State CEQA Guidelines (Title 14, California Code of Regulations, §15000 et seq.). The Alameda CTC uses Appendix G of the State CEQA Guidelines as the thresholds of significance unless another threshold of significance is expressly identified in the document.

Based on the analysis provided within this Initial Study, the Alameda CTC has concluded that, with incorporation of the identified mitigation as agreed to by the Applicant, the Project would not result in significant impacts on the environment and, therefore, that the preparation of an Initial Study/Mitigated Negative Declaration is appropriate under CEQA.

1.1 Purpose of an Initial Study

The CEQA was enacted in 1970 with several basic purposes, including: (1) to inform governmental decision makers and the public about the potential significant environmental effects of proposed projects; (2) to identify ways that environmental damage can be avoided or significantly reduced; (3) to prevent significant, avoidable damage to the environment by requiring changes in projects through the use of feasible alternatives or mitigation measures; and (4) to disclose to the public the reasons behind a project's approval even if significant environmental effects are anticipated.

An Initial Study is a preliminary analysis conducted by the Lead Agency, in consultation with other agencies (responsible or trustee agencies, as applicable), to determine whether there is substantial evidence that a project may have a significant effect on the environment. If the Initial Study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, the Lead Agency shall prepare a Negative Declaration. If the Initial Study identifies potentially significant effects but revisions have been made by or agreed to by the applicant that would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, a Mitigated Negative Declaration is appropriate. If the Initial Study concludes that neither a Negative Declaration nor Mitigated Negative Declaration is appropriate, an EIR is normally required.[1]

[1] State CEQA Guidelines Section 15063(b)(1) identifies the following three options for the Lead Agency when there is substantial evidence that the project may cause a significant effect on the environment: "(A) Prepare an EIR, or (B) Use a previously prepared EIR which the Lead Agency determines would adequately analyze the project at hand, or (C) Determine, pursuant to a program EIR, tiering, or another appropriate process, which of a project's effects were adequately examined by an earlier EIR or negative declaration.

1.2 Organization of this Initial Study

This Initial Study is organized into sections as follows:

1. Introduction

Describes the purpose and content of the Initial Study and provides an overview of the CEQA process.

2. Executive Summary

Provides Project information, identifies key areas of environmental concern, and includes a determination whether the project may have a significant effect on the environment.

3. Project Description

Provides a description of the environmental setting and the Project, including project characteristics and a list of discretionary actions.

4. Evaluation of Environmental Impacts

Contains the completed Initial Study Checklist and discussion of the environmental factors that would be potentially affected by the Project.

1.3 CEQA Process

In compliance with the State CEQA Guidelines, the Alameda CTC, as the Lead Agency for the project, will provide opportunities for the public to participate in the environmental review process. As described below, throughout the CEQA process, efforts will be made to inform, contact, and solicit input on the project from various government agencies and the general public, including stakeholders and other interested parties.

Initial Study

At the onset of the environmental review process, the Alameda CTC prepared this Initial Study to determine if the proposed Project may have a significant effect on the environment. This Initial Study determined that the proposed Project could have potentially significant environmental impacts, but that the identified mitigation measures, which the Applicant agreed to incorporate into the Project, would avoid or reduce such impacts to a point where clearly no significant impacts would occur.

A Notice of Intent to Adopt a Mitigated Negative Declaration (MND) or Negative Declaration (ND) is provided to inform the general public, responsible agencies, trustee agencies, and the county clerk of the availability of the document and the locations where the document can be reviewed. A 20-day review period (or 30-day review period when the document is submitted to the State Clearinghouse for state agency review) is identified to allow the public and agencies to review the document. The notice is mailed to any interested parties and is noticed to the public through publication in a newspaper of general circulation.

The decision-making body then considers the Mitigated Negative Declaration or Negative Declaration, together with any comments received during the public review process, and may adopt the MND or ND and approve the project. In addition, when approving a project for which an MND or ND has been prepared, the decision-making body must find that there is no substantial evidence that the project will have a significant effect on the environment, and that the ND or MND reflects the lead agency's independent judgement and analysis. When adopting an MND, the lead agency must also adopt a mitigation monitoring and reporting program to ensure that all proposed mitigation measures are implemented to mitigate or avoid significant environmental effects.

2 Executive Summary

Project Title	Alameda CTC Rail Grade Crossing Safety Enhancement Program – San Leandro (Marina, Washington, Hesperian), Unincorporated Alameda County (Lewelling), and Hayward (Tennyson High School, Tennyson Road, and Industrial Parkway)
Lead Agency contact and address	Alameda County Transportation Commission 1111 Broadway #800, Oakland, CA 94607
Staff Contact	Jhay Delos Reyes
Phone Number	510-208-7469
Email Address	jdelosreyes@alamedactc.org
Project Location	City of San Leandro: Marina Boulevard, Washington Avenue, Hesperian Boulevard Unincorporated Alameda County: Lewelling Boulevard City of Hayward: Tennyson High School Pedestrian Crossing (near Schafer Road), Tennyson Road, Industrial Parkway
Property Owner/Project Sponsor	Cities of Hayward and San Leandro, Unincorporated Alameda County/Alameda County Transportation Commission
Property APN	City of San Leandro: Marina Boulevard – 75-105-35, 75-93-6 Washington Avenue – 77C-1315-6, 77B-1163-13, 77B-1163-12, 77C-1315-5 Hesperian Boulevard – 77D-1487-32, 77D-1490-9, 77D-1490-17 Unincorporated Alameda County: Lewelling – 414-1-68, 414-31-78 City of Hayward: Leidig Court – 453-0095-030-00, 453-0095-031-00, 078C-0418-033-00 Tennyson High School Pedestrian Crossing – 452-40-6 Tennyson Road – 453-95-31, 78C-418-33 Industrial Parkway – 83-460-10-2, 83-460-8, 78G-2651-4, 78G-2651-6-2
General Plan Designation	City of San Leandro: Marina Boulevard – General Commercial Washington Avenue – Light Industrial, Industrial Transition, Low-Medium Density Residential, General Commercial Hesperian Boulevard – Medium Density Residential, General Commercial, Medium-High Density Residential Unincorporated Alameda County: Lewelling Boulevard – Public, Commercial District, Neighborhood Corridor City of Hayward: Leidig Court – Neighborhood Commercial Tennyson High School Pedestrian Crossing – Public, Medium Density Residential Tennyson Road – Public, Mixed Use Land Use, Suburban Density Residential Use Industrial Parkway – Industrial, Low Density Residential Land Use
Zoning	Industrial Transition District, Commercial District (City of San Leandro) Residential District (Unincorporated Alameda County) Residential District, Industrial District (City of Hayward)

Council District	City Council Districts for City of San Leandro: Brian Azevedo-D2 & Victor Aguilar Jr-D3 City Council Districts for Unincorporated Alameda County: Richard Valle-D2 City Council Districts for City of Hayward: N/A
Applicant	Alameda County Transportation Commission
Address	1111 Broadway #800, Oakland, CA 94607
Phone Number	(510) 208-7400

2.1 Project Overview

The project proposes safety improvements to several existing at-grade rail crossings: three in the City of San Leandro, one in unincorporated Alameda County, and four in the City of Hayward, California. The improvements are designed to increase safety for motorists and pedestrians. Site conditions vary between crossings. The Hesperian Boulevard, Lewelling Boulevard, Industrial Parkway crossings take place on major arterials while the rest of the crossings are located on one- or two-lane streets. Each crossing location is paved and surrounded by walls or fencing. Safety improvements at the crossings include installation of new security gates/fencing, medians, pavement markings, and roadside signals. Additional improvements include Americans with Disabilities Act (ADA) detectable pavers, “No Trespassing” signs, and installation of new sidewalks.

2.2 Environmental Setting

The project site consists of several existing at-grade rail crossings: three in the City of San Leandro, one in unincorporated Alameda County, and four in the City of Hayward, California. The crossings are fairly spread out, extending from the central and southern portions of San Leandro to the southern portion of Hayward. The crossings are along Union Pacific Railroad (UPRR) tracks where they intersect with local streets. Each crossing is listed in Table 3-1 below, which notes jurisdiction and local street intersections. The Map ID number corresponds to crossing locations shown on Figure 3-1. Detailed drawings of each crossing are included in this initial study as Attachment A.

2.3 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist included in Section 4 Evaluation of Environmental Impacts.

- ☐ Aesthetics
- ☐ Agriculture & Forestry Resources
- ☒ Air Quality
- ☒ Biological Resources
- ☒ Cultural Resources
- ☒ Geology & Soils
- ☐ Greenhouse Gas Emissions
- ☒ Hazards & Hazardous Materials
- ☐ Hydrology & Water Quality
- ☐ Land Use & Planning
- ☐ Mineral Resources
- ☒ Noise & Vibration
- ☐ Population & Housing
- ☐ Public Services
- ☐ Parks & Recreation
- ☐ Transportation & Circulation
- ☒ Tribal Cultural Resources
- ☐ Utilities & Service Systems
- ☒ Mandatory Findings of Significance

All impacts would be reduced to less-than-significant levels with adherence to applicable policies, and regulations, and incorporation of best management practices (BMPs) and mitigation measures discussed in Section 4 Evaluation of Environmental Impacts.

3 Project Description

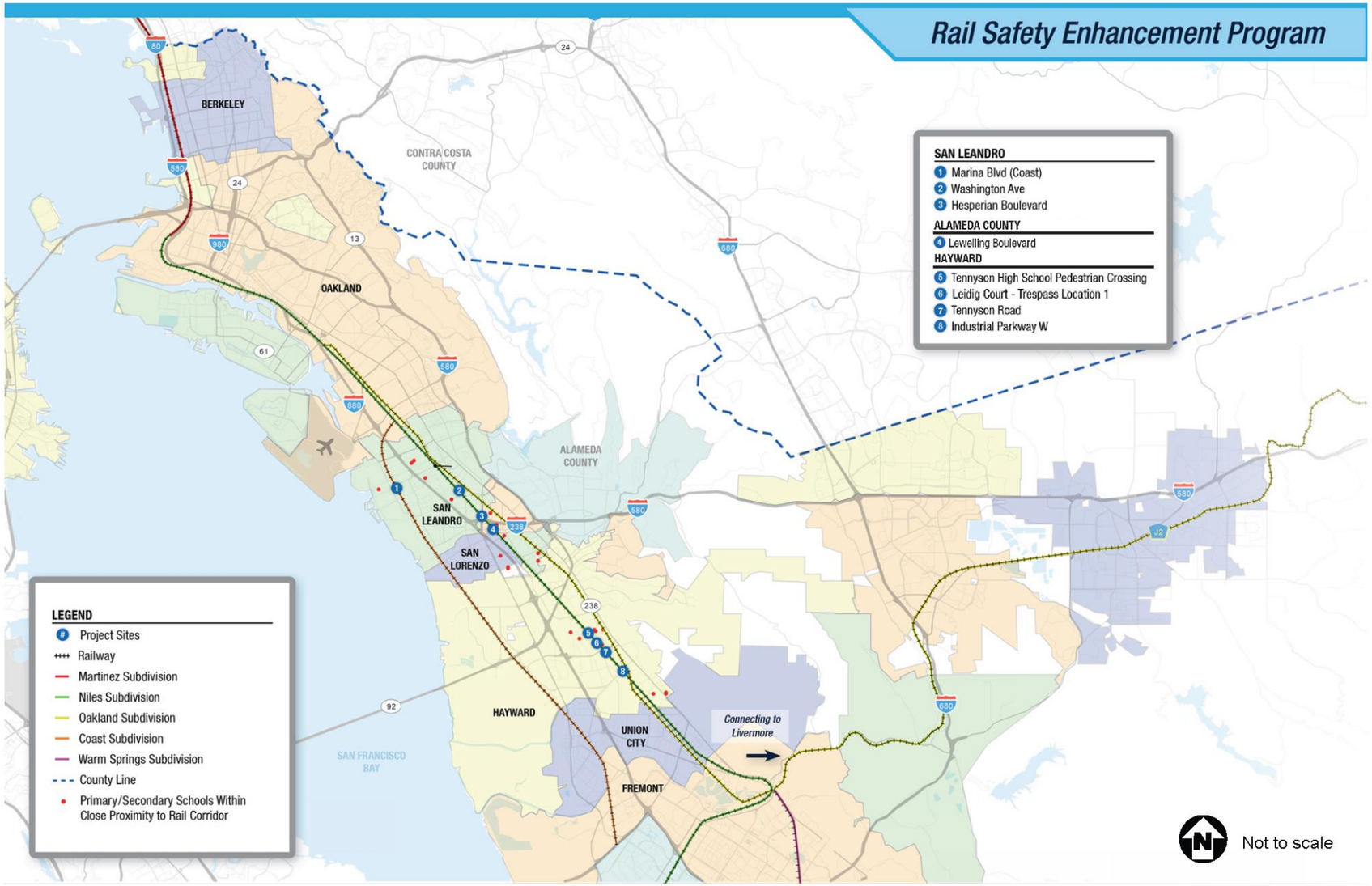
3.1 Project Location and Setting

The project site consists of several existing at-grade rail crossings: three in the City of San Leandro, one in unincorporated Alameda County, and four in the City of Hayward, California. The crossings are fairly spread out, extending from the central and southern portions of San Leandro to the southern portion of Hayward. Alameda CTC is the Lead Agency under the California Environmental Quality Act (CEQA). The crossings are along Union Pacific Railroad (UPRR) tracks where they intersect with local streets. Each crossing is listed in Table 3-1 below, which notes jurisdiction and local street intersections. The Map ID number corresponds to crossing locations shown on Figure 3-1.

Table 3-1 Crossing Locations

Jurisdiction	Intersection	Map ID
San Leandro	Marina Boulevard (Coast Subdivision)	1
San Leandro	Washington Avenue	2
San Leandro	Hesperian Boulevard	3
Unincorporated Alameda County	Lewelling Boulevard	4
Hayward	Leidig Court – Trespass Location 2	5
Hayward	Tennyson High School Pedestrian Crossing (near Schafer Road)	6
Hayward	Tennyson Road	7
Hayward	Industrial Parkway	8

Source: Alameda CTC, 2021



Source: Kimley-Horn, 2023

Kimley»Horn
Expect More. Experience Better.

Figure 3-1 Project Site Map

3.2 Site Conditions

In general, the crossings are in or near residential areas. Notable exceptions are the Washington Avenue crossing in San Leandro and the Industrial Parkway crossing in Hayward, both of which are in areas characterized by a mix of industrial and commercial uses. Additionally, the Lewelling Boulevard, Tennyson Road, and Tennyson High School crossings are all adjacent to schools (Tennyson High School (100 feet), San Lorenzo High School (150 feet), and Cesar Chavez Middle School (500 feet), respectively).

Within San Leandro, the Hesperian Boulevard and Washington Avenue crossings are surrounded by Medium-Density Residential, Single-Family Residential, General Industrial, and General Commercial. Zoning for these areas include Residential Multifamily, Residential Single-family, Industrial General, and Commercial Community. By contrast, the Marina Boulevard crossing is surrounded by land designated and zoned as Industrial Transition, Industrial General, and Commercial Neighborhood. Development immediately surrounding each of the crossings comprises a mix of residential buildings and industrial uses including warehouses, offices, and associated parking lots.

Within unincorporated Alameda County, land uses and zoning surrounding the Lewelling Boulevard include Commercial Community District to the northeast, Commercial District to the west and south, and Corridor Neighborhood to the southeast.

Within Hayward, each crossing is adjacent to residential areas designated as Limited Medium Density Residential, Low Density Residential, and Medium Density Residential. These areas are zoned Planned Development, Single-family Residential, and Medium-Density Residential, respectively. The Tennyson Road crossing abuts an area designated Public/Quasi Public and zoned for Agriculture to the north. However, this site currently includes Cesar Chavez Middle School. Similarly, the Tennyson High School pedestrian crossing abuts an area designated Public Quasi Public and zoned for Agriculture, and currently includes Tennyson High School. Other uses present at these crossings include Light Industrial and Retail, and Office Commercial.

Site conditions vary between crossings. The Hesperian Boulevard, Lewelling Boulevard, Industrial Parkway crossings take place on major arterials while the rest of the crossings are located on one- or two-lane streets. Each crossing location is paved and surrounded by walls or fencing. The existing railroad crossings include single-arm gates (one in each direction of traffic), a warning device, concrete crossing panels, and street lighting. The existing conditions at each crossing location are described in detail in Table 3-2.

Table 3-2 Existing Conditions

Intersection	Description	Map ID
Marina Boulevard (Coast Subdivision)	Marina Boulevard extends northeast-southwest through this crossing with two lanes of travel in either direction separated by striping. A continuous sidewalk is present along the northeast side of Marina Boulevard but the sidewalk on the southwest side does not extend through the railroad crossing in the southwest direction. Vegetation is limited to landscaping associated with adjacent residents and businesses. A transmission tower for power lines is located approximately 50 feet east of the crossing. The UPRR corridor contains two parallel rail lines in this location.	1
Washington Avenue	Washington Avenue extends north-south through this crossing with two lanes of travel in either direction separated by a mix of concrete median and plastic pylons. The area between Washington Avenue and Chapman Road to the west is unpaved and contains several mature trees. Continuous sidewalks run along each side of Washington Avenue. The UPRR corridor contains a single rail line in this location.	2
Hesperian Boulevard	Hesperian Boulevard extends in a north-south direction through this crossing with three lanes of travel in either direction separated by a concrete median. Sidewalks extend along each side of Hesperian, allowing pedestrians to cross the tracks at-grade. Vegetation is limited to small-scale landscaping associated with adjacent businesses and homes. The UPRR corridor contains a single rail line in this location.	3
Lewelling Boulevard	Lewelling Boulevard extends east-west through this crossing with two lanes of travel in each direction separated by a landscaped median. San Lorenzo High School is located immediately to the north and a residential neighborhood abuts the crossing to the south. Continuous sidewalks extend along Lewelling Boulevard on each side. The UPRR corridor contains a single rail line in this location.	4
Leidig Court Trespass	Leidig Court at Tennyson Road extends in a northeast direction through this crossing with one lane of travel in each direction. Cesar Chavez Middle School is located immediately east, and a residential neighborhood abuts the crossing to the west. Continuous sidewalk extends along the western side of Leidig Court. The UPRR corridor contains a single rail line in this location.	5
Tennyson High School Pedestrian Crossing (near Schafer Road)	The existing pedestrian crossing at Tennyson High School extends from the sidewalk northeast of Huntwood Avenue near Schafer Road, northeast across the UPRR tracks to the high school. Huntwood Avenue runs parallel to the UPRR tracks and contains one lane of travel in either direction with Class II bicycle lanes striped on both sides. The pedestrian crossing contains stairs and an ADA-accessible ramp along with signage and lighting to warn of trains crossing. Given that no automobile traffic crosses the UPRR tracks in this location, no vehicular gate or arm is present. Many mature trees associated with the high school are present on the northeast side of the UPRR tracks.	6
Tennyson Road	Tennyson Road extends in a northeast-southwest direction through this crossing with two lanes of travel in each direction separated by a vegetated median. Class II bicycle lanes are striped in both directions along Tennyson Road and sidewalk facilities allow pedestrians to cross the UPRR tracks at grade. Cesar Chavez Middle School is located immediately to the north of this intersection and a residential neighborhood is located immediately to the east behind a wall. The UPRR corridor contains a single rail line in this location.	7
Industrial Parkway	Industrial Parkway extends in a northeast-southwest direction through this crossing with three lanes of travel in either direction separated by a vegetated median. A drainage ditch runs parallel to Industrial Parkway along the southeastern side. A single-family residential	8

Intersection	Description	Map ID
	neighborhood abuts the crossing to the west behind a wall. Sidewalks are present north and south of the UPRR tracks along the northwestern side of Industrial Parkway, but no pedestrian facilities extend across the tracks. The UPRR corridor contains a single rail line in this location.	

Source: Circlepoint, 2021

Figure 3-2 shows existing conditions at the Washington Avenue crossing, Figure 3-3 shows the existing conditions at the Hesperian Boulevard crossing, Figure 3-4 shows the existing condition at the Marina Boulevard crossing, and Figure 3-5 shows the existing condition at the Lewelling Boulevard crossing. Figure 3-6 shows the existing condition at the Tennyson High School pedestrian crossing. Figure 3-7 shows the existing conditions at the Leidig Court Trespass and Tennyson Road crossing. Figure 3-8 shows the existing condition at the Industrial parkway trespass. Existing conditions at these eight crossings are representative of existing conditions at each crossing included in the project. Figure 3-9 depicts the typical improvements proposed at each crossing in the program for illustrative purposes.

Figure 3-2 Washington Avenue- Existing Conditions from South looking North

Figure 3-3 Hesperian Boulevard - Existing Conditions from Northeast looking Southwest

Figure 3-4 Marina Boulevard (Coast Division) - Existing Conditions from West looking East

Figure 3-5 Lewelling Boulevard -Existing Conditions from East looking West

Figure 3-6 Tennyson High School Pedestrian Crossing -Existing Conditions from South looking North

Figure 3-7 Tennyson Road and Leidig Court Trespass -Existing Conditions from Northeast looking Southwest

Figure 3-8 Industrial Parkway - Existing Conditions from Northeast looking Southwest

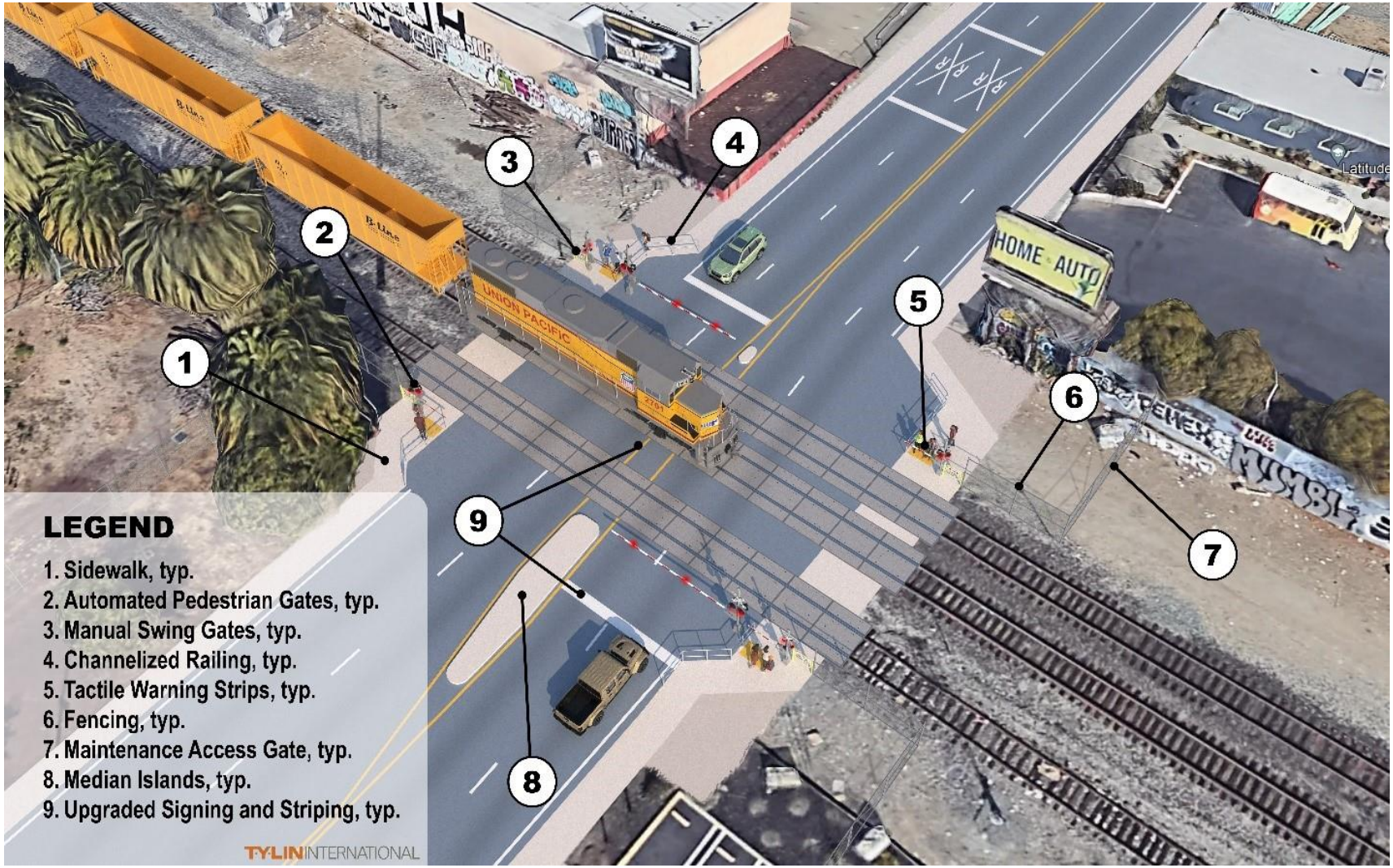


Figure 3-9 Illustration of Typical Improvements

3.3 Project Components

The project consists of rail safety improvements to existing at-grade rail crossings. The improvements will improve safety for motorists and pedestrians. This includes restricting access to UPRR tracks, improving signage, accessibility improvements, and other safety features. The proposed safety improvements at each crossing are listed in Table 3-3.

Table 3-3 Proposed Safety Improvements

Intersection	Description	Excavation/Grading	Map ID
Marina Boulevard (Coast Subdivision)	The following improvements are proposed: • Remove portions of existing pavement/concrete • Install new sidewalk (outside of UPRR and City right of way (ROW)), roadway striping/pavement marking, roadside signs, medians, security access gates/fencing (portions of which are outside of UPRR and San Leandro's ROW), pavement, ADA detectable pavers, "No Trespassing" signs, k-rail, and curb along tracks	The project will require minor excavation would be required to replace old pavement and sidewalks on the project site and create new medians.	1
Washington Avenue	The following improvements are proposed: • Remove portions of existing pavement/concrete • Install new roadway striping/pavement marking, roadside signs, medians, sidewalk, security access gates/fencing, ADA detectable pavers, and "No Trespassing" signs	The project will require minor excavation and grading would be required to remove pavement and conform new sidewalks to existing. This work would generally be contained within UPRR ROW at this crossing.	2
Hesperian Boulevard	The following improvements are proposed: • Remove portions of existing pavement/concrete and portions of the existing driveway • Install new sidewalk, roadway striping/pavement marking, roadside signs, curb and gutter, security access gates/fencing, pavement, and ADA detectable pavers • Construct new driveway access	The project will require excavation and grading would be required for the removal and installation of new pavement on either side of Hesperian Boulevard. Removal of the existing driveway and construction of a gutter on the southeast corner of the crossing would require grading within San Leandro's ROW.	3
Lewelling Boulevard	The following improvements are proposed:	None	4

Intersection	Description	Excavation/Grading	Map ID
	• Install new roadway striping/pavement marking, security access gates/fencing, "No Trespassing" signs, and new pedestrian path		
Leidig Court Trespass	The following improvements are proposed: • Install new sidewalk, roadway striping/pavement marking, security access gates/fencing, pavement, ADA detectable pavers, and "No Trespassing" signs	The project will require excavation and grading would be required for the removal of existing sidewalk and installation/conformation of new sidewalk. All excavation and grading would be contained within UPRR ROW for this crossing.	5
Tennyson High School Pedestrian Crossing (near Schafer Road)	The following improvements are proposed: • Remove portions of existing pavement/concrete • Install new trespass-resistant landscaping, sidewalk, pavement, crosswalk striping/pavement marking, security access gates/fencing, "No Trespassing" signs, new culvert, and ADA detectable pavers	The project will require excavation and grading would be required for the removal of existing sidewalk and installation/conformation of new sidewalk. Conformation to the existing sidewalk along Huntwood Avenue would occur within Hayward's ROW.	6
Tennyson Road	The following improvements are proposed: • Remove portions of existing pavement/concrete • Install new sidewalk, roadway striping/pavement marking, security access gates/fencing, pavement, ADA detectable pavers, and "No Trespassing" signs	The project will require excavation and grading would be required for the removal of existing sidewalk and installation/conformation of new sidewalk. All excavation and grading would be contained within UPRR ROW for this crossing.	7
Industrial Parkway	The following improvements are proposed: • Remove portions of existing pavement/concrete • Installation of new sidewalk, roadway striping/pavement marking, security access gates/fencing, curbs, new median, replacement/addition of pavement, ADA-detectable pavers, "No Trespassing" signs	The project will require excavation and grading would be required for the removal of existing sidewalk and installation/conformation of new sidewalk. While most of this work would occur within UPRR ROW, conformation to existing sidewalk on the northwest side of Industrial Parkway would occur within Hayward's ROW.	8

Source: Alameda CTC, 2021

3.4 Construction

Construction of the project is anticipated to take approximately 12 months, beginning in the third quarter of 2023, and concluding in the third quarter of 2024. Construction at each crossing will generally include:

- Temporary closure of the crossing with an appropriate detour
- Removal of outdated or non-functioning crossing control equipment, fencing, signage, pavement, and other materials
- Installation of new fencing, crossing control equipment, signage, sidewalks and pavement, and other safety features

Additionally, the Hesperian Boulevard crossing will involve construction of new driveway access along Springlake Drive.

3.5 Operation

During operation, vehicular traffic and pedestrians will be able to use the crossings as they do under existing conditions, but with improved safety. Operation of the project would require electricity for single-arm gates in each direction of traffic but otherwise would not require the use of utilities. Operation of the project would not change the frequency or speed of existing trains along UPRR tracks or affect the volume of vehicles using the crossing. The improvements may provide the groundwork for local agencies to pursue a Federal "quiet zone" designation, but this would be completed by the local agencies as a separate project.

3.6 Permits and Approvals

Required permits and approvals are listed in Table 3-4 below. In addition, agreements for work within ROW for which UPRR has easements will be acquired prior to construction.

Table 3-4 Permits and Approvals

Permitting Agency	Permit/Approval	Timing
City of San Leandro	Encroachment Permit for construction in City of San Leandro ROW	Prior to ground disturbance
City of Hayward	Encroachment Permit for construction in City of Hayward ROW; Construction Noise Permit	Prior to ground disturbance
Alameda County	Encroachment Permit for construction in Alameda County ROW	Prior to ground disturbance

Source: Circlepoint, 2021

4 Evaluation of Environmental Impacts

This Initial Study evaluates impacts based on the CEQA Guidelines Appendix G Environmental Checklist:

- No Impact indicates that there is no impact.
- Less than Significant Impact indicates that, while there is some impact, the impact does not exceed identified thresholds.
- Less than Significant with Mitigation Incorporated indicates that a potentially significant and/or significant impact has been identified in the course of this analysis and mitigation measures have been provided to reduce a potentially significant impact and/or significant impact to a less-than-significant level.
- Significant Impact indicates that not all impacts have been reduced to less-than-significant and an Environmental Impact Report (EIR) will be required. As noted previously, mitigation measures developed for this project reduce any significant impacts to a less-than-significant level and an EIR will not be required.
- Section XVIII, Mandatory Findings, discusses cumulative impacts. Cumulative impacts are two or more individual effects, which when combined, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over time. If a significant cumulative impact is identified, the project's contribution to the significant cumulative impact is considered.

The environmental factors checked below would be potentially affected by the project, involving at least one impact that is a potentially significant or significant impact as indicated by the checklist on the following pages. Mitigation measures have been provided for each significant impact, reducing all to a less-than-significant level.

☐ Aesthetics	☐ Agriculture & Forestry Resources
☒ Air Quality	☒ Biological Resources
☒ Cultural Resources	☒ Geology & Soils
☐ Greenhouse Gas Emissions	☒ Hazards & Hazardous Materials
☐ Hydrology & Water Quality	☐ Land Use & Planning
☐ Mineral Resources	☒ Noise & Vibration
☐ Population & Housing	☐ Public Services
☐ Parks & Recreation	☐ Transportation & Circulation
☒ Tribal Cultural Resources	☐ Utilities & Service Systems
☒ Mandatory Findings of Significance	

4.1 Aesthetics

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
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 nonurbanized 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 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?	☐	☐	☒	☐

Environmental Setting

The Alameda County General Plan is a primary source for identifying and determining scenic vistas and scenic routes throughout the county. No scenic vistas have been identified within the plan. The San Leandro 2035 General Plan is a primary source for identifying and determining scenic vistas and scenic routes throughout the City of San Leandro. According to the San Leandro 2035 General Plan, the San Francisco Bay is a scenic vista within the City of San Leandro. Scenic viewsheds are also important factors to consider when analyzing the aesthetic character of a project site. While a scenic vista is typically a singular scene or view, scenic viewsheds are areas of particular scenic or historic value deemed worthy of preservation against development and other changes. The California Department of Transportation (Caltrans) Scenic Highway Program has designated Interstate 580 (I-580) as a scenic highway in the project site vicinity.

Scenic viewsheds are also important factors to consider when analyzing the aesthetic character of a project site. While a scenic vista is typically a singular scene or view, scenic viewsheds are areas of particular scenic or historic value deemed worthy of preservation against development and other changes.

The San Leandro Hills are slightly visible from the Marina Boulevard, Hesperian Boulevard, Lewelling Boulevard crossings; however, the I-880 overcrossings have heavily filter views of the East Bay Hills. The existing crossings are not located near any natural or historic features that are considered scenic resources by the City of San Leandro.

The Hayward 2040 General Plan is a primary source for identifying and determining scenic vistas and scenic routes throughout the City of Hayward. According to the Hayward 2040 General Plan, there are two scenic vistas within the City of Hayward: the San Francisco Bay and East Bay Hills. Views of the East Bay Hills are prominent from the Tennyson Road and Industrial Parkway West crossings. Existing landscaping and buildings block views of the East Bay Hills from the Tennyson High School pedestrian crossing. The existing crossings are not located near any natural or historic features that are considered scenic resources by the City of Hayward. The project would require minor surface alterations such as new roadway striping, pavement marking, roadside signs, security access gates/fencing, and new sidewalks. These improvements would be generally visible to pedestrians, bicyclists and motor vehicle drivers.

Regulatory Setting

Local

Various policies in the General Plans have been adopted for avoiding or mitigating visual impacts resulting from development within the City of San Leandro. After review of the San Leandro 2035 General Plan, and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

The Alameda County General Plan does not have applicable policies regarding aesthetic resources.

San Leandro 2035 General Plan

Action CD-5.7. A	Explore the redesign of select streets in commercial districts (including Downtown) to reduce the number of travel lanes and create amenities such as wider sidewalks, crosswalk pavers, landscaped medians, and street trees within parking lanes.

Hayward 2040 General Plan

Policy NR-8.3	The City shall protect the visual characteristics of transportation corridors that are officially designated as having unique or outstanding scenic qualities, including portions of I-580, I-880, and SR 92.

Impact Discussion

a) Have a substantial adverse effect on a scenic vista?

No Impact. The existing crossings are not located in or near any scenic vistas identified by Alameda County, the City of San Leandro, or the City of Hayward. Additionally, views from the existing crossings lack continuity and are dominated by existing development such as industrial buildings and commercial and residential uses. Therefore, the project would not result impacts to a scenic vista, and no mitigation is required.

b) Substantially damage scenic resources, including but not limited to: trees, rock outcroppings, and historic buildings within a State scenic highway?

Less than Significant. The closest State scenic highway to the existing crossings is I-580, which is a designated State scenic highway from the San Joaquin County Line to Route 205, and from the San Leandro City limit to Route 24 in Oakland. However, the existing crossings are all located approximately 1 mile west of I-580. The project improvements would be confined to the previously developed sites and

would not include tall structures or substantial vertical features that could affect views of scenic resources from I-580.

The project is not located within the viewshed of a state scenic highway and, as a result would not damage any trees, rock outcroppings, or historic buildings along a scenic highway. As discussed in Section 4.4 Biological Resources, the project site does not contain any trees that have been identified as scenic resources or as landmark trees with historical significance. Tree removal or trimming is not currently planned as part of the project. As discussed in Section 4.5 Cultural Resources, there are no historic buildings within the project site. Additionally, there are no rock outcroppings on the project site that would be damaged by the project. Therefore, the project would have a less-than-significant impact to scenic resources, and no mitigation is required.

c) In nonurbanized 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 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?

Less than Significant. The project would require minor improvements at the eight existing crossings to enhance safety. As discussed in Section 3.3, Project Components, minor improvements would include new signs, street markings, and security access gates. The existing crossings within the City of San Leandro, unincorporated Alameda County, and the City of Hayward are located in urbanized areas and are surrounded by manufacturing, industrial, and commercial uses. The project would not conflict with applicable zoning and other regulations governing scenic quality, as the General Plans associated with the three jurisdictions do not identify any scenic vistas or view corridors near or adjacent to the existing crossings. Proposed improvements would be similar in scale, height and mass to the existing facilities, and as such, would not create substantial new obstructions to views of or from these locations. Therefore, the project would have less-than-significant impact on the visual character and quality of the site and vicinity, and no mitigation is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less than Significant. While there would be lights associated with the project, such as street lighting and warning lights, these would be similar in nature to existing lighting features onsite. Therefore, the project would have no impact on day or nighttime views in the area. The impact would be less than significant, and no mitigation measures are required.

4.2 Agriculture and Forest Resources

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
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 nonagricultural 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?	☐	☐	☐	☒

Environmental Setting

Unincorporated Alameda county, where the Lewelling Road crossing is located, is within primarily Urban and Built Up Land with the rest of the unincorporated area starting about 4 miles to the east is heavily made up of Grazing Land. Virtually all of City of San Leandro's early agricultural lands have been converted to Urban and Built Up Land uses. Suburban development currently extends up to 70 miles out from the center of the region. Hayward primarily consists of Urban and Built Up Land, Grazing Land, and Other Land Uses. The project sites within Hayward are within Urban and Built Up Land uses.

The proposed improvements would take place at existing rail crossings in urbanized areas. A review of the California Department of Conservation's Important Farmland Finder Interactive Map revealed that the existing crossings are classified as Urban and Built-Up Land and are not located near any land under the Williamson Act contract. There is no forest or timberland on or near the existing crossings.[2]

The California Department of Conservation administers the Farmland Mapping and Monitoring Program (FMMP), California's statewide agricultural land inventory. Four classifications of farmland are

[2] California Department of Conservation. California Important Farmland Finder. Available: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed: May 2021.

considered valuable: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance. Any conversion of land within these classifications is typically considered an environmental impact under CEQA. Other categories of land that are not protected by the Department of Conservation include Grazing Land, Urban and Built-up Land, and Other Land. The existing crossings are designated as Urban and Built-up Land by the FMMP. There are no important farmlands on or adjacent to the existing crossings.[3]

California Public Resources Code (PRC) Section 4526 defines timberland as land that is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. Land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land is excluded as timberland. According to the FMMP, there are no forest/timberlands on or adjacent to the existing crossings.

Regulatory Setting

State

California Land Conservation Act

The California Land Conservation Act of 1965, also referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive property tax assessments which are much lower than normal because they are based upon farming and open space uses as opposed to full market value.

Farmland Mapping and Monitoring Program

The California FMMP provides maps and data to decision makers to assist them in making informed decisions regarding the planning of the present and future use of California's agricultural land resources.

PRC/California Government Code

PRC Section 12220(g) identifies forest land as land that can support a 10 percent native tree cover of any species under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits.

PRC Section 4526 identifies timberland as land available for and capable of growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. Land owned by the federal government and land designated by the State Board of Forestry and Fire Protection as experimental forest land is excluded as timberland.

Government Code Section 51104(g) identifies timberland production zones as areas which have been zoned and are devoted to and used for growing and harvesting timer, or for growing and harvesting timber and compatible uses.

Local

After review of the Alameda County General Plan, San Leandro 2035 General Plan, and the Hayward 2040 General Plan, it was determined that the cities do not have agricultural regulations that apply to the project.

[3] California Department of Conservation. California Important Farmland Finder. Available: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed: May 2021.

Impact Discussion

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 nonagricultural use?

No Impact. The existing crossings are located in urbanized developed areas and are not designated by the California Department of Conservation as farmland of any type. The Tennyson Road crossing and the Tennyson High School pedestrian crossing are zoned for Agriculture. However, both crossings are designated as Public Quasi Public areas in the Hayward 2040 General Plan, as the project site contains Cezar Chavez Middle School and Tennyson High School respectively. As the existing crossings are not currently being used for agricultural purposes, implementation of the project would not convert important farmland to nonagricultural use. No impact would occur, and no mitigation is required.

b) Conflict with existing zoning for agricultural use, a Williamson Act contract?

No Impact. The existing crossings are located in urbanized developed areas and are not designated by the California Department of Conservation as farmland of any type, nor are they under a Williamson Act Contract.[4] The Tennyson Road crossing and the Tennyson High School pedestrian crossing are zoned for Agriculture. However, both crossings are designated as Public Quasi Public areas in the Hayward 2040 General Plan, as the project site contains Cezar Chavez Middle School and Tennyson High School respectively. As the existing crossings are not currently being used for agricultural purposes, implementation of the project would not impact farmland and would not conflict with zoning for agricultural use or a Williamson Act contract. Therefore, no impact would occur, and no mitigation is required.

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))?

No Impact. The existing crossings do not contain land zoned as forest land or timberland production. Areas surrounding the existing crossings are currently developed with residential and commercial neighborhoods. Therefore, the project would not conflict with timberland or timberland zoned production. No impact would occur, and no mitigation is required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The existing crossings do not contain forest land or other similar resources. Areas surrounding the existing crossings are currently developed with residential and commercial neighborhoods. Therefore, the project would not result in loss of forest land or conversion of forest land to non-forest use. No impact would occur, and no mitigation is required.

[4] California Department of Conservation.2019. Important Farmland Categories. 2019. Available: https://www.conservation.ca.gov/dlrp/fmmp/Pages/Important-Farmland-Categories.aspx. Accessed March 2021.

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?

No Impact. As discussed above, the existing crossings are not located on or adjacent to land designated or used as farmland. Implementation of the project would not conflict with timberland or timberland zoned production, nor would it result in loss of forest land or the conversion of forest land to non-forest use. Therefore, no impact would occur, and no mitigation is required.

4.3 Air Quality

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
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?	☐	☐	☒	☐

Environmental Setting

The existing crossings are located in Alameda County within the San Francisco Bay Area Air Basin (SFBAAB). Ambient air quality standards have been established at both the state and federal level for the SFBAAB, as listed below in Table 4-1. The San Francisco Bay Area currently meets all ambient air quality standards with the exception of ground-level ozone (O_3), respirable particulate matter (PM_{10}) and fine particulate matter ($PM_{2.5}$). High O_3 levels are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_x) and can aggravate respiratory and cardiovascular diseases, reduce lung function, and increase coughing and chest discomfort. High particulate matter (PM) levels can aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children.

Toxic Air Contaminants

Toxic air contaminants (TAC) are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer) and include, but are not limited to, the criteria air pollutants listed above. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

These contaminants include airborne carcinogens and nuisance sources, such as odors or dust. While the meteorology is generally favorable for minimizing air pollution, the Bay Area is a source region for air quality problems in downwind communities. This impact is exacerbated by the frequent traffic congestion in San Leandro and Hayward. Consequently, emission reductions in these cities will have a limited local benefit but will be an important contributor to attaining/maintaining clean air standards in the region.

Transportation is the major contributor to regional air pollution. Stationary sources (e.g., smokestack industries) were once important sources of both regional pollution as well as a local nuisance. Their role in the pollution picture—regionally and locally—has been substantially reduced in recent years by pollution control programs of the Bay Area Air Quality Management District (BAAQMD). Any further progress in air quality improvement now focuses heavily on the automobile.

The California Air Resources Board (CARB) and the United States Environmental Protection Agency (U.S. EPA) have adopted and implemented a number of regulations and emission standards for stationary and mobile sources to reduce emissions of Diesel particulate matter (DPM). These include emission standards for off-road diesel engines, including backup generators, and regulatory programs that affect medium and heavy-duty diesel trucks that represent the bulk of diesel particulate matter from California highways. The federal and ambient air quality standards are depicted in Table 4-1.

Table 4-1 Federal and Ambient Air Quality Standards

Pollutant	Averaging Time	Federal Primary Standards	California Standards
Ozone	1-Hour	---	0.09 ppm
	8-Hour	0.070 ppm	0.070 ppm
Carbon Monoxide	8-Hour	9.0 ppm	9.0 ppm
	1-Hour	35.0 ppm	20.0 ppm
Nitrogen Dioxide	Annual	0.053 ppm	0.030 ppm
	1-Hour	0.100 ppm	0.18 ppm
Sulfur Dioxide	Annual	---	---
	24-Hour	---	0.04 ppm
	1-Hour	0.075 ppm	0.25 ppm
PM_{10}	Annual	---	20 µg/m3
	24-Hour	150 µg/m3	50 µg/m3
PM_{25}	Annual	12 µg/m3	12 µg/m3
	24-Hour	35 µg/m3	---
Lead	30-Day Average	---	1.5 µg/m3
	3-Month Average	0.15 µg/m3	---

Source: Environmental Protection Agency, 1990.

Notes: ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter

Regulatory Setting

Federal

40 Code of Federal Regulation 93.126

The 40 Code of Federal Regulation (CFR) 93.126, Exempt Projects, lists highway and transit project types that are exempt from the requirement to determine conformity. Such projects may proceed toward

implementation even in the absence of a conforming transportation plan and TIP. Such project is not exempt if the Metropolitan Planning Organization (MPO) in consultation with other or the Federal Transit Administration (FTA) (in the case of a transit project) concur that it has potentially adverse emissions impacts for any reason. States and MPOs must ensure that exempt projects do not interfere with transportation control measures implementation.

State

CARB and the United States Environmental Protection Agency (U.S. EPA) have adopted and implemented a number of regulations and emission standards for stationary and mobile sources to reduce emissions of DPM. These include emission standards for off-road diesel engines, including backup generators, and regulatory programs that affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways.

Sensitive Receptors

CARB has identified the following persons who are most likely to be affected by air pollution: infants, children under 18, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, churches and places of assembly, and parks. Table 4-2 shows the nearest sensitive receptors to each of the crossings.

Table 4-2 Closest Sensitive Receptors

Crossing	Nearest Sensitive Receptor	Approximate Distance from Crossing
Marina Boulevard (Coast Subdivision)	Single-family residential	780 feet west
Washington Avenue	Single-family residential	50 feet southwest
Hesperian Boulevard	Single-family residential	550 feet west
Lewelling Boulevard	Single-family residential	10 feet east
Tennyson High School Pedestrian Crossing (near Schafer Road)	Sorensdale Park	20 feet north
	Multi-family residential	50 feet southwest
Leidig Court Trespass	Multi-family residential	20 feet west
Tennyson Road	Cesar Chavez Middle School	30 feet north
	Single-family residential	30 feet east
Industrial Parkway	Single-family residential	20 feet west

Source: Kimley Horn, 2021

Regional

BAAQMD

BAAQMD is the regional agency tasked with managing air quality in the region. At the state level, the CARB (a part of the California EPA [CalEPA]) oversees regional air district activities and regulates air quality at the state level. The BAAQMD has published CEQA Air Quality Guidelines that are used in this analysis to evaluate air quality impacts.

BAAQMD CEQA Significance Thresholds

In June 2010, BAAQMD adopted thresholds of significance to assist in the review of projects under CEQA. These thresholds were designed to establish the level at which BAAQMD believed air pollution emissions would cause significant environmental impacts under CEQA.

The significance thresholds identified by BAAQMD and used in this analysis are summarized in Table 4-3. As indicated in Table 4-4, the project would have a significant impact if average daily emissions from construction and operation exceed 54 Ibs/day for ROG, NOx, and $PM_{2.5}$ and 82 lbs/day for PM_{10}. For TACs BAAQMD notes that "[a]n excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0 would be a cumulatively considerable contribution."[5] The BAAQMD's significance thresholds are described in their latest version of their BAAQMD CEQA Air Quality Guidelines issued in May 2017.

Table 4-3 BAAQMD Air Quality Significance Thresholds

Criteria Air Pollutant	Construction Thresholds	Operational Thresholds	
	Average Daily Emissions (lbs./day)	Average Daily Emissions (lbs./day)	Annual Average Emissions (tons/year)
ROG	54	54	10
NO_x	54	54	10
PM_{10}	82 (Exhaust)	82	15
$PM_{2.5}$	54 (Exhaust)	54	10

Source: Kimley Horn, 2021

Note: ROG = reactive organic gases, NO_x = nitrogen oxides, PM_{10} = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, $PM_{2.5}$ = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating air quality impacts resulting from planned development within the project area. The Alameda County General Plan policies are applicable to the Lewelling Boulevard crossing only, due to the crossing being located in unincorporated Alameda County. After review of the San Leandro 2035 General Plan and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

Goal E	To insure and maintain the highest possible air quality in the County.
Objective E1	In areas of critical air pollution to attempt to restore and prevent further degradation of air quality.
Objective E2	To achieve coordination of air quality policies and regulations at the federal, state, regional, and local level.

[5] BAAQMD, CEQA Air Quality Guidelines, LOCAL COMMUNITY RISK AND HAZARD IMPACTS – PROJECT LEVEL, https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf#page=23

Alameda County Community Climate Action Plan

Policy T-2	Develop appropriate bicycle infrastructure for high traffic intersections and corridors.
Policy T-6	Improve pedestrian connectivity and route choice in neighborhoods.

San Leandro 2035 General Plan

Policy EH-3.1	Clean Air Plan Implementation. Cooperate with the appropriate regional, state, and federal agencies to implement the regional Clean Air Plan and enforce air quality standards.
Policy EH-3.2	Transportation Control Measures. Promote strategies that help improve air quality and reduce greenhouse gas (GHG) emissions by reducing the necessity of driving. These strategies include more reliable public transportation, carpooling and vanpooling programs, employer transportation demand management (TDM) programs, better provisions for bicyclists and pedestrians, and encouraging mixed use and higher density development around transit stations.
Action EH-3.4.A:	Work with the BAAQMD in the review and monitoring of businesses and activities with the potential for air quality impacts.

Hayward 2040 General Plan

Policy NR-2.2	The City shall review proposed development applications to ensure projects incorporate feasible measures that reduce construction and operational emissions for ROGs, NO_x, and PM (and) through project location and design.
Policy NR-2.3	The City shall require development projects that exceed Bay Area Air Quality Management District ROGs, NO_X operational thresholds to incorporate design or operational features that reduce emissions equal to at least 15 percent below the level that would be produced by an unmitigated project.
Policy NR-2.7	The City shall coordinate with the Bay Area Air Quality Management District to ensure projects incorporate feasible mitigation measures to reduce GHG emissions and air pollution if not already provided for through project design.
Policy NR-2.12	The City shall give preference to contractors using reduced-emission equipment for City construction projects and contracts for services (e.g., garbage collection), as well as businesses that practice sustainable operations.
Policy NR-2.16	The City shall minimize exposure of sensitive receptors to TACs, $PM_{2.5}$, and odors to the extent possible, and consider distance, orientation, and wind direction when siting sensitive land uses in proximity to TAC- and $PM_{2.5}$-emitting sources and odor sources in order to minimize health risk.
Policy NR-2.17	The City shall coordinate with and support the efforts of the Bay Area Air Quality Management District, the California Air Resources Board, the U.S. Environmental Protection Agency, and other agencies as appropriate to implement source reduction measures and best management practices that address both existing and new sources of TACs, $PM_{2.5}$, and odors.

Impact Discussion

Information in this section is based on the Air Quality Analysis prepared for this project by Kimley Horn in March 2023.[6]

a) Conflict with or obstruct implementation of the applicable air quality plan?

No Impact. The project is exempt from the requirement to determine conformity per 40 CFR 93.126 because it is considered a railroad/highway crossing safety improvement. The project would not conflict with or obstruct implementation of the air quality plan of the area. Therefore, no impact would occur, and no mitigation is required.

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?

Less than Significant with Mitigation. The Bay Area is considered a considered a nonattainment area for ground-level O_3 and $PM_{2.5}$ under both the federal Clean Air Act and the California Clean Air Act. The area is also considered non-attainment for PM_{10} under the California Clean Air Act, but not under the federal Act. The area has attained both state and federal ambient air quality standards for CO. As part of an effort to attain and maintain ambient air quality standards for O_3, PM_{10} and $PM_{2.5}$, BAAQMD has established thresholds of significance for air pollutants. These thresholds are for O_3 precursor pollutants (ROG and NO_x), PM_{10} and $PM_{2.5}$ and apply to both construction period and operational period impacts.

As shown in Table 4-4, construction of the project would not cause exceedances for ROG, NOx, $PM_{2.5}$, and PM_{10}. The calculated emission results for ROG, NOx, $PM_{2.5}$, and PM_{10} from CalEEMod demonstrate that the construction of this project would not exceed maximum daily thresholds created by the BAAQMD. Project emissions would not worsen ambient air quality, create additional violations of federal and state standards, or delay the Basin's goal for meeting attainment standards. Construction impacts of the project would be less than significant.

Additionally, **AQ-1,** which outlines BAAQMD's "Basic Construction Mitigation Measures Recommended for All Projects" from their *Air Quality Guidelines*, would be implemented at all crossings during construction.[7]

> ***Mitigation Measure AQ-1: BAAQMD's Basic Construction Measures Recommended for All Projects***
>
> These conditions include the following: water exposed surfaces two times daily; cover haul trucks; clean track outs with wet powered vacuum street sweepers; limit speeds on unpaved roads to 15 miles per hour; complete paving as soon as possible after grading; limit idle times to 5 minutes; properly maintain mobile and other construction equipment; and post a publicly visible sign with contact information to register dust complaints and take corrective action within 48 hours.

With implementation of **Mitigation Measure AQ-1** at all crossings during construction, project emissions would not worsen ambient air quality, create additional violations of federal and state standards, or

[6] Kimley Horn. 2023. Alameda County Rail Safety Enhancement Program – Air Quality Analysis San Leandro-Hayward ISMND.

[7] BAAQMD. 2017. California Environmental Quality Act Air Quality Guidelines. Available: https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed: April 2022.

delay the Basin's goal for meeting attainment standards. Construction impacts would be less than significant with mitigation.

Table 4-4 Construction-Related Emissions

Year	Pollutant (maximum pounds per day)[1]			
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO_X)	Exhaust	
			Course Particulate Matter (PM_{10})	Fine Particulate Matter ($PM_{2.5}$)
2023	3.47	28.32	33.43	1.33
2024	4.50	37.57	52.26	2.65
BAAQMD Significance Threshold [2,3]	54	54	82	54
Exceed BAAQMD Threshold?	No	No	No	No

Source: Kimley-Horn, 2023

Notes: [1] Emissions were calculated using CalEEMod. Mitigated emissions include compliance with the BAAQMD's "Basic Construction Mitigation Measures Recommended for All Projects" from their *Air Quality Guidelines*. These measures include the following: water exposed surfaces two times daily; cover haul trucks; clean track outs with wet powered vacuum street sweepers; limit speeds on unpaved roads to 15 miles per hour; complete paving as soon as possible after grading; limit idle times to 5 minutes; properly maintain mobile and other construction equipment; and post a publicly visible sign with contact information to register dust complaints and take corrective action within 48 hours. Emission quantities in this table are the sum of all emissions generated by the construction of all eight project locations throughout Alameda County for each year.

[2] Bay Area Air Quality Management District, California Environmental Quality Act Air Quality Guidelines, updated May 2017.

[3] BMP = Best Management Practices. The BAAQMD recommends the implementation of all Basic Construction Mitigation Measures, whether or not construction-related emissions exceed applicable significance thresholds. Implementation of Basic Construction Mitigation measures are considered to mitigate fugitive dust emissions to be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant. The nearest sensitive receptors to each crossing are shown in Table 4-2, above.

Construction could result in the temporary generation of emissions during demolition, site preparation, site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Diesel-powered construction equipment for the project could include rubber-tired dozers, tractors, loaders, skid-skeer loaders, cement and mortar mixers, pavers, rollers, and graders. Construction equipment would not operate more than 12 hours daily on the weekdays and 11 hours on the weekends. This equipment would be staged within the Alameda CTC right-of-way. As discussed under threshold (b), above, construction activities would generate 1.27 lbs/day in 2022 and 1.98 lbs/day in 2023 of $PM_{2.5}$ exhaust, which would not exceed BAAQMD significance threshold. Construction activities would not result in substantial pollutant emissions or toxic air contaminants and thus no Health Risk Analysis was performed.

Construction activities would be minor and limited to the existing crossing footprints. These activities would be temporary, lasting for approximately 12 months. Furthermore, project operations would not

result in a net increase in pollutant emissions because no additional capacity would be added to any of the intersections.

Construction would result in the generation of DPM emissions from the use of off-road diesel equipment. The amount to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). Health-related risks associated with diesel-exhaust emissions are primarily linked to long-term exposure and the associated risk of contracting cancer. The use of diesel-powered construction equipment would be temporary and episodic. The proposed project includes limited demolition, earth moving, excavation and construction using heavy-duty off-road equipment. The duration of exposure would be short and exhaust from construction equipment dissipates rapidly. Current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. Therefore, construction activities are not anticipated to generate high sources of TACs which would result in cancer risk for nearby receivers.

California Office of Environmental Health Hazard Assessment has not identified short-term health effects from DPM. Construction is temporary and would be transient throughout the site (i.e., move from location to location) and would not generate emissions in a fixed location for extended periods of time. Construction would be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than 5 minutes to further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. For these reasons, DPM generated by construction activities, in and of itself, would not be expected to expose sensitive receptors to substantial amounts of air toxics and the reason no Health Risk Analysis was performed. Therefore, this impact would be less than significant, and no mitigation is required.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant. During construction activities, only short-term, temporary odors from vehicle exhaust and construction equipment engines would occur. While the existing crossings are located near residential neighborhoods, construction-related odors would disperse and would not cause substantial odors near the existing crossings. In addition, construction-related odors would be temporary and would cease upon completion of construction.

Once operational, the project is not expected to produce any offensive odors that would result in odor complaints, based on BAAQMD's guidelines for odor-generating uses and activities. Therefore, the impact would be less than significant, and no mitigation is required.

4.4 Biological Resources

	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, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
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 an established 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?	☐	☐	☐	☒

Environmental Setting

The existing crossings are dispersed along the UPRR tracks from central to southern San Leandro to the southern portion of the City of Hayward. Both the City of San Leandro and the City of Hayward are located along the eastern shoreline of the San Francisco Bay. This region has a Mediterranean climate with rains falling mostly in the winter and spring, as is the case with most of the San Francisco Bay Area. Due to the coastal location, fog and cool temperatures are common in the summer. The average annual

high temperature is approximately 76 degrees Fahrenheit (°F), and the average annual low temperature is 42°F. Average annual precipitation is approximately 18 inches.[8]

The existing crossings are all located on relatively flat ground with elevations ranging from approximately 12 to 44 feet above mean sea level. In general, the existing crossings are in or near residential areas. Notable exceptions are the Washington Avenue crossing in the City of San Leandro and the Industrial Parkway crossing in the City of Hayward, both of which are characterized by a mix of industrial and commercial uses. Additionally, the Lewelling Boulevard, Tennyson Road, and Tennyson High School crossings are all adjacent to schools (San Lorenzo High School, Cesar Chavez Middle School, and Tennyson High School, respectively).

The study area for this project is defined as the work areas at crossings and surrounding 50-foot buffers to account for indirect or temporary impacts. The project site is paved except for gravel ballast along the UPRR tracks. There are small areas of landscaped (non-native trees and annual grasses used as ornamental plantings) or ruderal vegetation. One vegetation community occurs along the perennial stream located in the Industrial Parkway crossing area and consists of a mix of upland and wetland vegetation. The dominant species observed in this community are cattails (*Typha latifolia*) and non-native annual grasses such as brome (*Bromus spp*.) and wild oats (*Avena spp.*).

No special-status plant species were observed during the field reconnaissance survey in April 2021, and no special-status plants are expected to occur within the project site. No special-status plant species have potential to occur within the project site due to the absence of suitable habitats (i.e., cismontane woodland, valley and foothill grassland, chaparral, vernal pools), the lack of suitable soils (i.e., serpentine, alkaline), and the developed and disturbed nature of the project site and immediate vicinity.

Twelve special-status wildlife species have a low or moderate potential to occur at the project site. Two federally-listed species have a low potential to occur within the study area: Central California Coast steelhead (*Oncorhynchus mykiss irideus*) and California red-legged frog (*Rana draytonii*). Tricolored blackbird (*Agelaius tricolor*) is a state threatened species that also has a low potential to occur within the study area. Four special-status wildlife species have a moderate potential to occur within the study area: Cooper's hawk (*Accipter cooperii*); pallid bat (*Antrozous pallidus*); Townsend's big-eared bat (*Corynorhinus townsendii*); and western mastiff bat (*Eumops perotis californicus*). Four additional special-status wildlife species have a low potential to occur within the biological study area: golden eagle (*Aquila chrysaetos*); burrowing owl (*Athene cunicularia*); white-tailed kite (*Elanus leucurus*); and American peregrine falcon (*Falco peregrinus anatum*). No sensitive natural communities, essential wildlife corridors, or habitat linkages exist within the biological study area.

San Lorenzo Creek is located approximately 0.08 miles south of the Lewelling Boulevard crossing and 0.01 miles south of the Industrial Parkway crossing, respectively. San Lorenzo Creek consists of an approximately 39-foot-wide engineered channel which flows into the San Francisco Bay approximately 2.6 miles west of the study area. The concrete channel is bare of any soils or vegetation, and only a small amount of water flows through in a V-shaped low flow channel running through the center.

One occurrence of the steelhead salmon, designated as federally threatened, is documented within five miles of the study area. This occurrence is recorded in Alameda Creek, to the south of the Industrial Parkway crossing site. The perennial stream at the Industrial Parkway crossing site flows to the west into Ward Creek that then ties into Alameda Creek flowing into the San Francisco Bay. Although the stream habitat at this crossing site is fairly shallow, it may provide marginally suitable aquatic habitat for

[8] Western Regional Climate Center. 2016. Hayward Air Terminal, California (043861). Available: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca3861. Accessed: September 2021.

migrating steelhead. Therefore, this species has a low potential to occur within the study area during migration.

Regulatory Setting

Federal

Clean Water Act

Section 404 of the Clean Water Act (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 United States Army Corps of Engineers (USACE) with oversight by the 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 CFR 230), and whether permit approval is in the public interest. The Section 404 (b)(1) Guidelines (Guidelines) were developed by the U.S. EPA in conjunction with the USACE, and allow the discharge of dredged or fill material into the aquatic system (Waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a "least environmentally damaging practicable alternative" to the proposed discharge that would have lesser effects on Waters of the U.S., and not have any other significant adverse environmental consequences.

Section 401 of the Clean Water Act requires that any person applying for a federal permit or license, which may result in a discharge of pollutants into waters of the United States, must obtain a state water quality certification that the activity complies with all applicable water quality standards, limitations, and restrictions. No license or permit may be issued by a federal agency until certification required by Section 401 has been granted. Further, no license or permit may be issued if certification has been denied.

Section 402 of the Clean Water Act requires that a discharge of any pollutant or combination of pollutants to surface waters that are deemed waters of the United States be regulated by a National Pollutant Discharge Elimination System (NPDES) permit. To provide coverage to discharges by water purveyors to waters of the United States in compliance with Clean Water Act section 402, the State Water Board adopted the Statewide General NPDES Permit for Drinking Water System Discharges to Waters of the United States on November 18, 2014. To get coverage under the permit, a water purveyor (community drinking water system or wholesaler) must submit an application to the State Water Board no later than September 1, 2015. Alternatively, if a water purveyor does not need coverage under the permit, it must submit a notice of non-applicability to the State Water Board also by September 1, 2015.

Federal Endangered Species Act

The U.S. Fish and Wildlife Service Endangered Species Act protects listed wildlife species from harm or "take" which is broadly defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture,

collect, or attempt to engage in any such conduct. Take can also include habitat modification or degradation that directly results in death or injury to a listed wildlife species.

Federal Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA; 16 U.S.C., §703, Supp. I, 1989) prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Migratory birds protected under this law include all native birds and certain game birds (e.g., turkeys and pheasants). The MBTA encompasses whole birds, parts of birds, and bird nests and eggs. The MBTA protects active nests from destruction and all nests of species protected by the MBTA, whether active or not, cannot be possessed. An active nest under the MBTA, as described by the Department of the Interior in its April 15, 2003, Migratory Bird Permit Memorandum, is one having eggs or young. Nest starts, prior to egg laying, are not protected from destruction. All native bird species in the city are protected under the MBTA.

State

California Endangered Species Act and California Native Plant Protection Act

The California Endangered Species Act prohibits the take of any plant or animal listed or proposed for listing as rare (plants only), threatened, or endangered (California Fish and Game Code, Chapter 1.5, Sections 2050-2116). In accordance with the California Endangered Species Act, the California Department of Fish and Wildlife (CDFW) has jurisdiction over state-listed species. The CDFW regulates activities that may result in "take" of individuals listed under the Act (i.e., "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill"). Habitat degradation or modification is not expressly included in the definition of "take" under the Fish and Game Code. The CDFW, however, has interpreted "take" to include the "killing of a member of a species which is the proximate result of habitat modification." The California Native Plant Protection Act preserves, protects, and enhances endangered and rare plants in California. It specifically prohibits the importation, take, possession, or sale of any native plant designated by the CDFW as rare or endangered, except under specific circumstances identified in the Act.

California Fish and Game Code

The California Fish and Game Code includes regulations governing the use of, or impacts to, many of the state's fish, wildlife, and sensitive habitats. The CDFW exerts jurisdiction over the bed and banks of rivers, lakes, and streams according to provisions of Sections 1601 - 1603 of the Fish and Game Code. The Fish and Game Code requires a Streambed Alteration Agreement for the fill or removal of material within the bed and banks of a watercourse or waterbody and for the removal of riparian vegetation. Provisions of these sections may apply to modifications of sensitive aquatic habitats and riparian habitats within the City.

Other regulations in the Fish and Game Code provide protection for native birds, including their nests and eggs (Sections 3503, 2513, and 3800). These regulations prohibit all forms of take, including disturbance that causes nest abandonment and/or loss of reproductive effort. Raptors (i.e., eagles, falcons, hawks, and owls) are specifically protected under Fish and Game Code Section 3503.5.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating impacts to biological resources resulting from the development within the project area. The Alameda County General Plan policies are applicable to the Lewelling Boulevard crossing location only, due to the crossing being located in unincorporated Alameda County. Additionally, after review of the San Leandro

2035 General Plan and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

Goal B	Vegetative and Wildlife Resources. To protect and enhance wildlife habitats and natural vegetation areas in Alameda County
Objective B-1	To identify areas of critical or sensitive concern for wildlife and vegetation.
Objective B-2	To maintain and, if necessary, restore deteriorative environments to a level of diversity appropriate in this area of California.
Objective B-3	*To identity the principles of resource management as criteria for resource evaluation.*

San Leandro 2035 General Plan

Policy OSC-6.1	Ecosystem Management. Promote the long-term conservation of San Leandro's remaining natural ecosystems, including wetlands, grasslands, and riparian areas. Future development should minimize the potential for adverse impacts to these ecosystems and should promote their restoration and enhancement.
Policy OSC-6.2	Mitigation of Development Impacts. Require measures to mitigate the impacts of development or public improvements on fish and wildlife habitat, plant resources, and other valuable natural resources in the city.
Policy OSC-6.4	Species of Special Concern. Ensure that local planning and development decisions do not damage the habitat of rare, endangered, and threatened species, and other species of special concern in the city and nearby areas.
Action OSC-6.4. A	Biological Assessments – Require biological assessments for developments in areas where special status species may be present. Require mitigation in accordance with state and federal regulations where potential adverse impacts exist.

Hayward 2040 General Plan

NR-1.1	Native Wildlife Habitat Protection. The City shall limit or avoid new development that encroaches into important native wildlife habitats; limits the range of listed or protected species; or creates barriers that cut off access to food, water, or shelter of listed or protected species.
NR-1.2	Sensitive Habitat Protection. The City shall protect sensitive biological resources, including state and federally designated sensitive, rare, threatened, and endangered plant, fish, and wildlife species and their habitats from urban development and incompatible land uses.
NR-1.3	Sensitive Species Identification, Mapping, and Avoidance. The City shall require qualified biologists to identify, map, and make

	recommendations for avoiding all sensitive biological resources on the project site, including state and federally sensitive, rare, threatened, and endangered plant, fish, and wildlife species and their habitats using methods and protocols in accordance with the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and California Native Plant Society for all development applications proposed within sensitive biological resource areas.
NR-1.9	Native Plant Species Protection and Promotion. The City shall protect and promote native plant species in natural areas as well as in public landscaping.

Impact Discussion

Information in this section is based on the Biological Resources Assessment prepared for this project by Rincon Consultants in April 2022.[9]

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, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less than Significant with Mitigation. A Biological Resources Assessment for the project was conducted in April 2022. Due to the highly developed nature of the project site and surrounding area, as well as lack of suitable habitat for special-status species, no special-status plant species are expected to occur within any of the crossings. Due to the low likelihood of occurrence, the potential for impacts to special-status plant species is extremely low to none. As such, this analysis assumes no Impact to special-status plant species and will not be addressed further.

No federally protected wildlife species have potential to occur in the project area. However, four special-status wildlife species have moderate potential to occur within the study area.

Cooper's hawk is a special-status raptor species with a moderate potential to forage, fly over, or nest within the study area. Should this species be present on-site during construction, direct effects could include injury or mortality from construction activity, or nest abandonment from construction noise, dust, and other project activities. These impacts would be considered potentially significant, but mitigable. Due to the relatively small size and previously developed nature of the existing crossings, it is unlikely that project activities would result in a significant impact to foraging habitat for Cooper's hawk. **Mitigation Measure BIO-1** would be applied at all crossings and would require a Worker Environmental Awareness Program (WEAP) to educate construction personnel in recognizing special-status species within the study area. Additionally, **Mitigation Measure BIO-2** includes recommendations for reducing potential impacts to raptors nesting within the vicinity of all the existing crossings to less than significant.

Special-status bats such as pallid bat, Townsend's big-eared bat, and western mastiff bat are state species of special concern and have potential to occur within the study area. Disturbance of maternity roosts from construction activities, resulting in roost destruction or abandonment, would be a potentially significant impact to bat species and would be violations of the California Fish and Game Code (CFGC). Adverse effects on special-status bats would be a potentially significant impact under CEQA. **Mitigation Measure BIO-1** would be applied at all crossings and would require a WEAP to

[9] Rincon Consultants, Inc. 2022. Alameda County Transportation Commission Rail Safety Enhancement Program – San Leandro, Hayward, and Alameda County Biological Resources Assessment.

educate construction personnel in recognizing special-status species within the study area. Additionally, **Mitigation Measure BIO-3** provides recommendations for reducing potential impacts to roosting bats within the vicinity of all the existing crossings to less than significant.

Nesting special-status bird species and/or nesting birds protected under the MBTA and CFGC have potential to occur throughout the study area during the nesting season (February 1 to September 15). Should nesting birds be present within the existing crossings during construction, direct impacts could include the destruction of nests or the disturbance of nesting behavior. Indirect impacts to nesting birds could include the destruction or disturbance of nesting habitat. **Mitigation Measure BIO-2** provides recommendations for reducing impacts to nesting birds at all crossings to less than significant.

Mitigation Measure BIO-1: Worker Environmental Awareness Program (WEAP)

Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction should attend a WEAP training, conducted by a qualified biologist, to aid workers in recognizing special-status species, native birds and other biological resources that may occur in the construction area. The specifics of this program should include identification and habitats of special-status species with potential to occur at the existing crossings, a description of the regulatory status and general ecological characteristics of sensitive resources, a review of the limits of construction, and an explanation of the mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information should also be prepared for distribution to all contractors, their employers, and other personnel involved with construction. All employees should sign a form provided by the trainer indicating they have attended the WEAP and understand the information presented to them.

Mitigation Measure BIO-2: Pre-Construction Survey for Raptors and Nesting Birds

Ground disturbance and vegetation removal activities should be restricted to the non-breeding season (September 16 to January 31) when feasible. If construction activities occur during the nesting bird season (February 1 to September 15), the following mitigation measures are recommended to reduce impacts to nesting special-status avian species, and other nesting birds protected by CFGC and the MBTA:

- A preconstruction nesting bird survey should be conducted by a qualified biologist no more than 14 days prior to initiation of ground disturbance and vegetation removal. The survey should be conducted by a biologist familiar with the identification of avian species known to occur in the region and should focus on trees, human-made structures, and vegetated areas.
- If nests are found, an appropriate avoidance buffer will be determined and demarcated by the qualified biologist with high visibility material. Avoidance buffers of up to 500 feet should be established based on the nest location in relation to project activity, the line-of-sight from the nest to the project activity and observed behavior at the nest.
- All construction personnel should be notified as to the existence of the buffer zones and to avoid entering buffer zones during the nesting season. No ground disturbing activities should occur within the buffer until the qualified biologist has confirmed that breeding/nesting is complete, and the young have fledged the nest. Encroachment into the buffer should occur only at the discretion of the qualified biologist.

Mitigation Measure BIO-3: Roosting Bats Avoidance and Minimization Measures

If construction requires removal of trees, a qualified biologist shall conduct a focused survey of all trees to be removed or impacted by construction activities to determine whether active roosts of special-status bats are present on site. If tree removal is planned for the fall, the survey shall be conducted in September to ensure tree removal will have adequate time to occur during seasonal periods of bat activity (March 1 to April 15, September 1 to October 15, or when evening temperatures rise above 45 degrees Fahrenheit and/or no more than 0.5 inch of rainfall within 24 hours occurs, as described below). If tree removal is planned for the spring, then the survey shall be conducted during the earliest possible time in March, to allow for suitable conditions for both the detection of bats and subsequent tree removal. Trees containing suitable potential bat roost habitat features shall be clearly marked or identified. If day roosts are found to be potentially present, the biologist shall prepare a site-specific roosting bat protection plan to be implemented by the contractor following the Alameda County Transit Commission's approval. The plan shall incorporate the following guidance as appropriate:

- When possible, removal of trees identified as suitable roosting habitat should be conducted during seasonal periods of bat activity, including the following:
    - Between September 1 and about October 15, or before evening temperatures fall below 45 degrees Fahrenheit and/or more than 0.5 inch of rainfall within 24 hours occurs.
    - Between March 1 and April 15, or after evening temperatures rise above 45 degrees Fahrenheit and/or no more than 0.5 inch of rainfall within 24 hours occurs.
- If a tree must be removed during the breeding season and is identified as potentially containing a colonial maternity roost, then a qualified biologist shall conduct acoustic emergence surveys or implement other appropriate methods to further evaluate if the roost is an active maternity roost. Under the biologist's guidance, the contractor shall implement measures similar to or better than the following:
    - If it is determined that the roost is not an active maternity roost, then the roost may be removed in accordance with the other requirements of this measure.
    - If it is found that an active maternity roost of a colonial roosting species is present, the roost shall not be disturbed during the breeding season (April 15 to August 31).
- Potential non-colonial hibernation roosts shall only be removed during seasonal periods of bat activity. Potential non-colonial roosts that cannot be avoided shall be removed on warm days in late morning to afternoon when any bats present are likely to be warm and able to fly. Appropriate methods shall be used to minimize the potential harm to bats during tree removal. Such methods may include using a two-step tree removal process. This method is conducted over two consecutive days and works by creating noise and vibration by cutting non-habitat branches and limbs from habitat trees using chainsaws only (no excavators or other heavy machinery) on day one. The noise and vibration disturbance, together with the visible alteration of the tree, is very effective in causing bats that emerge nightly to feed to not return to the roost that night. The remainder of the tree is removed on day two.

With implementation of **Mitigation Measure BIO-1, Mitigation Measure BIO-2,** and **Mitigation Measure BIO-3** at all crossings, this impact would be less than significant with mitigation.

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 Game or U.S. Fish and Wildlife Service?

No Impact. No sensitive natural communities, riparian habitat, or federally designated critical habitats are present within the study area. Therefore, no impacts would occur, and no mitigation is required.

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?

Less than Significant with Mitigation. San Lorenzo Creek and Ward Creek are the closest aquatic features to the project site, located approximately 0.08 miles south of the Lewelling Boulevard crossing and 0.01 miles south of the Industrial Parkway crossing, respectively. San Lorenzo Creek has hydrologic connectivity to the San Francisco Bay and contains defined bed and banks. There is an emergent wetland located along Ward Creek located within the Industrial Parkway crossing study area. Additionally, a drainage ditch runs parallel to the UPRR tracks within the Tennyson Road crossing study area and flows into a culverted storm drain system under Tennyson Road. However, there are no watercourses, seasonal wetlands, or other potential waters of the United States on the project site.

Construction activities on Lewelling Boulevard would include the installation of new roadway striping/pavement marking, security access gates/fencing, "No Trespassing" signs, and a new pedestrian path. No grading or excavation would be required, and no in-channel work would occur in San Lorenzo Creek. Similarly, no construction activities at the Industrial Parkway crossing would occur in Ward Creek or the associated emergent wetland. Therefore, the project would not result in direct removal, filling, hydrological interruption, or other direct impacts to San Lorenzo Creek or Ward Creek. No regulatory permits from USACE, Regional Water Quality Control Board (RWQCB) and/or CDFW would be required.

Indirect impacts from project activities could occur if sediment or pollutants were allowed to enter nearby waterways. Implementation of recommendations in **Mitigation Measure BIO-4** and the stormwater pollution prevention plan (SWPPP) would prevent potential impacts to San Lorenzo Creek and Ward Creek and its wetlands from the construction of planned safety improvements adjacent to the channels.

> ***Mitigation Measure BIO-4: Steelhead Habitat Protection and Wetland Best Management Practices***
>
> BMPs shall be implemented during all construction activities that take place in or adjacent to the drainage ditches, freshwater emergent wetland, perennial stream or channel at Lewelling Boulevard, Industrial Parkway crossing or Tennyson Road crossing locations to prevent erosion and sedimentation into the stream and to prevent the spill of contaminants in or around the stream.
>
> At minimum, the following BMPs will be implemented on-site during construction to prevent any indirect impacts to waters and wetlands:
>
> - Vehicles and equipment should be checked at least daily for leaks and maintained in good working order. Spill kits should be available on-site at all times and a spill response plan should be developed and implemented.

Sediment and erosion control measures (e.g., sand or gravel bags, hay bales, check dams) should be implemented and maintained throughout the existing crossings to prevent the entry of sediment and/or pollutants into any waterways or jurisdictional areas. No monofilament plastic (i.e., sheets of single

plastic threads woven together, which can easily fray and result in microplastic pollution) will be used for erosion control.
With implementation of **Mitigation Measure BIO-4** at the Lewelling Boulevard, Industrial Parkway, and Tennyson Road crossings, indirect impacts to wetlands would be less than significant.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. The existing crossings are in a developed urban area at the crossings of an active railway and paved city streets. There are no Natural Landscape Blocks or Essential Connectivity Areas mapped within the study area. Wildlife movement within the study area and surrounding land has long been disrupted by train and vehicular traffic, and wildlife would not be prevented from moving around the area of project disturbance. The project would not substantially alter existing wildlife movement or interfere with established resident or migratory wildlife corridors. Therefore, this impact would be less than significant, and no mitigation is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less than Significant with Mitigation. Project activities are subject to the Alameda County General Plan, the San Leandro 2035 General Plan, and the Hayward 2040 General Plan, as well as the Alameda County Municipal Code, the City of San Leandro Municipal Code and the Hayward Municipal Code.

The Alameda County General Plan, Conservation Element establishes a goal of protecting and enhancing wildlife habitats and natural vegetation areas in the County. This includes the objectives of identifying areas of sensitive concern and maintaining a level of diversity appropriate to this area. The San Leandro 2035 General Plan and Hayward 2040 General Plan both include policies to protect sensitive habitats and special-status species through identification, mapping, and avoidance (San Leandro Policy OSC-6.4 and Hayward Policies NR-1.2, -1.3). Additionally, the San Leandro 2035 General Plan includes Action OSC-6.4.A, requiring biological assessments for development in areas where special-status species may be present. The BRA conducted for this project in June 2021 serves as the environmental analysis to identify sensitive habitats and special-status species that would satisfy these General Plan objectives and policies.

Both Alameda County and the City of San Leandro Municipal Codes require the removal or alteration of street trees be approved by the Director of Public Works. The City of Hayward Municipal Code requires a permit for the removal or alteration of Protected Trees within the city. The project would involve safety improvements to existing railroad crossings and trespass areas, and tree removal or trimming is not currently planned. However, should street tree removal or trimming be necessary at the existing crossings in unincorporated Alameda County or the City of San Leandro, the project applicant would be required to obtain the approval of the Director of Public Works in compliance with Alameda County Municipal Code Chapter 12.11 and City of San Leandro Chapter 5-2, respectively. If tree removal or trimming is found necessary in the City of Hayward, the project applicant would be required to obtain a tree permit from the City's landscape architect pursuant to City of Hayward Municipal Code Chapter 10, Article 15.

With adherence to these General Plan and Municipal Code requirements, project activities would not conflict with any local policies or ordinances protecting biological resources. Additionally, **Mitigation Measure BIO-4** includes recommendations for reducing any potential indirect impacts to waters and wetlands at the Lewelling Boulevard and Industrial Parkway crossings. Therefore, with incorporation of **Mitigation Measure BIO-4**, potential impacts would be less than significant.

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?

No Impact. The existing crossings are not within any applicable Habitat Conservation Plan or Natural Conservation Community Plan areas. Therefore, the project would not conflict with any adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur, and no mitigation is required.

4.5 Cultural Resources

	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 as defined in Section 15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

Environmental Setting

Important historical buildings and sites throughout the City of San Leandro, Alameda County, and City of Hayward have been recognized and designated as landmarks by the Landmarks Preservation Commission. Structures such as historical buildings and small house structures are present throughout.

A search of the California Historical Resources Information System (CHRIS) was requested at the Northwest Information Center (NWIC) at Sonoma State University. The records search was intended to identify previously recorded cultural resources, as well as previously conducted cultural resource studies within the project site and a 0.25-mile radius. The records search also included a review of the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), the Office of Historic Preservation Historic Properties Directory, the California Built Environment Resources Directory, and the Archaeological Determinations of Eligibility list. The NWIC records search was completed on May 21, 2021, by NWIC staff. The records search did not identify any previously recorded cultural resources within the project site. Within the 0.25-mile radius, the records search identified ten previously recorded cultural resources, all of which were outside of the project site.

The Area of Potential Effects (APE) for a project is defined in 36 CFR 800.16(d) as the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such property exists." The APE will be developed in compliance with the Section 106 of the National Historic Preservation Act. The APE of the project is confined to the boundaries of the existing railroad intersections of the project site.

Regulatory Setting

Federal

National Register of Historic Places

The National Register of Historic Places has specific criteria for evaluating the eligibility of historic resources. The criteria apply to the quality of significance in American history, architecture, archaeology, engineering, and culture as present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that: (a) are associated with events that have made a significant contribution to the broad patterns of our history; or

(b) that are associated with the lives of persons significant in our past; or (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or (d) that have yielded or may be likely to yield information important in history or prehistory.

State

California Public Resources Code

Archaeological, paleontological, and historical sites are protected by a wide variety of policies and regulations under the California PRC. Under the PRC, the State Historical Resources Commission is responsible for oversight of the CRHR and designation of State Historical Landmarks and Historical Points of Interest. Key provisions of the PRC that provide protection to cultural and paleontological resources are outlined below.

- California PRC Sections 5097.9–5097.991 protects Native American historical and cultural resources and sacred sites and identifies the powers and duties of the Native American Heritage Commission (NAHC). It also requires notification of discoveries of Native American human remains and provides for treatment and disposition of human remains and associated grave goods.
- California PRC Sections 5097.98 provides that in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation until the coroner has determined that the remains are not subject to provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the NAHC.
- California PRC Section 5097.5 prohibits “knowing and willful” excavation, removal, destruction, injury, and defacement of any paleontological feature on public lands (lands under state, county, city, district, or public authority jurisdiction, or the jurisdiction of a public corporation), except where the agency with jurisdiction has granted permission.

Health and Safety Code Section 7052 and 7050.5

Section 7052 of the Health and Safety Code states that the disturbance of Native American cemeteries is a felony. Section 7050.5 requires that construction or excavation be stopped in the vicinity of discovered human remains until the County coroner can determine whether the remains are those of a Native American. If determined to be Native American, the coroner must contact the NAHC.

State Historic Resources Inventory

The California Register of Historical Resources, enacted in 1992, is an authoritative guide to be used to identify the state's historical resources. The California Register program encourages public recognition of resources of architectural, historical, archaeological and cultural significance; identifies historical resources for state and local planning purposes; and defines threshold eligibility for state historic preservation grant funding.

13 CFR, Title 36, Part 60. By law, properties may be added to the California Register in two ways. At this time, the California Register consists of resources that are listed automatically by status through the California Register enabling legislation (AB 2881). The California Register includes properties listed in, or formally determined eligible for, the National Register, and selected California Registered Historical Landmarks. Formal Guidelines and Procedures for the direct nomination of properties must be adopted by the State Historical Resources Commission before other resources can be added. As an informational resource, the State Historic Preservation Office (SHPO) also maintains the Directory of Properties in the Historic Property Data File. This inventory is considered the most comprehensive list of historic properties for the State of California currently in existence.

This state survey produced a representative rather than a comprehensive inventory. The scope and reliability of the data within the listing varies depending upon the availability of information. Many properties exist which have been locally designated as City Landmarks or "Architecturally Significant" buildings that are not within the Historic Property Data File maintained by SHPO. The information contained in the SHPO directory indicates whether a property is listed in the National Register or is determined eligible for listing in the National Register or through another federal agency. In addition, the SHPO must be consulted on any federally-assisted project which involves any building 50 years of age or older.

California Environmental Quality Act

Historical Resources

The CEQA Guidelines define a significant resource as any resource listed in or determined to be eligible for listing in the CRHR [see PRC, Section 21084.1 and CEQA Guidelines Section 15064.5 (a) and (b)]. The California Register includes resources listed in or formally determined eligible for listing in the NRHP, as well as some California State Landmarks and Points of Historical Interest. The criteria are nearly identical to those of the NRHP, which includes resources of local, state, and region or national levels of significance. In general, the California Register defines historical resources as any object, building, structure, site, area, place, record, or manuscript that is historically or archaeologically significant; or is significant in the architectural, engineering, scientific, economic, agricultural educational, social, political, or cultural annals of California; and meets the criteria for listing on the California Register including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

Archeological Resources

CEQA also requires lead agencies to consider whether projects will affect "unique archaeological resources" (PRC, Section 21083.2(g)) which are defined as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Treatment options for unique archaeological resources include preservation in place in an undisturbed state; excavation and curation or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more of the criteria for defining a "unique archaeological resource").

Paleontological Resources

Treatment of paleontological resources under CEQA is generally similar to treatment of cultural resources, requiring evaluation of resources in a project's area of potential affect, assessment of potential impacts on significant or unique resources, and development of mitigation measures for potentially significant impacts, which may include monitoring combined with data recovery and/or avoidance.

Native American Burials

California law protects Native American burials, skeletal remains, and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains (Section 7050.5(b) of the California Health and Safety Code). CEQA Guidelines Section 15064.5(e) requires that excavation activities be stopped whenever human remains are uncovered, and that the county coroner or medical examiner be contacted to assess the remains. If the county coroner or medical examiner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. The property owner is required to consult with the appropriate Native Americans identified by the NAHC as a "most likely descendant" to develop an agreement for the treatment and disposition of the remains.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating impacts to cultural resources resulting from development within the project area. After review of the San Leandro 2035 General Plan, and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

The Alameda County General Plan does not have applicable policies regarding cultural resources.

San Leandro 2035 General Plan

Goal CD-1	Identify, preserve, and maintain San Leandro's historic resources and recognize these resources as an essential part of the City's character and heritage.
Policy CD-1.1	Broad Approach to Preservation. Take a broad and comprehensive approach to historic preservation in San Leandro. Preservation efforts should recognize the City's cultural history as well as its architectural history, its neighborhoods as well as individual buildings, its natural landscape as well as its built environment, and its archaeology as well as its living history.

Policy CD-1.5	Historic Neighborhoods. Promote the conservation of historic neighborhoods and the restoration of historic features in such neighborhoods, including structures, streetlamps, signage, landscaping, and architectural elements.
Policy CD-1.7	Protecting Resource Integrity. Ensure that new development, alterations, and remodeling projects on or adjacent to historic properties are sensitive to historic resources and are compatible with the surrounding historic context. Ensure that the San Leandro Zoning Ordinance and any future design guidelines include the necessary standards and guidelines to implement this policy.
Policy CD-1.12	Archaeological Resources. Recognize the potential for paleontological, prehistoric, historic, archaeological, and tribal cultural resources and ensure that future development takes the measures necessary to identify and preserve such resources.
Policy CD-3.7	Cultural Inclusiveness. Ensure that San Leandro's historic preservation efforts are culturally inclusive and recognize the contributions of the City's many racial and ethnic groups to its development. Programs that trace the roots and celebrate the history of different ethnic groups should be strongly encouraged, along with outreach to minorities, youth and under-represented groups.

Hayward 2040 General Plan

Goal LU-8	Preserve Hayward's historic districts and resources to maintain a unique sense of place and to promote an understanding of the regional and community history.
LU-8.3	The City shall maintain and implement its Historic Preservation Ordinance to safeguard the heritage of the city and to preserve historic resources.
LU-8.13	The City shall consider historical and cultural resources when developing planning studies and documents.
LU-8.14	The City shall prohibit the demolition of historic resources unless one of the following findings can be made: The rehabilitation and reuse of the resource is not structurally or economically feasible, the demolition is necessary to protect the health, safety, and welfare of the public, the public benefits of demolition outweigh the loss of the historic resource.

Impact Discussion

Information in this section is based on the Cultural Resources Study prepared for this project by Rincon Consultants in July 2021.[10]

a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?

Less than Significant. As described in the Cultural Resources Study prepared for the proposed project, a pedestrian field survey was conducted for the project between June 1, 2021 and June 3, 2021. The survey consisted of inspecting areas of exposed ground for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Historic rail lines were observed in each location.

Although the Southern Pacific Railroad (SPRR) was not recorded or evaluated for the CRHR, there is limited potential for the SPRR to be materially impaired regardless of its potential historical resources eligibility as defined in Section 15064.5 of the CEQA Guidelines. The alignment and tracks will not be altered by current proposed project activities and the proposed safety improvements are generally consistent with the existing conditions of the railway crossings. Therefore, this impact would be less than significant, and no mitigation is required.

b) Cause a substantial adverse change in the significance of an archaeological resource, pursuant to Section 15064.5?

Less than Significant with Mitigation. Site conditions and previous land uses indicate that the existing crossings have been extensively disturbed by extant rail lines and utilities associated with the surrounding development. While impacts to archaeological resources within the project site is unlikely, the potential occurrence of cultural resources cannot be entirely discounted. Therefore, the project would incorporate the following BMPs in the event of an unanticipated discovery of archaeological resources. The project is also required to adhere to state regulations regarding the discover of human remains, detailed below.

> ***Mitigation Measure CUL-1: Unanticipated Discovery if Archaeological Resources***
>
> If archaeological resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources.

With implementation of **Mitigation Measure CUL-1** at all crossings, potential subsurface cultural resources would be properly recovered and other direct and indirect impacts from construction would be limited. Therefore, project impacts would be less than significant with mitigation.

[10] Rincon Consultants, Inc. 2021. Cultural Resources Study, Alameda County Transportation Commission Rail Safety Enhancement Program: San Leandro and Hayward, Alameda County, California.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less than Significant with Mitigation. In the event that human remains are discovered during construction, the project applicant would comply with the California Health and Safety Code Section 7050.5 regarding human remains, and the PRC Section 5097.98 regarding the treatment of Native American human remains. Therefore, the project would incorporate the following BMPs in the event of an unanticipated discovery of human remains. The project is also required to adhere to state regulations regarding the discovery of human remains, detailed below.

Mitigation Measure CUL-2: Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the Alameda County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify a Most Likely Descendant. The Most Likely Descendant shall complete the inspection of the site and provide recommendations for treatment to the landowner within 48 hours of being granted access.

With implementation of **Mitigation Measure CUL-2** at all crossings, potential disturbance of human remains would be properly recovered and other direct and indirect impacts from construction would be limited. Therefore, project impacts would be less than significant with mitigation.

4.6 Energy

	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?	☐	☐	☒	☐

Environmental Setting

California is one of the lowest per capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate. California consumed 277,704 gigawatt-hours of electricity and approximately 12,800 therms of natural gas in 2018 (California Energy Commission [CEC] 2020). Most of California's electricity is generated in-state with approximately 30 percent imported from the northwest and southwest in 2017. In addition, approximately 34 percent of California's electricity supply comes from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass.

To reduce statewide vehicle emissions, California requires that all motorists use California Reformulated Gasoline, which is sourced almost exclusively from in-state refineries. Gasoline is the most used transportation fuel in California and is used by light-duty cars, pickup trucks, and sport utility vehicles. Diesel is the second most-used fuel in California and is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles. Both gasoline and diesel are primarily petroleum-based, and their consumption releases GHG emissions, including CO_2 and N_2O.

Regulatory Setting

State

The 100 Percent Clean Energy Act of 2018 (Senate Bill 100)

SB 100 sets a 2045 goal of powering all retail electricity sold in California and state agency electricity needs with renewable and zero-carbon resources — those such as solar and wind energy that do not emit climate-altering greenhouse gases. SB 100 also requires updates the state's Renewables Portfolio Standard to ensure that by 2030 at least 60 percent of California's electricity is renewable. Additionally, SB 100 requires the Energy Commission, Public Utilities Commission and Air Resources Board to use programs under existing laws to achieve 100 percent clean electricity and issue a joint policy report on SB 100 by 2021 and every four years thereafter.

Building Energy Efficiency Standards - Title 24

The Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6 of the California Code of Regulations (Title 24), was established in 1978 in response to a legislative mandate to reduce California's energy consumption. Title 24 is updated approximately every three years.[11] Compliance with Title 24 is mandatory at the time new building permits are issued by city and county governments.

Executive Order B-55-18 To Achieve Carbon Neutrality

In September 2018, Governor Brown issued an executive order, EO-B-55-18 To Achieve Carbon Neutrality, setting a statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." The executive order requires CARB to "ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal." EO-B-55-18 supplements EO S-3-05 by requiring not only emissions reductions, but also that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_2 from the atmosphere through sequestration.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating impacts resulting from energy deficiencies. The Alameda County General Plan policies are applicable to the Lewelling Boulevard crossing location only, due to the crossing being located in unincorporated Alameda County. Additionally, review of the San Leandro 2035 General Plan and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

Objective E4	To investigate and implement measures to conserve energy.

Alameda County Community Climate Action Plan

Various policies in the Alameda County (Unincorporated Areas) Community Climate Action Plan element of the Alameda County General Plan, approved on February 4, 2014, have been adopted for avoiding or mitigating energy impacts resulting from project development within the County.[12] All future development allowed by the proposed land use designations would be subject to the policies listed in the General Plan, including the following:

Measure T-8	Conduct a public transit study and implement ridership enhancement program.
Measure E-1	Work with PG&E and Alameda County cities to accelerate smart grid integration in the community.

[11] California Energy Commission. 2022. Building Energy Efficiency Standards - Title 24. Available: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards. Accessed February 2023.
[12] Alameda County. 2014. Alameda County General Plan, 2014. Available:https://www.acgov.org/cda/planning/generalplans/index.htm. Accessed: August 2021.

San Leandro 2035 General Plan

Policy EH-3.4	Require new development to be designed and constructed in a way that reduces the potential for future air quality problems, such as odors and the emission of any and all air pollutants. This should be done by: (c) Encouraging energy conservation and low-polluting energy sources

Hayward 2040 General Plan

Policy NR-4.3	The City shall encourage construction and building development practices that maximize the use of renewable resources and minimize the use of non-renewable resources throughout the life-cycle of a structure.
Policy NR-4.4	The City shall continue to require all public facilities and services to incorporate energy and resource conservation standards and practices.
Policy NR-4.5	When soliciting and awarding public contracts, professional service agreements, or grants to businesses or non-profit agencies, the City shall require, as appropriate, proposals or applications to include information about the sustainability practices of the organization.

Impact Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

Less than Significant. Project construction would require energy resources primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Temporary power may also be provided for construction trailers and electric construction equipment.

Electrical power would be required to construct the project and would be supplied from existing electrical infrastructure in the area. Construction activities would require minimal electricity consumption and would not be expected to have any adverse impact on available electricity supplies or infrastructure. Therefore, energy consumption during project construction would be negligible compared to the overall consumption of electricity in Alameda County or California.

Energy use during construction would be temporary, and construction equipment used would be typical of similar-sized construction projects in the region. Therefore, impacts related to the wasteful, inefficient, or unnecessary consumption of energy would be less than significant, and no mitigation is required.

Operation

Less than Significant. Energy demand from project operation would include electricity consumed by crossing arms but would not otherwise require energy. Electricity would be provided by Pacific Gas and Electric and East Bay Community Energy. East Bay Community Energy supplies renewable energy, which would reduce the amount of nonrenewable fuels consumed to supply electricity to the project site. The project would operate at energy levels similar to existing energy usage. Therefore, the project's impact on energy consumption would be less than significant, and no mitigation is required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant. SB 100 mandates 100 percent clean electricity for California by 2045. Because the project would be powered by the existing electricity grid, the project would eventually be powered by renewable energy and would not conflict with this statewide plan. Furthermore, the project would comply with all applicable Title 24 requirements pertaining to energy efficiency and renewable energy.

As discussed in the regulatory setting, various Climate Action Plans sets goals and policies related to renewable energy and energy efficiency. The project is consistent with these goals and policies. Therefore, the project would not conflict with renewable energy and energy efficiency plans because the Project's construction and intended operation's energy use will be minimal. The main source of energy used at the project sites will be the energy efficient Light-emitting diode (LED) railroad crossing lights. The Department of Energy states that LED is the most energy-efficient lighting technology and last longer, about 3 to 5 times longer than a Compact Fluorescent Light bulb and 30 times longer than an incandescent bulb, are more durable, and offer better light quality than other types of lighting. With the site adhering to renewable energy and energy efficiency plans, the impacts would be less than significant, and no mitigation is required.

4.7 Geology and Soils

	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 18-1b of the Uniform Building Code (1994), creating substantial 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 wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Environmental Setting

The existing crossings have a flat topography and no known active faults cross any of the existing crossings. All existing crossings are located within the Liquefaction Seismic Hazard Zone[13]. The existing crossings are not within an Earthquake Fault Zone as delineated by the Alquist-Priolo Earthquake Fault Zoning Act. Nearby active faults that are capable of generating ground shaking at the project site include Calaveras Fault (5.3 miles), Hayward Fault (6.8 miles), San Andreas (14.9 miles), Greenville Fault (19.3 miles), and Mount Diablo Fault (26.1 miles).

The closest earthquake fault zone to the project is the Hayward Fault, which is located to the east of all crossings. Below is the approximate distance from the fault to the existing crossing:

- Marina Boulevard crossing: Approximately 3.9 miles
- Washington Avenue crossing: Approximately 1.1 miles
- Hesperian Boulevard crossing: Approximately 1.0 miles
- Lewelling Boulevard crossing: Approximately 1.6 miles
- Tennyson High School pedestrian crossing: Approximately 0.8 miles
- Leidig Court crossing: Approximately 0.8 miles
- Tennyson Road crossing: Approximately 0.8 miles
- Industrial Parkway West crossing: Approximately 0.8 miles

Regulatory Setting

State

Alquist-Priolo Earthquake Zoning Act

The Alquist-Priolo Earthquake Zoning Act (1972) and the Seismic Mapping Act (1990) direct the state Geologist to delineate regulatory zones to prevent the construction of buildings used for human occupancy on the surface trace of active faults.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating geological impacts resulting from planned development within the project area. The Alameda County General Plan policies are applicable to the Lewelling Boulevard crossing location only, due to the crossing being located in unincorporated Alameda County. Additionally, review of the San Leandro 2035 General Plan, and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

Safety Element

Goal 6	Prepare and keep current County emergency procedures in the event of potential natural or man-made disaster.

[13] California Department of Conservation. California Earthquake Sones of Required investigation. Available: https://maps.conservation.ca.gov /cgs/EQZApp/app/. Accessed: May 2021.

Policy 1	The County shall coordinate its efforts with other local jurisdictions for hazard and disaster response planning and to minimize risks associated with man-made and environmental hazards.
Policy 2	Adequate emergency water flow, emergency vehicle access and evacuation routes shall be incorporated into any new development prior to project approval.

San Leandro 2035 General Plan

Goal EH-1	Reduce the potential for injury, property damage, and loss of life resulting from earthquakes, landslides, floods, and other natural disasters.
Policy EH-1	Minimize risks from geologic, seismic, flood, and climate change-related hazards by ensuring the appropriate location, site planning, and design of new development. The City's development review process, and its engineering and building standards, should ensure that new construction is designed to minimize the potential for damage.
Policy EH-1.2	Strongly encourage the retrofitting of existing structures to withstand earthquake ground shaking and require retrofitting when such structures are substantially rehabilitated or remodeled.
Policy EH-1.6	Implement federal requirements relating to new construction in flood plain areas to ensure that future flood risks to life and property are minimized.

Hayward 2040 General Plan

Goal HAZ-2	Protect life and minimize property damage from potential seismic and geologic hazards.
Policy HAZ-2.1	The City shall enforce the seismic safety provisions of the Code and Alquist-Priolo Special Studies Zone Act to minimize earthquake-related hazards in new construction, particularly as they relate to high occupancy structures or buildings taller than 50 feet in height.
Policy HAZ-2.2	The City shall require a geologic investigation for new construction on sites within (or partially within) the following zones: Fault Zone, Liquefaction Zone, Landslide Zone
Policy HAZ-2.3	The City shall assume that all sites within (or partially within) any fault zone are underlain by an active fault trace until a geotechnical investigation by a licensed geotechnical engineer proves otherwise.

Impact Discussion

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.

No Impact. The closest fault to the project site is the Hayward Fault (located approximately 0.8 to 3.6 miles east of all crossings). The site is not within a currently established State of California Earthquake Fault Zone or Earthquake Fault Zone as delineated by the Alquist-Priolo Earthquake Fault Zoning Act. No active or potentially active faults are known to pass directly under any of the existing crossings. Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design life of project is low. Due to the distances of faults from the project site, and the absence of known faults within or near the project site, implementation of the project would not expose people or buildings to known risks of fault rupture. Given this, there would be no impact, and no mitigation is required.

ii. Strong seismic ground shaking?

Less than Significant. Earthquakes along several nearby active faults in the region could cause moderate to strong ground shaking at the project site. The intensity of the earthquake ground motions, and the damage done by shaking would depend on the characteristics of the generating fault, distance to the fault and rupture zone, earthquake magnitude, earthquake duration, and site-specific geologic conditions. Given that the entire San Francisco Bay Area region is subject to strong seismic ground shaking during a large earthquake event, the project would not expose people or structures to any greater risks involving seismic ground shaking than would other development located in the region. Because the project does not involve habitable structures and is limited to minor safety improvements at the three existing crossings, no additional risk from ground shaking would occur. Therefore, impacts related to seismic ground shaking would be less than significant, and no mitigation is required.

iii. Seismic-related ground failure, including liquefaction?

Less than Significant. Soil liquefaction is a condition where saturated granular soils near the ground surface undergo a significant loss of strength during seismic events. Loose, water-saturated soils are transformed from a solid to a liquid state during ground shaking. Liquefaction can result in significant deformations and ground rupture. Soils most susceptible to liquefaction are loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface.

Each of the existing crossings are in a state-designated Liquefaction Hazard Zone. The likely consequence of potential liquefaction at the site would be settlement. However, the limited scope of the safety improvements at the existing crossings would not change any risk from liquefaction or settlement. No structures are proposed. Therefore, impacts related to liquefaction would be less than significant, and no mitigation is required.

iv. Landslides?

No Impact. Each of the existing crossing locations and surrounding area is relatively flat and do not have any steep slopes or hillsides that would be susceptible to landslides. Improvements proposed as part of the project do not include substantial mounding of earth or other substantive changes to grade that would create slope instability hazards. The project would not, therefore, be exposed to landslide-related hazards. No impact would occur, and no mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

Less than Significant. Project construction would involve ground disturbing activities that would temporarily expose soils and increase the potential for soil erosion from wind or stormwater runoff. The project would be subject to the requirements of Alameda County Stormwater Quality BMPs and would be required to comply with various BMPs set out by City of San Leandro and City of Hayward to erosion and sedimentation control during the construction period. Impacts related to erosion and loss of topsoil would be less than significant, and no mitigation is required.

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?

Less than Significant. As discussed in Section 4.7, Geology and Soils, a.ii and a.iii, liquefaction and landslide risk at the project site are very low. Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open face, such as the steep bank of a stream channel. Large scale lateral spreading is considered unlikely because the project site is relatively flat and the probability for liquefaction at the site is considered low, as discussed above.

Subsidence is the settlement of organic soils and/or saturated mineral soils of low-density following drainage. Soils susceptible to lateral spreading, sloughing, or caving pose a risk to human health and structures when located near a steep or vertical slope (e.g., basement foundation). Settlement is a common concern for new buildings because the weight of newly constructed buildings can cause significant compaction of the underlying soils. As the project site is relatively flat and no buildings or subsurface structures are included as part of the project, impacts related to subsidence would be less than significant.

As described above, the project site is not at risk of landslides, lateral spreading, subsidence, or significant liquefaction. Therefore, impacts related to soil stability would be less than significant, and no mitigation is required.

d) Be located on expansive soil, as defined in table 18-1b of the Uniform Building Code (1994), creating substantial risks to life or property?

No Impact. Moderate to highly expansive soils may be present at the existing crossings. Expansive soils can undergo significant volume changes when moisture content in the soil fluctuates. However, due to the limited nature of the improvements at the crossings and no structures are proposed, there would be no risks related to expansive soils. Therefore, no impact would occur, and no mitigation is required.

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 wastewater?

No Impact. No septic tanks or alternative wastewater disposal systems are proposed, and no wastewater would be generated by the project. Therefore, no impact would occur, and no mitigation is required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant with Mitigation. The project site is currently developed as at-grade rail crossings. Ground disturbance from project construction activities would be limited to previously disturbed areas. In addition, grading depths to install the improvements are not typically deep enough to encounter paleontological resources. It is not anticipated that project construction would encounter paleontological resources. However, in the unlikely event that paleontological resources are

encountered during construction, they may be inadvertently damaged or destroyed. This is a potentially significant impact. **Mitigation Measure GEO-1** would require the implementation of discovery procedures if paleontological resources are encountered and require a qualified paleontologist to recommend measures specific to the discovered resource. Implementation of **Mitigation Measure GEO-1** at all crossings would reduce potential impacts to paleontological resources at all crossing locations.

> ***Mitigation Measure GEO-1: Discovery of Paleontological Resources***
>
> Discovery of a paleontological specimen during any phase of the project shall result in a work stoppage in the vicinity of the find until it can be evaluated by a professional paleontologist. Should loss or damage be detected, additional protective measures or further action (e.g., resource removal), as determined by a professional paleontologist, shall be implemented to mitigate the impact.

With implementation of **Mitigation Measure GEO-1** at all crossings, potential impacts to paleontological resources would be reduced to be less than significant.

4.8 Greenhouse Gas Emissions

	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?	☐	☐	☒	☐

Environmental Setting

Unlike emissions of criteria and toxic air pollutants, which have local or regional impacts, GHG emissions have a broader, global impact. Global warming associated with the "greenhouse effect" is a process whereby GHGs accumulating in the atmosphere contribute to an increase in the temperature of the earth's atmosphere. The most common GHGs contributing to global warming and associated climate change are carbon dioxide (CO_2) perfluorocarbons, and sulfur hexafluoride, methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs). Emissions of GHGs contributing to global climate change are attributable to a variety of natural processes and human activities. Emissions of GHGs by human activities are associated with the transportation, industrial and manufacturing, utility, residential, commercial, and agricultural sectors. The operation of the existing crossings generates GHGs; however, to provide a conservative estimation of GHG emissions for the project site, this analysis assumed that the project site currently produces zero GHG emissions.

Regulatory Setting

State

Assembly Bill 32 and CEQA

The Global Warming Solutions Act (also known as "AB 32") codified the State's GHG emissions target by directing CARB to reduce the state's global warming emissions to 1990 levels by 2020. AB 32 was signed and passed into law by Governor Schwarzenegger on September 27, 2006. Since that time, the CARB, CEC, California Public Utilities Commission, and Building Standards Commission have all been developing regulations that will help meet the goals of AB 32 and Executive Order S-3-05.

A Scoping Plan for AB 32 was adopted by CARB in December 2008. It contains the state's main strategies to reduce GHGs from business-as-usual emissions projected in 2020 back down to 1990 levels. Business-as-usual is the projected emissions in 2020, including increases in emissions caused by growth, without any GHG reduction measures. The Scoping Plan has a range of GHG reduction actions, including direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. Per AB 32, the Scoping Plan must be updated every five years to evaluate the mix of AB 32 policies to ensure that California is on track to achieve the 2020 GHG reduction goal. The first update to the Scoping Plan was approved by CARB in May 2014. Additional state law and regulations related to the reduction of GHG emissions

includes SB 375, the Sustainable Communities and Climate Protection Act, the State's Renewables Portfolio Standard (RPS) for Energy Standard (SB 2X), and fleet-wide passenger car standards (Pavley Regulations).

The California Natural Resources Agency, as required under state law (PRC Section 21083.05) has amended the state guidelines to address the analysis and mitigation of GHG emissions. In these changes to the Guidelines, Lead Agencies, such as the City, retain discretion to determine the significance of impacts from GHG emissions based upon individual circumstances. Neither CEQA nor the Guidelines provide a specific methodology for analysis of GHGs and under the amendments to the Guidelines, a Lead Agency may describe, calculate, or estimate GHG emissions resulting from a project and use a model and/or qualitative analysis or performance-based standards to assess impacts.

Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Senate Bill 32

In September 2016, the Governor signed SB 32 into legislation, which builds on AB 32 and requires the state to cut GHG emissions to 40 percent below 1990 levels by 2030. With SB 32, the Legislature also passed Assembly Bill 197, which provides additional direction for updating the Scoping Plan to meet the 2030 GHG reduction target codified in SB 32. CARB published California's 2017 Climate Change Scoping Plan Update in November 2017 (2017 Scoping Plan). The 2017 Scoping Plan establishes a strategy that will reduce GHG emissions in California to meet the 2030 target. Key features of this plan are:

- Cap and Trade program places a firm limit on 80 percent of the State's emissions;
- Achieving a 50-percent Renewable Portfolio Standard by 2030;
- Increase energy efficiency in existing buildings;
- Develop fuels with an 18-percent reduction in carbon intensity;
- Develop more high-density, transit-oriented housing;
- Develop walkable and bikeable communities;
- Greatly increase the number of electric vehicles on the road and reduce oil demand in half;
- Increase zero-emissions transit so that 100 percent of new buses are zero emissions;
- Reduce freight-related emissions by transitioning to zero emissions where feasible and near-zero emissions with renewable fuels everywhere else; and
- Reduce "super pollutants" by reducing methane and hydrofluorocarbons by 40 percent.

As presented in the 2017 Scoping Plan, various changes and measures are needed to achieve the 2030 target. The Scoping Plan has established a proposed reduction scenario that requires specific reductions through programs and changes to fossil fuel consumption. Based on the Scoping Plan scenario, a significant portion of GHG emission reductions will result from statewide programs and existing and proposed policies, including Cap and Trade, a doubling of energy efficiency as required by SB 350,

Renewable Portfolio Standard requirements, and Low Carbon Fuel standards. Other significant reductions will be achieved through an increase in zero-emission vehicles, trucks, and buses.

Senate Bill 375

SB 375 was enacted to expand the efforts of AB 32 by controlling indirect GHG emissions caused by urban sprawl. SB 375 provides incentives for local governments and applicants to implement new conscientiously planned growth patterns. This includes incentives for creating attractive, walkable, and sustainable communities and revitalizing existing communities. The legislation also allows applicants to bypass certain environmental reviews under CEQA if they build projects consistent with the new sustainable community strategies. Development of more alternative transportation options that would reduce vehicle trips and miles traveled, along with traffic congestion, would be encouraged. SB 375 enhances CARB's ability to reach the AB 32 goals by directing the agency in developing regional GHG emission reduction targets to be achieved from the transportation sector for 2020 and 2035. CARB works with the metropolitan planning organizations (e.g., Association of Bay Area Governments (ABAG) and Metropolitan Transportation Commission [MTC]) to align their regional transportation, housing, and land use plans to reduce VMT and demonstrate the region's ability to attain its GHG reduction targets. A similar process is used to reduce transportation emissions of ozone precursor pollutants in the San Francisco Bay Area.

SB 350 Renewable Portfolio Standards

In September 2015, the California Legislature passed SB 350, which increases the State's RPS for content of electrical generation from the 33 percent target for 2020 to 50-percent renewables target by 2030.

Executive Order EO-B-30-15 (2015) and SB 32 GHG Reduction Targets

In April 2015, Governor Brown signed Executive Order which extended the goals of AB 32, setting a GHG emissions target at 40 percent of 1990 levels by 2030. On September 8, 2016, Governor Brown signed SB 32, which legislatively established the GHG reduction target of 40 percent of 1990 levels by 2030. In November 2017, CARB issued California's 2017 Climate Change Scoping Plan. While the state is on track to exceed the AB 32 scoping plan 2020 targets, this plan is an update to reflect the enacted SB 32 reduction target.

The new Scoping Plan establishes a strategy that will reduce GHG emissions in California to meet the 2030 target (note that the AB 32 Scoping Plan only addressed 2020 targets and a long-term goal). Key features of this plan are:

- Cap and Trade program places a firm limit on 80 percent of the state's emissions;
- Achieving a 50-percent Renewable Portfolio Standard by 2030 (currently at about 29 percent statewide
- Increase energy efficiency in existing buildings
- Develop fuels with an 18-percent reduction in carbon intensity;
- Develop more high-density, transit-oriented housing;
- Develop walkable and bikeable communities
- Greatly increase the number of electric vehicles on the road and reduce oil demand in half
- Increase zero-emissions transit so that 100 percent of new buses are zero emissions;
- Reduce freight-related emissions by transitioning to zero emissions where feasible and near-zero emissions with renewable fuels everywhere else; and

- Reduce “super pollutants” by reducing methane and hydrofluorocarbons by 40 percent.

In the updated Scoping Plan, CARB recommends statewide targets of no more than 6 metric tons (MT) carbon dioxide equivalents (CO_2e) per capita by 2030 and no more than 2 MT CO_2e per capita by 2050. The statewide per capita targets account for all emissions sectors in the state, statewide population forecasts, and the statewide reductions necessary to achieve the 2030 statewide target under SB 32 and the longer-term state emissions reduction goal of 80 percent below 1990 levels by 2050.

BAAQMD CEQA Guidelines and 2010 Bay Area Clean Air Plan

BAAQMD identifies thresholds of significance for operational GHG emissions from land-use development projects in its guidelines. These guidelines include recommended significance thresholds, assessment methodologies, and mitigation strategies for GHG emissions. Under the Guidelines, if a project would result in operational-related GHG emissions of 1,100 MT (also called the “bright line” threshold), or 4.6 MT per service population of CO_2e per year or more, it would make a cumulatively considerable contribution to GHG emissions and result in a cumulatively significant impact to global climate change. In jurisdictions where a qualified GHG Reduction Strategy has been reviewed under CEQA and adopted by decision-makers, compliance with the GHG Reduction Strategy would reduce a project’s contribution to cumulative GHG emission impacts to a less-than-significant level. The Guidelines also outline a methodology for estimating GHGs.

The Clean Air Plan is a multi-pollutant plan that addresses GHG emissions along with other air emissions in the SFBAAB. One of the key objectives in the Clean Air Plan is climate protection. The Clean Air Plan includes emission control measures in five categories: Stationary Source Measures, Mobile Source Measures, Transportation Control Measures, Land Use and Local Impact Measures, and Energy and Climate Measures. Consistency of a project with current control measures is one measure of its consistency with the Clean Air Plan. The current Clean Air Plan also includes performance objectives, consistent with the state’s climate protection goals under AB 32 and SB 375, designed to reduce emissions of GHGs to 1990 levels by 2020 and 40 percent below 1990 levels by 2035.

Assembly Bill 1279

Assembly Bill 1279 requires the state to achieve net zero GHG as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. The bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels, and directs the California Air Resources Board to work with relevant state agencies to achieve these goals.

Senate Bill 1020

SB 1020 adds interim targets to the policy framework originally established in SB 100, requires state agencies to rely on 100% renewable energy and zero-carbon resources to serve their own facilities by 2030, and establishes a Climate and Equity Trust fund to address rising electricity rates that threaten the affordability of basic service and undermine the economics of beneficial building and transportation electrification.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating impacts associated with GHG emission resulting from planned development within the project area. The Alameda County General Plan policies are applicable to the Lewelling Boulevard crossing location only, due to the crossing being located in unincorporated Alameda County. Additionally, review of the San Leandro 2035 General Plan, and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan	
Goal E	To insure and maintain the highest possible air quality in the County.
Objective E1	In areas of critical air pollution to attempt to restore and prevent further degradation of air quality.
Objective E2	To achieve coordination of air quality policies and regulations at the federal, state, regional, and local level.
Alameda County Community Climate Action Plan	
Policy T-2	Develop appropriate bicycle infrastructure for high traffic intersections and corridors.
Policy T-4	Enhance pedestrian infrastructure within easy walking distance from community activity centers.
Policy T-6	Improve pedestrian connectivity and route choice in neighborhoods.
San Leandro 2035 General Plan	
Policy EH-3.2	Promote strategies that help improve air quality and reduce GHG emissions by reducing the necessity of driving. These strategies include more reliable public transportation, carpooling and vanpooling programs, employer transportation demand management programs, better provisions for bicyclists and pedestrians, and encouraging mixed use and higher density development around transit stations.
Goal OSC-7	Promote recycling, water conservation, green building, and other programs which reduce GHG emissions and create a more sustainable environment.
Policy OSC-7.6	Reducing Municipal Greenhouse Gas Emissions. Reduce GHG emissions associated with municipal operations, including those associated with energy use, City vehicles, City recycling and composting operations, and utilities.
Policy OSC-7.7	Climate Action Plan. Maintain and periodically update a local Climate Action Plan. The Plan should be periodically updated to reflect the completion of tasks, emerging priorities, new technologies, new laws, and higher targets for emissions reduction.
Policy OSC-7.9	Reducing Greenhouse Gases Through Land Use and Transportation Choices. Locate and design new development in a manner which maximizes the ability to use transit, walk, or bicycle for most trips, reduce dependence on fossil fuel powered vehicles, and reduce VMT.
Action OSC-7.9. B	Pedestrian Orientation Implement design guidelines which encourage pedestrian friendly development and which de-emphasize the predominance of surface parking lots in transit-oriented development areas such as the BART stations and East 14th Street corridor.
Hayward 2040 General Plan	
Policy NR-2.4	The City shall work with the community to reduce community-based GHG emissions by 20 percent below 2005 baseline levels by 2020 and

	strive to reduce community emissions by 61.7 percent and 82.5 percent by 2040 and 2050, respectively.
Policy NR-2.5	The City shall reduce municipal GHG emissions by 20 percent below 2005 baseline level by 2020 and strive to reduce municipal emissions by 61.7 percent and 82.5 percent by 2040 and 2050, respectively.
Policy NR-2.6	The City shall reduce potential GHG emissions by discouraging new development that is primarily dependent on the private automobile; promoting infill development and/or new development that is compact, mixed use, pedestrian friendly, and transit oriented; promoting energy-efficient building design and site planning; and improving the regional jobs/housing balance ratio.
Policy NR-2.7	The City shall coordinate with the Bay Area Air Quality Management District to ensure projects incorporate feasible mitigation measures to reduce GHG emissions and air pollution if not already provided for through project design.
Policy NR-2.8	The City shall promote reduced idling, trip reduction, routing for efficiency, and the use of public transportation, carpooling, and alternate modes of transportation for operating City departments and City employees.
Policy NR-2.12	The City shall give preference to contractors using reduced-emission equipment for City construction projects and contracts for services (e.g., garbage collection), as well as businesses that practice sustainable operations.

Impact Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction

Less than Significant. BAAQMD has not established a threshold for construction-period GHG emissions. Project-related construction emissions are confined to a short period in relation to the overall life of the project. Based on BAAQMD's guidelines and the short nature of construction, GHG emissions during construction would be minor and temporary. Thus, GHG emissions from project construction are considered less than significant, and no mitigation is required.

Operation

Less than Significant. Operation of the project would result in emissions similar to existing conditions. Operation of the project would not change the frequency or speed of existing trains or effect the volume of vehicles using the crossings. As such, GHG emissions from operation of the project would be less than significant, and no mitigation is required.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less than Significant. Key planning and policy documents include the General Plans and Climate Action Plans. Relevant policies and goals are listed above. Project-related construction would be minimal, short, and temporary in nature. Additionally, energy use during operation (and GHG emissions associated with

such energy use) would be roughly equivalent to existing conditions. Therefore, the project would not conflict with the goals and policies of both the General Plans and Climate Action Plans. This impact would be less than significant and no mitigation is required.

4.9 Hazards and Hazardous Materials

	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 complied 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?	☐	☐	☐	☒

Environmental Setting

The following discussion qualitatively analyzes potential impacts on the potential hazardous materials adjacent to the existing crossings.

Hazardous Materials Use and Storage Regulation

A number of local, state, and federal regulations govern the use, transport, and storage of hazardous materials in the project area. A Hazardous Materials Business Plan is generally required of any facility which generates any quantity of hazardous waste, or which handles hazardous materials in amounts greater than 55 gallons for liquids, 500 pounds for solids, and 200 cubic feet for compressed gases. The implementation and enforcement of these local, state, and federal regulations regarding the use, storage, and transport of hazardous materials (including setbacks for flammable storage from property lines) reduce the potential for impacts to off-site land uses, in the event of an accidental release.

Potential Sources of Contamination

The existing crossings are in a mix of residential, industrial, and commercial areas. Surrounding land uses consist of a mix of residential buildings and industrial uses such as warehouses, offices, and associated parking lots. Based on a desktop search of the California Department of Toxic Substances Control, EnviroStor database, the existing crossings would be constructed in areas where potential contamination sources could occur.

There are two sites that contain potential contamination sources within a 1,000-foot radius of the existing crossings: the Yokota Nursery which is adjacent to the Marina Boulevard crossing and a groundwater contamination site in the general vicinity of the Washington Avenue and Marina Boulevard crossings in the City of San Leandro. Another site that contains potential contamination sources, the Roman Catholic Bishop Oakland Property, is located further than 1,000 feet from the Lewelling Boulevard crossing and thus will not be discussed further.

The Yokota Nursery was contaminated by orchard and nursery operations from the early 1900s until 2001. A land use covenant and environmental restriction was recorded for the property on April 23, 2002, which prohibits the use of residential, a hospital, school or day care. Given the closure status and the land use covenant for the property, this facility is not considered an environmental concern. The City of San Leandro groundwater contamination site is from the Doolittle, Washington, Alvarado (DWA) groundwater plume which was contaminated in the late 1980s by a variety of uses including dry cleaning, laundry services, manufacturing (electronic, lumberwood products, metal, and paint), and warehousing.

Regulatory Setting

State

In California, the U.S. EPA has granted most enforcement authority over federal hazardous materials regulations to the California Environmental Protection Agency. In turn, local agencies have been granted responsibility for implementation and enforcement of many hazardous materials regulations under the Certified Unified Program Agency program.

Department of Toxic Substances Control and Regional Water Quality Control Board

The Department of Toxic Substances Control (DTSC) regulates hazardous waste and remediation of existing contamination and evaluates procedures to reduce the hazardous waste produced in California. DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA and the California Health and Safety Code. The Bay RWQCB also provides regulatory oversight for sites with contaminated groundwater or soils.

Government Code §65962.5 (Cortese List)

Section 65962.5 of the Government Code requires the CalEPA to develop and annually update a list of hazardous waste and substances sites, known as the Cortese List. The Cortese List is used by state and local agencies and developers to comply with CEQA requirements. The Cortese List includes hazardous substance release sites identified by DTSC and the State Water Resource Control Board.

Local

Various policies in the local plans have been adopted for the purpose of avoiding or mitigating impacts from hazards and hazardous materials resulting from planned development within the areas.

Hazard Mitigation Plans

In 2011, the City of San Leandro adopted an adapted the hazards mitigation plan from the ABAG *Local Hazard Mitigation Plan Taming Natural Disasters*. The plan outlines procedures for identification and prioritization of appropriate mitigation strategies for localized hazards.

For Alameda County, including areas of unincorporated Alameda County, a local hazard mitigation plan was adopted in October of 2016. The local hazard mitigation plan was developed as an Annex to a region-wide multi-jurisdictional hazard mitigation plan prepared by ABAG.

The City of Hayward developed a localized hazard mitigation plan in 2016. The Local Hazard Mitigation Plan was drafted to assess hazard risk and asset vulnerability in the City of Hayward and is used to identify strategies to reduce future losses from natural hazards.

The Environmental Hazards element of the City of San Leandro's General Plan establishes policies for the management and conservation of the City of San Leandro's natural resources and the protection of the community from hazards. The Alameda County General Plan policies are applicable to the Lewelling Boulevard crossing location only, due to the crossing being located in unincorporated Alameda County. Additionally, a review of the San Leandro 2035 General Plan, it was determined that the following goals and policies are applicable to the project:

Alameda County General Plan

The Safety element of Alameda County's General Plan establishes policies for the management and conservation of Alameda County's natural resources and the protection of the community from hazards. The following goals and policies are applicable to the project:

Goal 4	Minimize residents' exposure to the harmful effects of hazardous materials and waste.
Policy 1	Uses involving the manufacture, use or storage of highly flammable (or toxic) materials and highly water reactive materials should be located at an adequate distance from other uses and should be regulated to minimize the risk of on-site and off-site personal injury and property damage. The transport of highly flammable materials by rail, truck, or pipeline should be regulated and monitored to minimize risk to adjoining uses.
Policy 6	Adequate separation shall be provided between areas where hazardous materials are present and sensitive uses such as schools, residences, and public facilities.
Policy 8	Developers shall be required to conduct the necessary level of environmental investigation to ensure that soil, groundwater, and buildings affected by hazardous material releases from prior land uses and lead or asbestos in building materials will not have a negative impact on the natural environment or health and safety of future property owners or users.

San Leandro 2035 General Plan

Goal EH-5	Protect local residents and workers from the risks associated with hazardous materials.
Policy EH-5.1	Work with the appropriate county, regional, state, and federal agencies to develop and implement programs for hazardous waste reduction, hazardous material facility siting, hazardous waste handling and disposal, public education, and regulatory compliance.
Policy EH-5.4	Provide adequate and safe separation between areas where hazardous materials are present and sensitive uses such as schools, residences, and public facilities. Zoning and other development regulations should include performance standards to avoid safety hazards and achieve compatibility between uses.

Hayward 2040 General Plan

The Hazards element of the City of Hayward's General Plan establishes policies for the management and conservation of the City of Hayward's natural resources and the protection of the community from hazards. After a review of the Hayward 2040 General Plan, it was determined that the following goals and policies are applicable to the project:

Goal 6	Protect people and environmental resources from contaminated hazardous material sites and minimize risks associated with the use, storage, transport, and disposal of hazardous materials.
Policy HAZ-6.1	The City shall maintain its status as a Certified Unified Program Agency and implement the City's Unified Hazardous Materials and Hazardous Waste Management Program.
Policy HAZ-6.2	The City shall require site investigations to determine the presence of hazardous materials and/or waste contamination before discretionary project approvals are issued by the City. The City shall require appropriate measures to be taken to protect the health and safety of site users and the greater Hayward community.
Policy HAZ-6.3	The City shall direct the Fire Chief (or their designee) and the Planning Director (or their designee) to evaluate all project applications that involve hazardous materials, electronic waste, medical waste, and other hazardous waste to determine appropriate permit requirements and procedures.

Hazardous Materials Use and Storage Regulation

Within the City, a number of local, state, and federal regulations govern the use, transport, and storage of hazardous materials. A Hazardous Materials Business Plan is generally required of any facility which generates any quantity of hazardous waste, or which handles hazardous materials in amounts greater than 55 gallons for liquids, 500 pounds for solids, and 200 cubic feet for compressed gases. The implementation and enforcement of these local, state, and federal regulations regarding the use, storage, and transport of hazardous materials (including setbacks for flammable storage from property lines) reduce the potential for impacts to off-site land uses, in the event of an accidental release.

Impact Discussion

Information in this section is based on the Hazardous Materials Technical Memo prepared for this project by Kimley Horn in July 2021.[14]

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant. Construction of the project would involve the use of hazardous materials, such as gasoline, hydraulic fluids, paint, and other similar materials. Operation of the project would not require the use or storage on-site of cleaning supplies in small quantities. No hazardous materials would be used or stored on-site.

In accordance with federal and state law, the project would be required to disclose hazardous materials handled at reportable amounts. The small quantities of hazardous materials would not pose a risk to site users or adjacent land uses. Additionally, the project applicant would be required to prepare an emergency response and evacuation plan, conduct hazardous materials training (including remediation of accidental releases), and notify employees who work in the vicinity of hazardous materials, in accordance with Federal Occupational Health and Safety Administration and California Division of Occupational Safety and Health requirements. Therefore, impacts related to the routine transport, use, or disposal of hazardous materials during construction and operation would be less than significant, and no mitigation is required.

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?

Less than Significant. Construction of the project would include ground clearing, grading, sidewalk removal and replacement, and other construction activities, which may require the limited use of hazardous materials such as fuels, oils, solvents, glues, paint and building material finishing products. Such materials would be used temporarily and typically do not generate hazardous air pollutant emissions or pose a long-term threat to human health or the environment. The use of such products would not reasonably result in an accidental release of hazardous materials into the environment. Conditions at the crossings during operation of the project would be similar to the existing conditions of the crossings and would not handle or emit hazardous materials, substances, or waste. Thus, this impact would be less than significant, and no mitigation is required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant. Three crossings are within 0.25 mile of a school (Hesperian Boulevard crossing, Lewelling Boulevard crossing, and Tennyson High School pedestrian crossing). For a list of the schools, please see Public Services 4.15. During construction, some hazardous materials may be used during construction activities. However, due to the nature of the project, the use of the hazardous materials and quantities would temporary and limited. Currently, all existing crossings operate within the 0.25 mile radius of the respective schools, and do not handle or emit hazardous materials, substances, or waste. During project operation, all crossings would operate similar to existing conditions without handling or emitting such hazardous materials, but with improved safety. Therefore, this impact would be less than significant, and no mitigation is required.

[14] Kimley-Horn. 2021. Alameda County Rail Safety Enhancement Program – Hazardous Materials Technical Memo: San Leandro-HaywardIS/MND

d) Be located on a site which is included on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 and as a result, would it create a significant hazard to the public or the environment?

Less than Significant with Mitigation. A search of the DTSC EnviroStor database shows the City of San Leandro as having groundwater contamination in the general vicinity of the Washington Avenue and Marina Boulevard crossings. According to EnviroStor, the DWA groundwater plume is approximately one mile wide and two miles long. Past uses that caused contamination include dry cleaning, laundry services, manufacturing- electronic, manufacturing (lumberwood products, metal, and paint), and warehousing. The contaminants of concern include 1,1,1-trichlorethane, 1,2-dichloroethylene, tetrachloroethylene, trichloroethylene and vinyl chloride. Extensive sampling and remediation had occurred since the late 1980s.

Mitigation Measure HAZ-1 would require construction of all crossings to prepare a Health and Safety Plan (HASP) for construction activities to ensure work safety and compliance with existing state and federal laws regarding exposure to hazardous materials.

> ***Mitigation Measure HAZ-1: Prepare a Site-specific HASP for Construction Activities***
>
> The construction contract specifications shall provide that a licensed hazardous materials professional shall prepare a site-specific HASP for construction activities. The HASP will establish protocols for preventing uncontrolled worker exposure to contaminated media during construction. The HASP will implement the following State and federal regulations govern the protection of worker safety at potential hazardous material sites:
>
> - Worker education and training (Hazard Communication Standard) 29 CFR 1910.1200, 1915.1200, 1917.28, 1918.90, and 1926.59, 1910.1018 (inorganic arsenic)
> - Construction Safety Orders 8 CCR Division 1, Chapter 4
> - Lead in Construction 8 CCR 1532.1
> - General Industry Safety Orders 8 CCR 5214. Inorganic Arsenic.
> - Environmental Health Standards for management of Hazardous Waste 22 CCR Division 4.5
>
> Upon operation of the project, no hazardous materials would be used at the crossings, and no hazardous materials would be released into the public.

With implementation of **Mitigation Measure HAZ-1** at both crossings, this impact would be less than significant.

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?

No Impact. None of the existing crossings are located within an airport land use plan or within two miles of a public airport or public use airport. Therefore, no impact would occur, and no mitigation is required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The project would not change the local roadway circulation pattern in a way that would physically interfere with local emergency response plans. Instead, the project would improve safety by restricting access to UPRR tracks, improving signage, accessibility improvements, and other safety features. As the project would not change roadways, local roadway circulation would remain at existing

levels and would facilitate implementation of emergency response plans and emergency evacuation plans. Therefore, no impact would occur, and no mitigation is required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. All crossings are located in developed urban area which contains no wildland areas. Additionally, neighboring cities are also fully developed. The existing crossings are not located adjacent to natural areas that would be subject to wildland fires. The project would not result in any significant exposure of people or structures to wildland fires. Therefore, no impact would occur, and no mitigation is required.

4.10 Hydrology and Water Quality

	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 groundwater 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 off-site;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater 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?	☐	☐	☒	☐

Environmental Setting

The following discussion qualitatively analyzes potential impacts on the hydrological area surrounding the project.

Water Supply

EBMUD supplies water services to the City of San Leandro. Ninety percent of EBMUD's potable water comes from the 577-square mile watershed of the Mokelumne River on the western slope of the Sierra

Nevada.[15] EBMUD has approved and adopted an Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan in June 2021. Projected increases in water demand were not included due to densification and intensification of both residential and non-residential land uses.

In unincorporated Alameda County, Alameda County Water District (District) supplies water services to the Lewelling Boulevard crossing. Water supplies are imported into the District's service area through the South Bay Aqueduct and Hetch-Hetchy Aqueduct, respectively. Local supplies include fresh groundwater from the Niles Cone Groundwater Basin (underlying the District's service area), desalinated brackish groundwater from portions of the groundwater basin previously impacted by seawater intrusion, and surface water from the Del Valle Reservoir. Twenty-seven percent of the total in-District water demands (distribution system and groundwater system demands) have been met by State Water Project supplies, nineteen percent from San Francisco Regional supplies, and fifty-four percent from local supplies.

The San Francisco Public Utilities Commission (SFPUC) supplies water to the City of Hayward. The City of Hayward buys its water from the Hetch Hetchy Regional Water System which flows from the SFPUC system to Hayward through two pipelines – a 24" pipeline that travels down Mission Blvd and a second a 42" pipeline that travels down Hesperian Boulevard. The two pipelines are looped so that the entire city has redundant water supply lines.

Stormwater

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. Regulations set forth by the U.S. EPA and the State Water Resource Control Board (SWRCB) have been developed to fulfill the requirements of this legislation. U.S. EPA's regulations include the NPDES permit program, which controls sources that discharge pollutants into waters of the US (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by water quality control boards.

The RWQCB has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008). The regional permit applies to 77 Bay Area municipalities, including the city. Under the Municipal Regional Stormwater NPDES Permit, development projects that create, add, or replace 10,000 square feet or more of impervious surface area are required to control post-development stormwater runoff through source control, site design, and treatment control BMPs. Additional requirements must be met by certain large projects that create one acre or more of impervious surfaces.

In addition to water quality controls, the Municipal Regional Stormwater NPDES permit requires all projects that create or replace 1 acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks. The overall project would not generate more than 1 acre of impervious surface. As such, implementation of hydromodification measures to satisfy NPDES permit conditions would not be required.

Additionally, the Washington Avenue, Hesperian Boulevard, Marina Boulevard, and Leidig Court crossings are defined as small projects as established by RWQCB provision C3.i and governed by the Alameda County Stormwater Control guidelines. These guidelines define small projects as those which create or replace at least 2,500 square feet but less than 10,000 square feet of impervious surface. For projects over 10,000 square feet post-construction stormwater treatment is required. The Leidig Court

[15] East Bay Municipal Utility District, 2021. Available: https://www.ebmud.com/water/about-your-water/drink-tap/#:~:text=Most%20of%20EBMUD's%20water%20comes,slope%20of%20the%20Sierra%20Nevada. Accessed: March 2021.

crossing will not be required to implement post-construction stormwater treatment, because it is exempt as the new sidewalk would be constructed along existing roads.[16] The Lewelling Boulevard, Tennyson Road, and Industrial Parkway crossings would disrupt less than 2,500 square feet of impervious surface and thus do not qualify as small projects.

Groundwater

Fluctuations in groundwater levels are common due to seasonal fluctuation, underground drainage patterns, regional fluctuations, and other factors. All existing crossings are located within the Niles Cone groundwater basin.

Tsunamis and Seiches

Seismically-induced ocean waves are caused by displacement of the sea floor by a submarine earthquake and are called tsunamis. Seiches are waves produced in a confined body of water such as a lake or reservoir by earthquake ground shaking or landsliding. Seiches are possible at reservoir, lake, or pond sites. The existing crossings are located within a Tsunami Hazard Area, which has the possibility of inundation during a tsunami.[17]

Regulatory Setting

Federal

The Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. Under the CWA, EPA has implemented pollution control programs such as setting wastewater standards for industry, and has made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit is obtained. The EPA has also developed national water quality criteria recommendations for pollutants in surface waters.

National Flood Insurance Program

The Federal Emergency Management Agency (FEMA) established the National Flood Insurance Program (NFIP) to reduce impacts of flooding on private and public properties. The program provides subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the program, FEMA publishes Flood Insurance Rate Maps (FIRMs) that identify Special Flood Hazard Areas (SFHAs). An SFHA is an area that would be inundated by the one-percent annual chance flood, which is also referred to as the base flood or 100- year flood.

Federal Emergency Management Agency

FEMA administers the NFIP to provide subsidized flood insurance to communities that comply with FEMA regulations protecting development in floodplains. As part of the NFIP, FEMA publishes Flood Insurance Rate Maps that identify flood hazard zones within a community. Flood Insurance Rate Maps designate 100-year floodplain zones and delineate other flood hazard areas. A 100-year floodplain zone

[16] Clean Water Program. 2017. C.3 Stormwater Technical Guidance: A Handbook for Developers, Builders, and Project Applicants. Available: https://www.cleanwaterprogram.org/images/uploads/C3_Technical_Guidance_v6_Oct_2017_FINAL_Errata_updated_04.20.18.pdf. Accessed: April 2022.

[17] California Department of Conservation. 2021. Alameda County Tsunami Hazard Area Map. Available: https://www.conservation.ca.gov/cgs/tsunami/maps/alameda. Accessed: March 2021.

is the area that has a one in one hundred (1 percent) chance of being flooded in any one year based on historical data. Areas subject to the 1 percent flood are designated as Zone AE, A, AH, or AO on the FEMA flood maps. The project site is in Flood Zone AO, which is defined as an area of 1 percent annual chance shallow floodplain.[18]

State

Statewide Construction General Permit

The SWRCB has implemented a NPDES General Construction Permit for the State of California. projects that would disturb more than one acre of land are required to submit a Notice of Intent and a SWPPP to the SWRCB to apply for coverage under the NPDES Construction and Land Disturbance General Permit. Construction activities subject to this permit include grading, clearing, or any activities that cause ground disturbance such as stockpiling or excavation. The SWPPP will include the site-specific BMPs to control erosion and sedimentation and maintain water quality during the construction phase. The SWPPP also contains a summary of the structural and non-structural BMPs to be implemented during the post-construction period.

Regional

National Pollutant Discharge Elimination System Permit Program

The NPDES permit program controls sources that discharge pollutants into waters of the United States (e.g., streams, lakes, bays, etc.). For the City, these regulations are implemented at the regional level by the San Francisco Bay RWQCB. The RWQCB is responsible for protecting the quality of surface water and groundwater by issuing and enforcing compliance with the NPDES permits and by preparation and revision of the relevant RWQCB Plan, also known as the Basin Plan.

The San Francisco Bay RWQCB also has issued a Municipal Regional Stormwater NPDES Permit (Permit Number CAS612008). Under the Municipal Regional Stormwater NPDES Permit, development projects that create, add, or replace 10,000 square feet or more of impervious surface area are required to control post-development stormwater runoff through source control, site design, and treatment control BMPs. Additional requirements must be met by certain large projects that create one acre or more of impervious surfaces.

In addition to water quality controls, the Regional Municipal NPDES permit has hydromodification controls as defined in the Hydromodification Management Plan.[19] The NPDES permit requires all new and redevelopment projects that create or replace one acre or more of impervious surface to manage development-related increases in peak runoff flow, volume, and duration, where such hydromodification is likely to cause increased erosion, silt pollutant generation or other impacts to beneficial uses of local rivers, streams, and creeks.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating impacts to hydrological systems and water quality resulting from planned development within the

[18] FEMA. 2014. FEMA Flood Map Service Center. Available: https://msc.fema.gov/portal/search?AddressQuery=101%20South%20Jackson%20Avenue%20San%20Jose%20CA%20#searchresultsanchor. Accessed March 2021.

[19] Hydromodification is a change in stormwater runoff characteristics from a watershed caused by changes in land use conditions (i.e., urbanization) that alter the natural cycling of water. Changes in local land use can cause runoff volumes and velocity to increase which can result in a decrease in natural vegetation, changing of river/creek bank grades, soil compaction, and the creation of new drainages.

project area. After review of the San Leandro 2035 General Plan and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

The Alameda County General Plan does not have applicable policies regarding hydrology and water quality.

San Leandro 2035 General Plan

Policy LU-2.17	Constrained Sites. Focus new housing development on underutilized or infill sites on the city's flatter lands, rather than on previously undeveloped sites in the hills. Development on sites with significant geologic, hydrologic, or land stability constraints should be strongly discouraged.
Policy OSC-7.2	Promote the efficient use of existing water supplies through a variety of water conservation measures, including the use of recycled water for landscaping.
Policy OSC-7.3	Drought-Tolerant Landscaping. Encourage the use of native vegetation and Bay-friendly landscaping and enforce the State Department of Water Resources Model Water Efficient Landscape Ordinance.
Policy OSC-7.4	Development Standards. Maintain local planning and building standards that require the efficient use of water through such measures as low-flow plumbing fixtures and water-saving appliances. Require water conservation measures as a condition of approval for major developments.

Hayward 2040 General Plan

Policy NR-6.4	The City shall minimize grading and, where appropriate, consider requiring onsite retention and settling basins.
Policy NR-6.5	The City shall concentrate new urban development in areas that are the least susceptible to soil erosion into water bodies in order to reduce water pollution.
Policy NR-6.6	The City shall promote stormwater management techniques that minimize surface water runoff and impervious ground surfaces in public and private developments, including requiring the use of LID techniques to best manage stormwater through conservation, onsite filtration, and water recycling.
Policy NR-6.7	The City shall protect baylands by ensuring that proper measures are in place to safely remove toxic metals in sewage prior to disposal.
Policy NR-6.8	The City shall continue to comply with the San Francisco Bay Region NPDES Municipal Regional Permit.
Policy NR-6.14	The City shall use native or drought-tolerant vegetation in the *landscaping of all public facilities.*

Policy NR-6.16 The City shall continue to implement the Bay-Friendly Water Efficient Landscape Ordinance.

Alameda County Clean Water Program

To protect the San Francisco Bay, as well as rivers and creeks, construction projects in the cities of San Leandro and Hayward as well as Unincorporated Alameda County are required to comply with the Alameda County Clean Water Program. The measures of the Clean Water Program, designed to protect water quality by minimizing land disturbances and impervious surfaces, encourage infiltration into landscape and direct runoff into vegetated areas. All development projects within the City, regardless of size, must implement construction BMPs for reducing runoff during construction. BMPs include, but are not limited to:

- Temporary erosion controls to stabilize all denuded areas until permanent erosion controls are established.
- Delineate with field markers clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses.
- Provide notes, specifications, or attachments describing the following:
- Construction, operation and maintenance of erosion and sediment controls, include inspection frequency;
- Methods and schedule for grading, excavation, filling, clearing of vegetation, and storage and disposal of excavated or cleared material;
- Specifications for vegetative cover & mulch, include methods and schedules for planting and fertilization;
- Perform clearing and earth moving activities only during dry weather.
- Use sediment controls or filtration to remove sediment when dewatering and obtain all necessary permits.
- Protect all storm drain inlets in vicinity of site using sediment controls such as berms, fiber rolls, or filters.
- Trap sediment on-site, using BMPs such as sediment basins or traps, earthen dikes or berms, silt fences, check dams, soil blankets or mats, covers for soil stockpiles, etc.
- Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate.
- Limit construction access routes and stabilize designated access points.
- No cleaning, fueling, or maintaining vehicles on-site, except in a designated area where washwater is contained and treated.
- Store, handle, and dispose of construction materials/wastes properly to prevent contact with stormwater.
- Contractor shall train and provide instruction to all employees/subcontractors regarding construction BMPs.

- Control and prevent the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, rinse water from architectural copper, and non-stormwater discharges to storm drains and watercourses.
- Divert on-site runoff around exposed areas; divert off-site runoff around the site (e.g., swales and dikes.

C.3 Stormwater Technical Guidance, Version 7.

C.3 Stormwater Technical Guidance, Version 7 is an Alameda Countywide Clean Water Program handbook meant to for developers, builders, and project applicants that help developers, builders, and project sponsors include post-construction stormwater controls in their projects, in order to meet local municipal requirements and State requirements in the Municipal Regional Stormwater NPDES Permit (MRP). The municipalities have to require post-construction stormwater controls as part of their obligations under Provision C.3 of the MRP.

Impact Discussion

Information in this section is based on the Hydrology and Water Quality Technical Report prepared for this project by Kimley Horn in May 2021.[20]

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less than Significant. The project would result in very little increase in impervious surfaces as the existing crossings are located in developed areas. The project would be required to comply with Alameda County Stormwater Quality BMPs and Alameda County Stormwater Control guidelines to avoid and minimize pollutant discharge as a result of construction. During operation, the project site will employ stormwater source controls to reduce the likelihood of contaminations from litter, pesticides, fertilizers, and petroleum drippings from automobiles. The source controls will require that all drainage will drain to bio-retention areas prior to discharging to the storm drain system; storm drain inlets will be clearly marked “No Dumping, Drains to Bay”; on-site storm drains will be cleaned annually, prior to the rainy season; and landscaping will be designed to minimize the need for irrigation, pesticide, and fertilizer use. With adherence to these BMPs and guidelines, the impact would be less than significant, and no mitigation is required.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

No Impact. The project would improve safety to existing railroad crossings and would operate similar to existing conditions. The project would not require the use of water during operation. As such, the project would not decrease groundwater supplies or interfere with groundwater recharge. Therefore, there would be no impact, and no mitigation is required.

[20] Kimley Horn. 2021. Alameda CTC – RSEP San Leandro-Hayward IS/MND Hydrology and Water Quality Technical Report.

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?

Less than Significant. Implementation of a SWPPP would require BMPs be installed and monitored throughout construction; therefore, the project would not result in substantial erosion or siltation on- or off-site. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site. This impact would be less than significant, and no mitigation is required.

ii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant. Implementation of a SWPPP would require BMPs be installed and monitored throughout construction. Additionally, the project would disturb less than one acre of land at each of the existing crossings. As such, discharge and stormwater runoff from the project would be minimal. This impact would be less than significant, and no mitigation is required.

iii. impede or redirect flood flows?

Less than Significant. The project would follow Alameda County Stormwater Quality BMPs and Alameda County Stormwater Control guidelines to limit potential impacts from runoff and source control measures. The Water Quality and Drainage Memorandum conducted for the project concluded that there are no impacts to stormwater drainage systems and implementation of the project would not impede of redirect flood flows. Therefore, the impact would be less than significant, and no mitigation is required.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less than Significant. Industrial Parkway West is located within FEMA Zone AO, which is defined as an area of one percent annual chance of flooding. Additionally, one existing crossing (Tennyson High School pedestrian crossing), is located within FEMA Zone AE. However, as the project would include safety improvements to existing railroad crossing infrastructure, the project would not increase the chance of flooding within the respective existing crossings. The Industrial Parkway West crossing is adjacent to a Tsunami Hazard Area. However, tsunami waves and flooding have historically resulted in little damage around San Francisco Bay. Additionally, construction of the project would not introduce any additional pollutants to the existing crossings. Therefore, this impact is less than significant, and no mitigation is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant. Construction of the project would comply with Alameda County Stormwater Quality BMPs and the Alameda County Stormwater Control guidelines. With adherence to these BMPs and guidelines, the impact would be less than significant, and no mitigation is required.

4.11 Land Use and Planning

	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?	☐	☐	☐	☒

Environmental Setting

Land use and zoning surrounding the existing crossings in the City of San Leandro varies. Land uses for the Hesperian Boulevard and Washington Avenue crossings are designated as Medium-Density Residential, Single-Family Residential, General Industrial, and General Commercial. Zoning for these areas include Residential Multifamily, Residential Single-family, Industrial General, and Commercial Community. By contrast, the Marina Boulevard crossing is entirely surrounded by land designated and zoned for residential use. Development immediately surrounding each of the crossings in the City of San Leandro represents a mix of residential building of various sizes.

Zoning surrounding the Lewelling Boulevard crossing in unincorporated Alameda County includes a large public use area to the north and northeast associated with San Lorenzo High School, Commercial District to the west and south, and Corridor Neighborhood to the southeast.

Within the City of Hayward, each crossing is adjacent to residential areas designated as Limited Medium Density Residential, Low Density Residential, and Medium Density Residential. These areas are zoned as Planned Development, Single-family Residential, and Medium-Density Residential, respectively. The Tennyson Road crossing is located within an area designated as Public/Quasi Public and Agriculture to the north. However, this site currently contains Cesar Chavez Middle School. Similarly, the Tennyson High School pedestrian crossing is located within an area designated Public Quasi Public and zoned for Agriculture. However, the Tennyson Road crossing currently contains Tennyson High School. Other uses present at these crossings include Light Industrial and Retail and Office Commercial.

Regulatory Setting

Local

Various policies in local General Plans have been adopted for avoiding or mitigating land use impacts resulting from planned development within the project area. The Alameda County General Plan policies are applicable to the Lewelling Boulevard crossing location only, due to the crossing being located in unincorporated Alameda County. Additionally, review of the San Leandro 2035 General Plan, and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

Policy 3.8	Seek strategies to streamline or expedite the environmental review process required under CEQA.

Alameda County Community Climate Action Plan

Various policies in the Alameda County (Unincorporated Areas) Community Climate Action Plan element of the Alameda County General Plan, approved on February 4, 2014, have been adopted for avoiding or mitigating land use impacts resulting from project development within the County.[21] All future development allowed by the proposed land use designations would be subject to the policies listed in the General Plan, including the following:

Measure L-1	Facilitate the establishment of mixed-use, pedestrian-, and transit-oriented development near major transit stations or transit corridors.

San Leandro 2035 General Plan

Policy LU-1.2	Encroachment of Incompatible Uses. Protect residential neighborhoods from the impacts of incompatible non-residential uses and disruptive traffic to the extent possible. Zoning and design review should ensure that compatibility issues are fully addressed when non-residential development is proposed near or within residential areas.
Policy LU-1.14	Ensure that construction activities are regulated and monitored in a manner that minimizes the potential for adverse off-site impacts such as noise, dust, erosion, exposure to hazardous materials, and truck traffic.
Policy LU-2.5	Promote improvements that make San Leandro neighborhoods more friendly to pedestrians and bicyclists, such as bike lanes, street trees, and crosswalks.
Policy LU-6.8	Provide public and private improvements that create a safe, friendly, and comfortable environment for pedestrians and bicyclists in Downtown.
Policy LU-7.6	Improve the appearance, operation, and safety of the street system in San Leandro's industrial districts, with an emphasis on better conditions for pedestrians and bicyclists, reducing conflicts between truck traffic and residential traffic, and improving connectivity between destinations.

Hayward 2040 General Plan

Policy LU-4.11	The City shall strive to improve the visual character of corridors by improving streetscapes with landscaped medians, and widened sidewalks that are improved with street trees, pedestrian scaled lighting, underground utilities, landscaping, and streetscape furniture and amenities.

[21] Alameda County. 2014. Alameda County General Plan, 2014. Available:https://www.acgov.org/cda/planning/generalplans/index.htm. Accessed: August 2021.

Impact Discussion

a) Physically divide an established community?

No Impact. Project-related improvements would take place entirely within existing at-grade rail crossings and would not add new physical or visual barriers within existing communities. During operation, the improved crossings will function similar to existing conditions. Instead of dividing an established community, the project would improve safety elements at existing railroad crossings. The project would improve safety elements at existing railroad crossings and contribute to the cohesion of established communities. Therefore, no impact would occur as the project would not physically divide an established community, and no mitigation is required.

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?

No Impact. The project would be consistent with existing zoning designations. The project would not require any rezoning and would improve safety at existing railroad crossings. The project has been designed in accordance with applicable City of San Leandro, City of Hayward, and Alameda County regulations. The project would be consistent with both the General Plan land use designation and local zoning and the project would not conflict with any applicable land use plans, policies, or regulations. Therefore, there would be no impact, and no mitigation is required.

4.12 Mineral Resources

	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?	☐	☐	☐	☒

Environmental Setting

According to the Mineral Land Classification Map for Alameda and San Francisco Counties, the existing crossings are within Mineral Resource Zone 1 (MRZ-1) (areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence).

Regulatory Setting

State

Surface Mining and Reclamation Act of 1975

The Surface Mining and Reclamation Act of 1975 (SMARA, PRC, Sections 2710-2796) provides a comprehensive surface mining and reclamation policy with the regulation of surface mining operations to assure that adverse environmental impacts are minimized, and mined lands are reclaimed to a usable condition. [22]

SMARA also encourages the production, conservation, and protection of the state's mineral resources. PRC Section 2207 provides annual reporting requirements for all mines in the state, under which the State Mining and Geology Board is also granted authority and obligations.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating mineral impacts resulting from planned development within the project area. The Alameda County General Plan policies are applicable to the Lewelling Boulevard crossing location only, due to the crossing being located in unincorporated Alameda County. Additionally, review of the San Leandro 2035 General Plan, it was determined that the City does not have regulations listed pertaining to mineral resources.

After review of the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

[22] The California Department of Conservation. 2019. SMARA Statutes and Regulations.2019. Available: https://www.conservation.ca.gov/dmr/lawsandregulations. Accessed March 2021

Alameda County General Plan

Conservation Element

Mineral Resources Goal	To insure extraction of minerals and reclamation of land to the fullest extent possible consistent with sound management policies.
Objective 1	To provide access to minerals through identification of the resource.
Objective 2	To permit extraction only when not detrimental to other valuable resources.
Objective 3	To utilize lower quality sources by methods which minimize environmental costs.
Objective 4	To increase recycling of mineral commodities such as metals.

San Leandro 2035 General Plan

The San Leandro 2035 County General Plan does not have applicable policies regarding mineral resources.

Hayward 2040 General Plan

Goal NR-5	Protect the economic viability of state-identified mineral resource extraction areas, while avoiding potential land use conflicts and minimizing adverse environmental impacts.
Policy NR-5.1	The City shall protect mineral resources in undeveloped areas that have been classified by the State Mining and Geology Board as having statewide or regional significance for possible future extraction by limiting new residential or urban uses that would be incompatible with mining and mineral extraction operations.

Impact Discussion

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?

No Impact. The project is located within an area classified as MRZ-1; areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. As such, the project would not 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. No impact would occur, and no mitigation is required.

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?

No Impact. As mentioned previously, the project is located within an area classified as MRZ-1; areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. Given this, implementation of the project would not disturb protected mineral resources and would not result in the loss of availability of a locally important mineral resource recovery site. Therefore, no impact would occur, and no mitigation is required.

4.13 Noise and Vibration

	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?	☐	☐	☒	☐

Environmental Setting

Noise is typically described as any unwanted or objectionable sound and is technically described in terms of the loudness of the sound (amplitude) and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). However, because the human ear is not equally sensitive to sound at all frequencies, the A-weighted decibel scale (dBA), which gives greater weight to the frequencies of sound to which the human ear is most sensitive, was devised to relate noise to human sensitivity.

The dBA measurement system is not an effective way to measure noise levels within a community since community noise is always fluctuating and changing. Therefore, other methods of describing noise levels have been developed, the most common of which are the Community Noise Equivalent Level (CNEL) and the Day-Night Noise Level (Ldn). Ldn is an average of all noise levels recorded over a 24-hour period, with a 10-dB penalty for nighttime noise that occurs between 10:00 p.m. and 7:00 a.m. CNEL is also an average sound level over a 24-hour period, with a 10 dB penalty added for noise between 10:00 p.m. and 7:00 a.m. and an additional 5 dB penalty added for the evening hours of 7:00 p.m. to 10:00 p.m.

Sensitive Receptors

Noise exposure standards and guidelines for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Residences, hospitals, schools, guest lodging, libraries, and churches are treated as the most sensitive to noise intrusion and therefore have more stringent noise exposure targets than do other uses, such as manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance.

The project site is located in an urban area near I-880. As described above, the surrounding land uses are predominately commercial and industrial uses, with some residential uses to the east of the project site. Table 4-5 lists the distances and locations of the nearby sensitive receptors.

Figure 4-1 shows the locations of the sensitive receptors.

Table 4-5 Closest Sensitive Receptors

Crossing	Nearest Sensitive Receptor	Approximate Distance from Crossing
Marina Boulevard (Coast Subdivision)	Single-family residential	780 feet west
Washington Avenue	Single-family residential	50 feet southwest
Hesperian Boulevard	Single-family residential	550 feet west
Lewelling Boulevard	Single-family residential	10 feet east
Tennyson High School Pedestrian Crossing (near Schafer Road)	Sorensdale Park	20 feet north
	Multi-family residential	50 feet southwest
Leidig Court Trespass	Multi-family residential	20 feet west
Tennyson Road	Cesar Chavez Middle School	30 feet north
	Single-family residential	30 feet east
Industrial Parkway	Single-family residential	20 feet west

Source: Kimley Horn, 2021

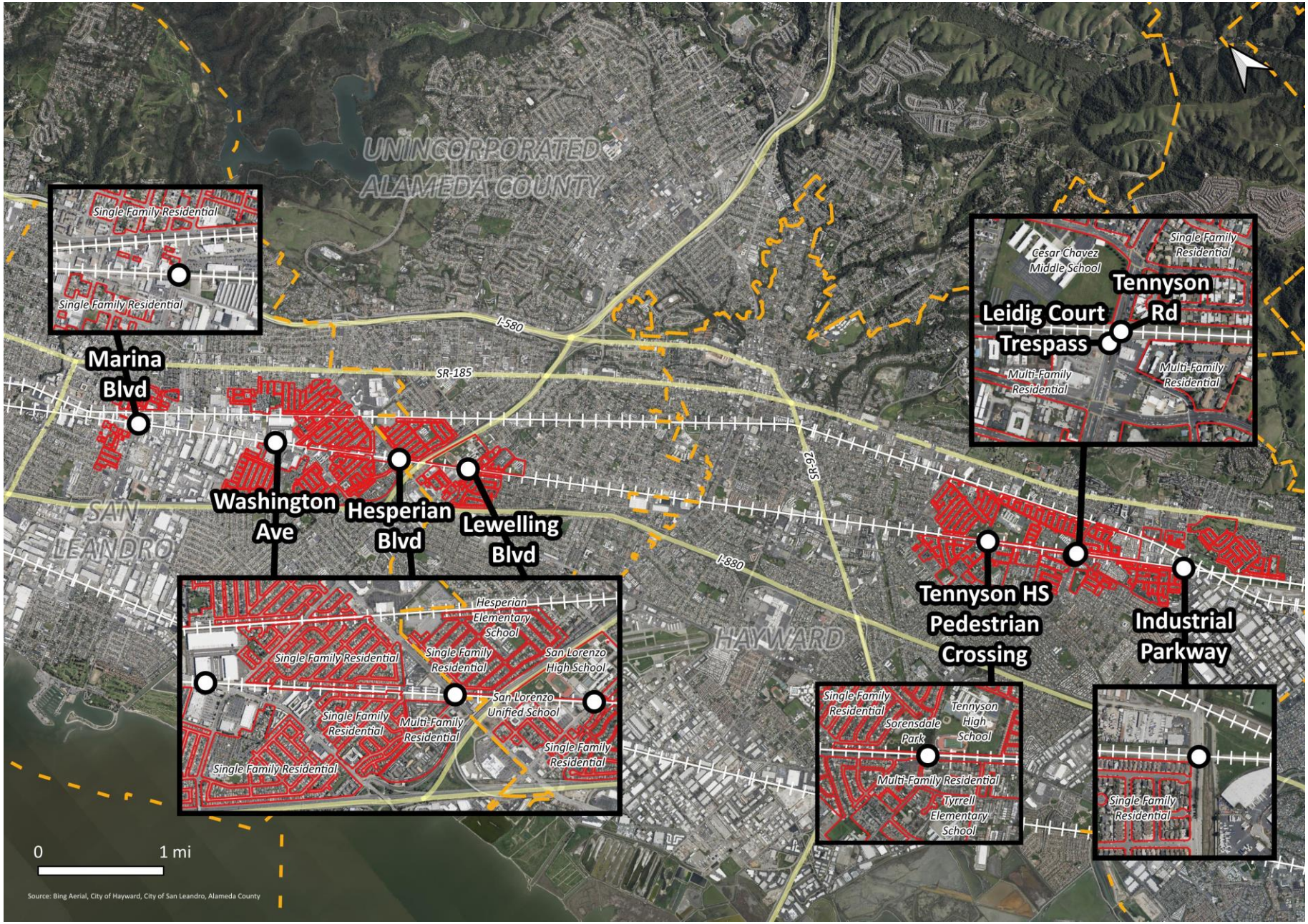


Figure 4-1 Sensitive Receptor Locations

Regulatory Setting

Federal

Federal Transit Administration

Noise

In the absence of local numeric noise thresholds, recommendations in the FTA's Transit Noise and Vibration Impact Assessment Manual (2018) can be used as guidance to determine whether or not a change in traffic would result in a substantial permanent increase in noise. Under the FTA standards, the allowable noise exposure increase is reduced with increasing ambient existing noise exposure, such that higher ambient noise levels have a lower allowable noise exposure increase. Table 4-6 shows the significance thresholds for increases in traffic-related noise levels. These standards are applicable to a project's impact on existing sensitive receptors.

Table 4-6 Significance of Increases in Exposure to Traffic Noise

Existing Noise Exposure (dBA L_{dn} or L_{eq})	Allowable Noise Exposure Increase (dBA L_{dn} or L_{eq})
45-49	7
50-54	5
55-59	3
60-64	2
65-74	1
75+	0

Source: Federal Transit Administration 2018

Vibration

The FTA has published standard vibration velocities for construction equipment operations. In general, depending on the building category of the nearest buildings adjacent to the potential pile driving area, the potential construction vibration damage criteria vary. For example, for a building constructed with reinforced concrete with no plaster, the FTA guidelines show that a vibration level of up to 0.50 inch per second (in/sec) peak particle velocity (PPV) is considered safe and would not result in any construction vibration damage. In general, the FTA architectural damage criterion for continuous vibrations (i.e. 0.2 in/sec) appears to be conservative. The types of construction vibration impacts include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on soil composition and underground geological layer between vibration source and receiver.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating noise impacts resulting from planned development within the project area. The Alameda County General Plan policies are applicable to the Lewelling Boulevard crossing location only, due to the crossing being located in unincorporated Alameda County. Additionally, after review of the San Leandro 2035 General Plan, and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

Goal #2	Alameda County should encourage noise compatible land uses near highways and other noise generators.
Policy #1	In order to control objectionable noise, Alameda County should survey noise sources and impacts in the Unincorporated area and develop acceptable noise level standards for noise impacted areas.
Policy #5	The County should encourage architectural designers, developers, and builders to employ physical techniques to reduce noise impacts.

Alameda County General Code

The County General Code (Chapter 6.60 of the County General Code, October 2006) regulates identifiable shorter duration noise sources such as the operation of audio equipment and electric or gas-powered tools and noise from animals and birds. The Ordinance defines these occurrences as a Noise Disturbance if they cause frequent or continuous noise that is "plainly audible" at a distance of 50 feet from the source.

Table 4-7 shows the number of cumulative minutes that a particular external noise level is permitted, as well as the maximum noise allowed under the Alameda County General Code.

Table 4-7 Single- or Multiple-family residential, school, hospital, church, or public library properties Noise Level Standards dB(A)

Category	Cumulative Number of Minutes in any one hour period	Daytime (7 am to 10 pm)	Nighttime (10 pm to 7 am)
1	30	50	45
2	15	55	50
3	5	60	55
4	1	65	60
5	0	70	65

Source: Alameda County General Code Chapter 6.60.040A

San Leandro 2035 General Plan

Goal EH-7	Ensure that noise associated with the day-to-day activities of San Leandro residents and businesses does not impede the peace and quiet of the community.
Action EH-7.1. A	On an on-going basis, review future development proposals for compliance with the General Plan Noise and Land Use Compatibility standards in Chart 7-2. Require acoustical studies for projects that are likely to be exposed to noise levels that exceed the "normally acceptable" standard and for projects that are likely to generate noise in excess of these standards. Impose mitigation measures based on the findings. Noise studies should consider the effects of significant short

	term noise sources (such as passing trains or planes) as well as the average noise levels that may be experienced over a 24- hour period.
Policy EH-7.3	Strive to maintain an exterior noise level of no more than 60 dB Ldn in residential areas. Recognizing that some San Leandro neighborhoods already exceed this noise level, encourage a variety of noise abatement measures that benefit these areas.
Action EH-7.5. A	When approving development or issuing conditional use permits, establish conditions of approval (including construction hours and operating hours) that minimize the potential for noise impacts on nearby properties.
Action EH-7.9	Limit the potential for vibration impacts from construction and ongoing operations to disturb sensitive uses such as housing and schools.
Policy EH-8.2:	Where feasible and appropriate, develop and implement noise reduction measures when undertaking improvements, extensions, or design changes to San Leandro streets.
Policy EH-8.5:	Work with the appropriate parties and agencies to reduce or mitigate the noise and vibration from trains traveling through San Leandro.

San Leandro Municipal Code After a review of the San Leandro Municipal Code, it was determined that that the following policy is applicable to project:

Noise

Chapter 4-1 of the City of San Leandro Municipal Code provides restrictions and regulations for noise within San Leandro. For construction and demolition noise, Section 4-1-1115 (b) includes the following requirements:

Construction-related Noise Near Residential Uses. Construction work or related activity which is adjacent to or across a street or right of way from a residential use, except between the hours of 7 a.m. and 7 p.m. on weekdays, or between 8 a.m. and 7 p.m. on Sunday and Saturday. No such construction is permitted on Federal holidays.

Conflicts with Residential Uses. Subject to the restrictions on constructions contained in subdivision, the sustained operation or use between the hours of 9 p.m. and 8 a.m. of any electric or gasoline powered motor or engine or the repair, modification, reconstruction, testing or operation of any automobile, motorcycle, sweeper, vacuum, public address system, whistle muffler, motorized scooter, machine or mechanical device or other contrivance or facility unless such motor, engine, automobile, motorcycle, sweeper, vacuum, public address system, whistle muffler, motorized scooter, machine or mechanical device is enclosed within a sound insulated structure so as to prevent noise and sound from being plainly audible from any residential property line.

Vibration

Neither the City of San Leandro nor the County of Alameda has specific and/or quantitative regulatory standards for construction or operational vibration sources. San Leandro Zoning Code Part IV, Article 16, Division 3, Provision 4-1670B, Vibration, requires that no use, activity, or process produce vibrations that are perceptible without instruments by a reasonable person at the property lines of a site. This performance standard applies to all land use classifications in all zoning districts.

Hayward 2040 General Plan

Policy HAZ-8.12	The City shall consider potential noise impacts when evaluating proposals for transportation projects, including road, freeway, and transit projects, and will strive to minimize noise impacts through the implementation of mitigation measures.
Policy HAZ-8.20	The City may require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on those uses, to the extent feasible.
Policy HAZ-8.21	The City shall limit the hours of construction and maintenance activities to the less sensitive hours of the day (7:00am to 7:00pm Monday through Saturday and 10:00am to 6:00 pm on Sundays and holidays).
Policy HAZ-8.22	The City shall require a vibration impact assessment for proposed projects in which heavy-duty construction equipment would be used (e.g., pile driving, bulldozing) within 200 feet of an existing structure or sensitive receptor. If applicable, the City shall require all feasible mitigation measures to be implemented to ensure that no damage or disturbance to structures or sensitive receptors would occur.

Hayward Municipal Code

Section 4-1.03.4 of the Hayward Municipal Code (HMC) states that unless otherwise provided pursuant to a duly-issued permit or a condition of approval of a land use entitlement, the construction, alteration, or repair of structures and any landscaping activities, occurring between the hours of 10:00 a.m. and 6:00 p.m. on Sundays and holidays, and 7:00 a.m. and 7:00 p.m. on other days, shall be subject to the following:

a. No individual device or piece of equipment shall produce a noise level exceeding eighty-three (83) dBA at a distance of twenty-five (25) feet from the source. If the device or equipment is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close as possible to twenty-five (25) feet from the equipment.
b. The noise level at any point outside of the property plane shall not exceed eighty-six (86) dBA.
c. During all other times, the decibel levels set forth in Section 4-1.03.1 shall control.

Caltrans Best Practices for Noise Control

Standard Caltrans measures that are used for all projects include that construction noise shall not exceed a maximum sound level of 86 dBA at 50 feet from job site activities between the hours of 9:00 p.m. to 6:00 a.m. The following standard measures will also be implemented to minimize or reduce the potential for noise impacts from project construction:

- Limit paving and demolition activities to 7:00 a.m. to 7:00 p.m., where feasible.
- Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Prohibit unnecessary idling (i.e., greater than 5 minutes in duration) of internal combustion engines within 100 feet of residences.
- Avoid staging of construction equipment within 200 feet of residences and locate all stationary noise-generating construction equipment, such as air compressors, portable

power generators, or self-powered lighting systems as far as practical from noise-sensitive receptors.

- Utilize “quiet” air compressors and other “quiet” equipment where such technology exists.

Impact Discussion

Information in this section is based on the Acoustical Analysis prepared for this project by Kimley Horn in March 2023.[23]

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?

Construction

Less than Significant with Mitigation. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. During construction, exterior noise levels could affect the residential neighborhoods surrounding the construction site. Project construction would occur approximately 10 feet from existing single-family residences at the closest point. However, construction activities would occur throughout the project site and would not be concentrated at a single point near sensitive receptors. Noise levels typically attenuate (or drop off) at a rate of 6 dB per doubling of distance from point sources, such as industrial machinery. During construction, exterior noise levels could affect the residential neighborhoods near the construction site.

Construction activities associated with development of the project would include demolition, grading, and paving. Such activities may require graders, dozers, and tractors during grading; cranes, forklifts, generators, tractors, and welders during construction; and pavers, rollers, mixers, tractors, and paving equipment during paving. Grading and excavation phases of project construction tend to be the shortest in duration and create the highest construction noise levels due to the operation of heavy equipment required to complete these activities. It should be noted that only a limited amount of equipment can operate near a given location at a particular time. Equipment typically used during this stage includes heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, and scrapers. Operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Other primary sources of noise would be shorter-duration incidents, such as dropping large pieces of equipment or the hydraulic movement of machinery lifts, which would last less than one minute. Pile driving would not be used during construction. Table 4-8 depicts the typical construction equipment noise levels associated with the project.

[23] Kimley Horn. 2023. Alameda County Rail Safety Enhancement Program – Acoustical Analysis Alameda County ISMND.

Table 4-8 Typical Construction Equipment Noise Levels

Equipment	Typical Level (dBA) 50 Feet from the Source
Concrete Mixer	85
Concrete Pump	82
Concrete Vibrator	76
Dozer	85
Grader	85
Paver	85
Roller	85
Saw	76
Truck	84

Source: Kimley Horn, 2023

Following the FTA's methodology for quantitative construction noise assessments, the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM) was used to predict construction noise. Per the FTA Transit Noise and Vibration Manual, when calculating construction noise, all construction equipment is assumed to operate simultaneously at the center of the active construction zone. Because in reality, equipment would be operating throughout the site and not all of the equipment would be operating at the point closest to the sensitive receptors and considering the distance between the center of the project site and the sensitive receptors is a reasonable assumption. These assumptions represent the worst-case noise scenario because construction activities would typically be spread out throughout the project site, and thus some equipment would be further away from the affected receptors. In addition, construction noise levels are not constant, and in fact, construction activities and associated noise levels would fluctuate and generally be brief and sporadic, depending on the type, intensity, and location of construction activities. Construction noise would also be acoustically dispersed throughout the project site and will be masked by freeway noise and roadway noise. The noise levels identified in Table 4-9, show the exterior construction noise at the nearest sensitive receptors, without accounting for attenuation from existing physical barriers.

As described above in the Regulatory Setting section, the Alameda County General Plan, San Leandro Municipal Code, and the Hayward Municipal Code limit the hours of construction to the less sensitive hours of the day. The City of San Leandro restricts construction to between 7 a.m. and 7 p.m. on weekdays or between 8 a.m. and 7 p.m. on weekends. The City of Hayward restricts construction to between 10:00 a.m. and 6:00 p.m. on Sundays and holidays and 7:00 a.m. and 7:00 p.m. on other days). Therefore, construction would not occur during normal sleeping hours for residents, which is the most sensitive time for exposure to noise. As described in the Regulatory Setting Section, the Hayward Municipal Code also states that no individual device or piece of equipment shall produce a noise level exceeding 83 dBA at a distance of 25 feet from the source and that the noise level at any point outside of the property plane shall not exceed 86 dBA. The FTA Transit Noise and Vibration Impact Assessment Manual (2018) (FTA Noise and Vibration Manual) identifies a maximum 1-hour noise level standard of 90 dBA L_{eq} at residential uses and 100 dBA L_{eq} at commercial and industrial uses for short-term construction

activities.[24] As shown in Table 4-9, it is anticipated that noise from construction of the proposed project would exceed these limits without implementation of noise reduction measures.

Table 4-9 Project Construction Noise Levels

Construction Phase	Receptor Location		Worst Case Modeled Noise Level, dBA $L_{eq\ (8\text{-}hour)}$ [2]	Jurisdiction	Noise Standard, dBA L_{eq} [3]	Exceeded?
	Land Use	Distance (feet)[1]				
Demolition	Washington Avenue Residential Receptor	300	68.3	San Leandro	90	**No**
	Lewelling Boulevard Residential Receptor	160	73.7	Alameda County		**No**
	Leidig Court Residential Receptor	100	77.8	Hayward	86	**No**
	Tennyson High School Pedestrian Crossing Residential Receptor	80	79.7			**No**
	Tennyson High School Pedestrian Crossing Park Receptor	80	79.7			**No**
	Tennyson Road School Receptor	125	75.9			**No**
	Tennyson Road Residential Receptor	125	75.9			**No**
	Industrial Parkway Residential Receptor	140	74.9			**No**
Grading	Washington Avenue Residential Receptor	300	71.3	San Leandro	90	**No**
	Lewelling Boulevard Residential Receptor	160	76.8	Alameda County		**No**
	Leidig Court Residential Receptor	100	80.9	Hayward	86	**No**
	Tennyson High School Pedestrian Crossing Residential Receptor	80	82.8			**No**
	Tennyson High School Pedestrian Crossing Park Receptor	80	82.8			**No**
	Tennyson Road School Receptor	125	78.9			**No**
	Tennyson Road Residential Receptor	125	78.9			**No**
	Industrial Parkway Residential Receptor	140	77.9			**No**
Paving	Washington Avenue Residential Receptor	300	66.9	San Leandro	90	**No**
	Lewelling Boulevard Residential Receptor	160	72.4	Alameda County		**No**
	Leidig Court Residential Receptor	100	76.5	Hayward	86	**No**
	Tennyson High School Pedestrian Crossing Residential Receptor	80	78.4			**No**
	Tennyson High School Pedestrian Crossing Park Receptor	80	78.4			**No**
	Tennyson Road School Receptor	125	74.5			**No**

[24] Transit Noise and Vibration Impact Assessment Manual (dot.gov), at p. 179, last accessed 4/13/23, https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Construction Phase	Receptor Location		Worst Case Modeled Noise Level, dBA $L_{eq\ (8\text{-}hour)}$ [2]	Jurisdiction	Noise Standard, dBA L_{eq} [3]	Exceeded?
	Land Use	Distance (feet)[1]				
	Tennyson Road Residential Receptor	125	74.5			**No**
	Industrial Parkway Residential Receptor	140	73.5			**No**
Building Construction	Washington Avenue Residential Receptor	300	67.3	San Leandro	90	**No**
	Lewelling Boulevard Residential Receptor	160	72.8	Alameda County		**No**
	Leidig Court Residential Receptor	100	76.8	Hayward	86	**No**
	Tennyson High School Pedestrian Crossing Residential Receptor	80	78.8			**No**
	Tennyson High School Pedestrian Crossing Park Receptor	80	78.8			**No**
	Tennyson Road School Receptor	125	74.9			**No**
	Tennyson Road Residential Receptor	125	74.9			**No**
	Industrial Parkway Residential Receptor	140	73.9			**No**

Source: Federal Highway Administration, *Roadway Construction Noise Model,* 2006.

1. Distance measured from the center of the project site to the receptor's nearest property line.
2. Modeled noise levels conservatively assume the simultaneous operation of all pieces of equipment.
3. The Hayward Municipal Code also states that the noise level at any point outside of the property plane shall not exceed 86 dB. Neither the City of San Leandro nor the County of Alameda has specific and/or quantitative regulatory standards for construction, therefore the FTA noise level standard of 90 dBA L_{eq} at residential uses for short-term construction activities is used.

As indicated in Table 4-8, construction noise levels at the project site would range between 67.3 dBA and 82.8 dBA at the nearest sensitive receptor and would not exceed the Hayward Municipal Code 86 dBA noise limit or the FTA noise level standard of 90 dBA L_{eq}. Further, these assumptions represent the worst-case noise scenario because construction activities would typically be spread out throughout the project site, and thus some equipment would be further away from the affected receptors. In addition, construction noise levels are not constant, and in fact, construction activities and associated noise levels would fluctuate and generally be brief and sporadic, depending on the type, intensity, and location of construction activities. Construction noise would also be acoustically dispersed throughout the project site and will be masked by freeway noise and roadway noise. However, the project contractor would implement **Mitigation Measure NOI-1** to ensure levels of construction noise for nearby sensitive receptors at all crossing locations do not exceed the applicable noise standards.

Implementation of **Mitigation Measure NOI-1** would minimize construction noise impacts on the off-site nearby sensitive receptors and would implement all technically and economically feasible measures to reduce construction noise, consistent with the requirements of San Leandro and Hayward Municipal Codes and the Alameda County General Code.

Mitigation Measure NOI-1: The project contractor shall implement the following measures during construction of the project:

- Equip all construction equipment, fixed of mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active crossing.
- Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active crossing during all project construction.
- Construction haul trucks and materials delivery traffic shall avoid residential areas whenever feasible.
- Prohibit extended idling time of internal combustion engines by either shutting equipment off when not in use or reducing the maximum idling time to 5 minutes.
- Ensure that all general construction related activities are restricted to between the hours of 7:00 a.m. and 7:00 p.m. on Monday through Saturday and between the hours of 10:00 a.m. and 6:00 p.m. on Sundays and holidays.
- Designate a "disturbance coordinator" at the City of Hayward who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem, and ensure noise levels do not exceed noise ordinances standards.

With implementation of **Mitigation Measure NOI-1** at all crossings, the level of noise generated during construction at all crossing locations would be less than significant. Although construction noise is not expected to exceed Hayward's 86 dBA construction noise threshold outside the project boundary, the project will seek the necessary permits for increased noise levels as a precautionary measure.

Operation

No Impact. During operation, the improved crossings would function similar to the existing conditions. Vehicular traffic and pedestrians would be able to use the crossings as they do under existing conditions, but with improved safety. Operation of the project would not change the frequency or speed of existing trains along UPRR tracks or effect the volume of vehicles using the crossing. Since no change in vehicle or train trips and no new vehicle trips are generated by the project there would be no impact to operational noise as a result of project operation.

b) Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant. Construction activities have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. The effects of ground vibration may be imperceptible at lowest levels, low rumbling sounds and detectable vibrations at moderate levels, and damage to nearby structures at the highest levels. Project construction would result in vibration levels that would be felt in the immediate vicinity of construction activities and may be felt at nearby properties. Project operation would not have the potential to result in notable vibration.

The ground vibration levels associated with various types of construction equipment are summarized in Table 4-10, which lists vibration levels at 10 and 25 feet for typical construction equipment. Based on FTA data, vibration velocities from typical heavy construction equipment operations that would be used

during project construction range from 0.003 to 0.192 in/sec peak particle velocity from 10-25 feet from the source of the activity.

Table 4-10 Typical Construction Equipment Vibration Levels

Equipment	Typical Level (dBA)[1] 10 Feet from Sensitive Receptors	Typical Level (dBA)[1] 25 Feet from Sensitive Receptors
Large Bulldozer	0.192	0.089
Loaded Trucks	0.164	0.076
Rock Breaker	0.127	0.059
Jackhammer	0.075	0.035
Small Bulldozer/Tractors	0.007	0.003

Source: Kimley Horn, 2023

Notes: [1]Calculated using the following formula: $PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$, where: PPV_{equip} = the peak particle velocity in in/sec of the equipment adjusted for the distance; PPV_{ref} = the reference vibration level in in/sec from Table 7-4 of the Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Manual*, 2018; D = the distance from the equipment to the receiver.

As noted in Table 4-10, the highest vibration levels would occur during large bulldozer operations. In general, other construction activities would occur throughout the existing crossings and would not be concentrated at the point closest to the nearest residential structures. Therefore, impacts associated with vibration would be less than significant, and no mitigation is required.

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?

Less than Significant. The Oakland International Airport is located approximately 3.9 miles northeast of the Marina Boulevard crossing. Additionally, the Hayward Executive Airport is approximately 1.6 miles from the Lewelling Boulevard crossing. All existing crossings are located outside of the 65 dBA CNEL noise contours for the Oakland International Airport, and Hayward Executive Airport, respectively. Exterior noise levels resulting from aircraft would be compatible with the project. Therefore, this impact would be less than significant, and no mitigation is required.

4.14 Population and Housing

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
Would the project:				
a) Induce substantial 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?	☐	☐	☐	☒

Impact Discussion

a) Induce substantial 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)?

No Impact. The project is limited to transportation safety improvements at existing railroad crossings and does not include the construction of residential units. The project would not result in a substantial increase in employment such that population growth could be induced indirectly. Therefore, no impact would occur, and no mitigation is required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. There are no existing residential uses on the existing crossings; therefore, the project would not displace individuals or residents, necessitating the construction of replacement housing elsewhere. Therefore, no impact would occur, and no mitigation is required.

4.15 Public Services

	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:				
i) Fire protection?	☐	☐	☐	☒
ii) Police protection?	☐	☐	☐	☒
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Environmental Setting

Fire Protection

The Alameda County Fire Department (ACFD) serves and provides fire protection and emergency services to the City of San Leandro and unincorporated Alameda County existing crossings. ACFD currently employs 475 full-time personnel and 50 volunteer reserve staff members. ACFD aims for a city-wide response time of less than 7:30 minutes for 90 percent of all high-level emergency calls. In 2017, SCFD delivered service to 90 percent of all incidents in 7:53 minutes. ACFD is comprised of 29 fire stations, including Stations 9, 12, and 13 that would serve the City of San Leandro and unincorporated Alameda County existing crossings.

The Hayward Fire Department (HFD) serves and provides fire protection and emergency services to the City of Hayward. HFD maintains optimum staffing levels for sworn, civilian, and support staff to provide quality protection to the community. HFD aims for a response time of five minutes for the first unit to arrive on scene, and eight minutes for all remaining units to arrive on scene for 90 percent of all high-level emergency calls. HFD Station 7 would service the Tennyson High School pedestrian crossing, Tennyson Road, and Industrial Parkway West existing crossings.

Police Protection

The Alameda County Sheriff's Office (ACSO) provides law enforcement to the unincorporated areas of Alameda County and maintains contracts with Alameda-Contra Costa Transit District for police services. ACSO currently employs over 1,000 sworn officers, operating multiple locations across Alameda County. The ACSO is the closest police department office to the project site at about 1.12 miles east of the Washington Avenue crossing.

The following closest police office to the project site is the Hayward Police Department (HPD), operated by 300 members and led by Chief Toney Chaplin. HPD serves and provides emergency services to the City of Hayward, with a response time of approximately five minutes for 90 percent of all high-level emergency calls. HPD resides approximately 1.8 miles from the Tennyson High School pedestrian crossing.

Schools

The existing crossings are located within the San Leandro Unified School District and the Hayward Unified School District. There are approximately 16 schools within 0.5 miles of the existing crossings. The closest is Tennyson High School at approximately 0.1 mile from the Tennyson High School pedestrian crossing. Schools within 0.5 mile of each existing crossing can be found below:

- Marina Boulevard (Coast Subdivision): Principal Academy (0.3 mile) and Lincoln High School (0.5 mile)
- Washington Avenue: James Monroe School (0.4 mile) and Montessori School at Washington Avenue (0.44 mile)
- Hesperian Boulevard: San Lorenzo Unified School District office (0.3 mile) and Kidango Preschool (0.3 mile)
- Lewelling Boulevard: San Lorenzo High School (0.1 mile), St. Johns School (0.3 mile), Colonial Acres Elementary School (0.4 mile), and San Lorenzo Unified School District office (0.3)
- Leidig Court: Shepard Elementary School (0.5 mile), Tyrell Elementary School (0.3 mile), St. Bede Catholic School (0.5 mile), and Glassbrook Elementary School (0.5 mile)
- Tennyson High School Pedestrian Crossing: Tennyson High School (0.1 mile), Shepard Elementary School (0.5 mile), Tyrell Elementary School (0.3 mile), St. Bede Catholic School (0.5 mile), and Glassbrook Elementary School (0.4 mile)
- Tennyson Road: Tennyson High School (0.4 mile), Shepard Elementary School (0.4 mile), Tyrell Elementary School (0.3 mile), St. Bede Catholic School (0.4 mile), and Glassbrook Elementary School (0.4 mile)
- Industrial Parkway: Cesar Chavez Middle School (1.4 mile)

Library Services

The San Lorenzo Library and the Hayward Public Library are the two main libraries within the two cities that the existing crossings traverse. The San Lorenzo Library is a publicly funded and managed library affiliated with the Alameda County Library. The current facility opened in 1968 as the original branch of the Alameda County Library. The current Hayward Public Library was originally established in 1951 on Mission Boulevard in the historic Don Guillermo Castro Plaza site as a replacement of the original 1867 library. The closest library to the project site is the South Branch Library, approximately 0.6 mile from the Washington Avenue crossing. The South Branch Library is run by Director David Bohne and is

affiliated with the San Leandro Public Library. There are no libraries located within a 0.5-mile radius of the existing crossings.

Regulatory Setting

State

Quimby Act – California Code Sections 66475-66478

The Quimby Act (California Government Code Sections 66475-66478) was approved by the California legislature to preserve open space and parkland in the state. The Quimby Act authorizes local governments to establish ordinances requiring developers of new subdivisions to dedicate parks, pay an in-lieu fee, or perform a combination of the two. As described below, the city has adopted a Parkland Dedication Ordinance and a Park Impact Ordinance, consistent with the Quimby Act.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating impacts to public service systems resulting from planned development within the project area. The Alameda County General Plan policies are applicable to the Lewelling Boulevard crossing location only, due to the crossing being located in unincorporated Alameda County. Additionally, review of the San Leandro 2035 General Plan and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

Policy P2	Adequate emergency water flow, emergency vehicle access and evacuation routes shall be incorporated into any new development prior to project approval.

San Leandro 2035 General Plan

Policy OSC-1.11	Projects with Impacts on Parks and Recreation. Require that capital improvement or development projects with the potential to adversely affect or temporarily disrupt San Leandro's park operations and open spaces include measures to mitigate impacts. This should include projects outside the city limits, such as work by EBMUD on Lake Chabot Dam and in the San Leandro watershed.
Policy EH-6.11	Prepare for the weather-related impacts of climate change, such as more frequent extreme weather events, temperature extremes, and prolonged drought. Street rights-of-way, parks, and other public spaces, including such features as street trees and landscaping, should be designed to be more resilient to such events.

Hayward 2040 General Plan

Policy CS-2.4	The City shall strive to arrive at the scene of Priority 1 Police Calls within 5 minutes of dispatch, 90 percent of the time.

Impact Discussion

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:

i. Fire Protection?

No Impact. Fire protection services are currently provided at the existing crossings by the ACFD for San Leandro and Unincorporated Alameda County; and HFD for Hayward. The project would adhere with current fire codes to reduce potential fire hazards. Because the project would not include housing or other uses that would induce substantial growth in the area, the project would not increase demand on fire protection providers such that new facilities would be required. Therefore, there would be no impact, and no mitigation is required.

ii. Police Protection?

No Impact. Police protection services are currently provided at the existing crossings by the ACPD for San Leandro and Unincorporated Alameda County; and HPD for Hayward. The project would be consistent with appropriate safety measures to minimize criminal activity. Because the project would not include housing or other uses that would induce substantial growth in the area, the project would not increase demand on police protection providers such that new facilities would be required. Therefore, there would be no impact, and no mitigation is required.

iii. Schools?

No Impact. The project would not include any residential uses. The project would include pedestrian and safety improvements at existing railroad crossings. Due to the nature of the project, safer sidewalk connectivity will provide safer pedestrian travel routes for existing residents to schools. As the project is a safety improvement project, the project would not have an impact on schools, and no mitigation is required.

iv. Parks?

No Impact. The project would not include any residential uses. The project would include pedestrian and safety improvements at existing railroad crossings. Due to the nature of the project, safer sidewalk connectivity will provide safer pedestrian travel routes for existing residents to parks, and recreational facilities. As the project is a safety improvement project, the project would not have an impact on park and recreation facilities, and no mitigation is required.

v. Other public facilities?

No Impact. Open space and other public facilities such as libraries are typically provided to serve residents within their respective jurisdictions. Given the project has no residential component, project implementation would not increase demand for other public facilities. Therefore, no impact would occur, and no mitigation is required.

4.16 Parks and Recreation

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
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?	☐	☐	☐	☒

Environmental Setting

The Alameda County Recreation Plan contains general, county-wide preliminary plan proposals, and policies to establish a diversified but orderly environment to best meet current and future needs of the community. Responsibility for the preparation, adoption, and carrying out of the recreation plan is shared by the County's legislative bodies, planning commission and staff, other public officials in city and county governments, and by the local citizens within the County.[25]

The San Leandro Recreation and Human Services Department is responsible for enhancing the quality of life for all residents. The department is broken up into three divisions: Administration, Human Services, and Recreation. The City of San Leandro itself contains 21 parks throughout the city and one recreation complex.[26] The closest parks in proximity to the existing crossings are Halcyon Park, Floresta Park, and Heath Park, situated approximately 0.3, 0.4, and 0.5 miles away from the Washington Avenue crossing, respectively. There are no open space and recreation land uses present on or adjacent to the existing crossings within the City of San Leandro.

The Hayward Area Recreation District is an independent special use district that has been created to provide park and recreational services to the citizens of the City of Hayward. The recreation and park district encompasses 100 square miles and includes the City of Hayward and unincorporated communities of Castro Valley, San Lorenzo, Ashland, Cherryland, and Fairview. According to the City of Hayward's Parks and Facilities map, the City of Hayward contains a total of 75 recreation areas which include numerous parks, aquatic centers, community centers, and more.[27] The closest parks in proximity to the project site are Sorensdale Park, Tennyson Park, and Valle Vista Park residing approximately 0.1 miles from the Tennyson High School pedestrian crossing, approximately 0.2 miles from the Tennyson Road crossing, and approximately 0.5 miles from the Industrial Parkway West crossing, respectfully.

[25] Alameda County. 1994. The Recreation Plan. 1994. Available: https://www.acgov.org/cda/planning/generalplans/documents/The_Recreation%20_Plan.pdf. Accessed: May 2021.

[26] City of San Leandro. 2021. San Leandro City Parks. 2021. Available: https://www.sanleandro.org/depts/rec/parks/default.asp. Accessed: May 2021.

[27] City of Hayward. 2021. Hayward Area Recreation & Park District. 2021. Available: https://www.haywardrec.org. Accessed: May 2021.

There are no open space and recreation land uses present on or adjacent to the existing crossings within the City of Hayward.

Regulatory Setting

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating impacts to parks and recreational activity resulting from planned development within the project area. After review of the San Leandro 2035 General Plan and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

The Alameda County General Plan does not have applicable policies regarding Parks and Recreation.

San Leandro 2035 General Plan

Open Space, Parks, and Conservation Element

Policy OSC – 1.11	Require that capital improvement or development projects with the potential to adversely affect or temporarily disrupt San Leandro's park operations and open spaces include measures to mitigate impacts.
Policy OSC – 2.2	Allow no net loss of open space within San Leandro's parks and recreational facility system. In the event that land currently included in the City's park inventory is to be converted to a non-park related purpose, an area of equivalent or larger acreage shall be set aside as parkland.
Goal OSC – 5	Protect San Leandro Creek as a renewed open space and natural resource, a green connection between the San Leandro Hills and San Francisco Bay, and a core part of San Leandro's identity.
Policy OSC – 5.2	Creekside Development. Require new development adjacent to San Leandro Creek to maintain setbacks from the top of the creek bank, dedicate public access easements for creekside amenities, and where appropriate, undertake improvements such as erosion control, habitat restoration, vegetation management, bank stabilization, and trail dedication. Development and/or recreational improvements should be coordinated with appropriate state and federal resource agencies.

Hayward 2040 General Plan

Goal NR-3:	Preserve, enhance, and expand natural baylands, wetlands, marshes, hillsides, and unique ecosystems within the Planning Area in order to protect their natural ecology, establish the physical setting of the city, provide recreational opportunities, and assist with improved air quality and carbon dioxide sequestration.

Impact Discussion

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?

No Impact. The project would not include any residential uses, nor would it result in employment-related growth. As such, there would not be an increase in the use of parks and recreational facilities and contribute to physical deterioration of those facilities. No impact would occur and no mitigation is required.

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?

No Impact. The project would not include any residential uses, nor would it result in employment-related growth. As such, there would not be an increase in the use of parks and recreational facilities or require the construction or expansion of recreational facilities. No impact would occur, and no mitigation is required.

4.17 Transportation/Traffic

	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) Conflict or be consistent 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?	☐	☐	☐	☒

Environmental Setting

The following discussion qualitatively analyzes potential impacts on the local transportation network.

Regional Access

Regional access to the existing crossings is provided by Interstate 880 (I-880), located east of the existing crossings. I-880 is an east-west interstate which extends north through Alameda County and south towards San José. Primary access to and from the I-880 is provided via various on-and-off ramps near the existing crossings.

Local Access

Roadways that provide primary vehicular circulation to the existing crossings include Marina Boulevard, Washington Avenue, Hesperian Boulevard, Lewelling Boulevard, Huntwood Avenue, Tennyson Road, and Industrial Parkway. Access provided by each roadway is discussed below:

- **Marina Boulevard** is a four-lane side street that begins at Washington Avenue and connects residential neighborhoods and local businesses to downtown San Leandro.
- **Washington Avenue** is a four-lane side street that begins on W Juana Avenue and connects local businesses and residential neighborhoods to northern and southern portions of San Leandro.
- **Hesperian Boulevard** is a four-lane side street that begins on route 185 and connects local businesses and residential neighborhoods from the northeastern portion of San Leandro to the southern portion.
- **Lewelling Boulevard** is a four-lane side street that begins on route 185 and connects local businesses and residential neighborhoods to downtown San Leandro.
- **Huntwood Avenue** is a two-lane road that begins on Gading Road and connects residential neighborhoods to local and industrial businesses.

- **Tennyson Road** changes between a two and three lane road that begins on route 238 and connects open space and residential neighborhoods to local and industrial businesses.
- **Industrial Parkway** changes between a two and four-lane road that begins on route 238 and connects residential neighborhoods to local and industrial businesses.

Regulatory Setting

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating impacts to transportation systems and traffic resulting from planned development within the project area. After review of the San Leandro 2035 General Plan, and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

The Alameda County General Plan does not have applicable policies regarding Transportation/Traffic.

San Leandro 2035 General Plan

Policy EH-3.2	Promote strategies that help improve air quality and reduce GHG emissions by reducing the necessity of driving. These strategies include more reliable public transportation, carpooling and vanpooling programs, employer transportation demand management programs, better provisions for bicyclists and pedestrians, and encouraging mixed use and higher density development around transit stations.

Hayward 2040 General Plan

Policy M-3.12	The City shall continue to implement the Americans with Disabilities Act when designing, constructing, or improving transportation facilities.
Policy M-4.1	The City shall strive to address traffic operations, including traffic congestion, intersection delays, and travel speeds, while balancing neighborhood safety concerns.
Policy M-5.2	The City shall strive to create and maintain a continuous system of connected sidewalks, pedestrian paths, creek sidewalks, and utility greenways throughout the city that facilitates convenient and safe pedestrian travel, connects neighborhoods and centers, and is free of major impediments and obstacles.
Policy M-5.4:	The City shall require that sidewalks, wherever possible, be developed at sufficient width to accommodate pedestrians including the disabled; a buffer separating pedestrians from the street and curbside parking; amenities; and allow for outdoor uses such as cafes.
Policy M-5.6:	The City shall strive to improve pedestrian safety at intersections and mid-block locations by providing safe, well-marked pedestrian crossings, bulb-outs, or median refuges that reduce crossing widths, and/or audio sound warnings.

Policy M-5.7: The City shall develop safe and convenient pedestrian facilities that are universally accessible, adequately illuminated, and properly designed to reduce conflicts between motor vehicles and pedestrians.

Impact Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant. Project construction would add vehicle trips to nearby roadways as construction workers and vehicles enter and exit the project area. However, construction related trips represent a negligible traffic increase that would cease after construction and would not permanently affect traffic circulation in the area. Once construction equipment is in place, there would be no interruptions to traffic service during the construction period. Operation of the project would be similar to existing conditions with improved safety for automobiles, pedestrians and bicyclists at the railroad crossings. Therefore, the project would comply with applicable plans, and any impacts to the circulation system will be less than significant, and no mitigation is required.

b) Conflict or be consistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less than Significant. The project has been evaluated in conformance with CEQA Guidelines Section 15064.3 and would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b). Generally, VMT is the most appropriate measure of transportation impacts. For the purpose of this analysis, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to the project. Construction related traffic impacts would be negligible and are temporary in nature. The improved crossings will function similar to existing conditions.

The project would not include land uses that represent new sources of automobile trips, such as residences, offices, or public parks. The project would improve safety at existing railroad crossings. Additionally, the project would provide safer alternative travel routes for non-motorized travelers that would generally reduce VMT. Therefore, the project would not permanently increase regional miles travelled, and this impact would be less-than-significant, and no mitigation is required.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The project would improve safety at existing rail crossings. This would result in a beneficial impact by reducing hazards, and no mitigation is required.

d) Result in inadequate emergency access?

No Impact. Emergency access to the crossings would continue to be provided by the existing roadways. The project would comply with all emergency access standards of the Alameda County Fire and Police Department. Therefore, the project would not result in inadequate emergency access. No impact would occur, and no mitigation is required.

4.18 Tribal Cultural Resources

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
a) 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:				
i) 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)?	☐	☒	☐	☐
ii) 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.	☐	☒	☐	☐

Environmental Setting

Tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe that are listed, or determined to be eligible for listing, in the national, state, or local register of historical resources. Additionally, a tribal cultural resource may be a resource that the Lead Agency determines, in its discretion, is a tribal cultural resource. Cultural resources are generally defined as traces of human occupation and activity that include prehistoric and historic archaeological sites, districts, and objects; standing historic structures buildings, districts, and objects; and locations of important historic events of sites of traditional and/or cultural importance to various groups. Tribal cultural resources signify the intent to protect resources specifically of cultural value to a tribe. Specifically, the criteria set forth in subdivision (c) of PRC Section 5024.1 protect the following resources:

(c) A resource may be listed as a historical resource in the California Register if it meets any of the following NRHP criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- Is associated with the lives of persons important in our past.
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- Has yielded, or may be likely to yield, information important in prehistory or history.

No tribal lands are listed within Alameda County.[28] The closest tribal land listed is Lytton, located in Contra Costa County.

As part of the process of identifying cultural resources in or near the existing crossings, the NAHC was contacted on April 8, 2021, to request a review of the Sacred Lands File (SLF). The SLF is an inventory of places of cultural or traditional significance to California Native American tribes. The NAHC emailed a response on April 21, 2021, stating that the results of the SLF search were negative for sensitivity for the presence of Native American cultural resources within the existing crossings, and provided a list of ten local Native American contacts. It is assumed that the Alameda CTC will conduct consultation pursuant to Assembly Bill (AB) 52. Therefore, there have not been duplicated outreach efforts to the Native American contacts provided by the NAHC.

Regulatory Setting

State

Native American Tribal Cultural Resources

On September 25, 2014, Governor Edmund G. Brown signed Assembly Bill 52 (AB 52), creating a new category of environmental resources (tribal cultural resources), which must be considered under CEQA. The legislation includes new requirements for consultation regarding projects that may affect a tribal cultural resource, a definition of "tribal cultural resource", and a list of recommended mitigation measures. AB 52 also requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area if they have requested to be notified of projects proposed within that area. Where a project may have a significant impact on a tribal cultural resource, consultation is required until the parties agree to mitigate or avoid a significant impact on a tribal cultural resource or when it is concluded that mutual agreement cannot be reached.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating impacts to tribal cultural resources resulting from planned development within the project area. After review of the San Leandro 2035 General Plan and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

The Alameda County General Plan does not have applicable policies regarding Tribal Cultural Resources.

[28] Environmental Protection Agency. 2011. California Tribal Lands 2011. Available: https://www3.epa.gov/region9/air/maps/pdfs/air1100040_3.pdf. Accessed: May 2021.

San Leandro 2035 General Plan

Historic Preservation and Community Design Element

Policy CD-1.12:	Recognize the potential for paleontological, prehistoric, historic, archaeological, and tribal cultural resources and ensure that future development takes the measures necessary to identify and preserve such resources.
Policy CD-2.1:	Recognize the importance of local historic and cultural resources in the City's long-range planning activities, including the General Plan, specific plans, and neighborhood or area plans.
Policy CD-2.2:	Ensure that day-today planning and building activities, including the issuance of building permits, demolition permits, zoning approvals, site plan approvals, and use permits, are consistent with and further the achievement of local historic preservation goals.

Hayward 2040 General Plan

Goal LU-8:	Preserve Hayward's historic districts and resources to maintain a unique sense of place and to promote an understanding of the regional and community history.
Policy LU-8.1:	The City shall recognize the value and co-benefits of local historic preservation, including job creation, economic development, increased property values, and heritage tourism.
Policy LU-8.3:	The City shall maintain and implement its Historic Preservation Ordinance to safeguard the heritage of the city and to preserve historic resources.
Policy LU-8.13:	The City shall consider historical and cultural resources when developing planning studies and documents.
Policy LU-8.14:	The City shall prohibit the demolition of historic resources unless one of the following findings can be made: The rehabilitation and reuse of the resource is not structurally or economically feasible, the demolition is necessary to protect the health, safety, and welfare of the public, or the public benefits of demolition outweigh the loss of the historic resource.

Impact Discussion

Information in this section is based on the Cultural Resources Study prepared for this project by Rincon Consultants in July 2021.[29]

a) 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:

[29] Rincon Consultants, Inc. 2021. Cultural Resources Study, Alameda County Transportation Commission Rail Safety Enhancement Program: San Leandro and Hayward, Alameda County, California.

i. 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)?

Less than Significant with Mitigation. As stated above in Section 4.5 Cultural Resources, the likelihood of encountering archeological or other buried cultural resources could occur during ground moving construction work.

An SLF search was requested on April 8, 2021. The SLF, operated by the NAHC, is a confidential set of records containing places of religious or social significance to Native Americans. A response from the NAHC was received on April 21, 2021, stating that the results of the SLF search were negative for sensitivity for the presence of Native American cultural resources within the project site. Alameda CTC will be conducting tribal consultation with the suggested tribes, as required under AB-52. Results of the tribal consultation will be incorporated into the Final ISMND.

In addition to tribal consultation, implementation of **Mitigation Measure CUL-1** and **Mitigation Measure CUL-2** at all crossing locations would ensure any previously unidentified Native American archeological resources or remains encountered during construction are handled appropriately. With implementation of these mitigation measures, impacts to tribal cultural resources would be less than significant.

ii. 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.

Less than Significant with Mitigation. As stated in Section 4.5, Cultural Resources, the likelihood of encountering archeological or other buried cultural resources could occur during ground moving construction work. In addition to tribal consultation, implementation of **Mitigation Measure CUL-3** at both crossing locations would ensure any previously unidentified Native American archeological resources or remains encountered during construction are handled appropriately. With implementation of these mitigation measures, impacts to tribal cultural resources would be less than significant with mitigation.

4.19 Utilities and Service Systems

	Significant Impact	Less than Significant with Mitigation	Less-than-Significant Impact	No Impact
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?	☐	☐	☐	☒

Environmental Setting

The following discussion qualitatively analyzes potential impacts on local utility providers.

Potable Water

The EBMUD supplies water services to the City of San Leandro. Ninety percent of EBMUD's potable water comes from the 577-square mile watershed of the Mokelumne River on the western slope of the Sierra Nevada.[30]

[30] East Bay Municipal Utility District, 2021. Available: https://www.ebmud.com/water/about-your-water/drink-tap/#:~:text=Most%20of%20EBMUD's%20water%20comes,slope%20of%20the%20Sierra%20Nevada. Accessed: March 2021.

EBMUD has approved and adopted an UWMP and WSCP on June 28, 2016. The city did not include projected increases in water demand due to densification and intensification of both residential and non-residential land uses.

For unincorporated Alameda County, Alameda County Water District supplies water services to the Lewelling Boulevard crossing. Water supplies are imported into the District service area through the South Bay Aqueduct and Hetch-Hetchy Aqueduct. Local supplies include fresh groundwater from the Niles Cone Groundwater Basin (underlying the District service area), desalinated brackish groundwater from portions of the groundwater basin previously impacted by seawater intrusion, and surface water from the Del Valle Reservoir.

The SFPUC supplies water to the City of Hayward. The City of Hayward buys its water from the Hetch Hetchy Regional Water System which flows from the SFPUC system to Hayward through two pipelines – a 24" pipeline that travels down Mission Blvd and a second a 42" pipeline that travels down Hesperian Boulevard The two pipelines are looped so the entire city has redundant water supply lines.

Wastewater

The City of San Leandro is responsible for maintaining the City-owned sewer mains and lower sewer laterals. The City of San Leandro has updated it Sewer System Management Plan (SSMP) to meet the requirements established by the SWRCB Order 2006-0003, statewide General Discharge Requirements of Sanitary Sewer Systems. The goal of the SSMP is to minimize the frequency and severity of sanitary sewer overflows. The SSMP covers the management, planning, design, operation and maintenance of the City's sanitary sewer system. The update of the SSMP was completed in January 2017.

Wastewater needs for unincorporated Alameda County are provided by Castro Valley Sanitary District and Oro Loma Sanitary District. Both Castro Valley Sanitary District and Oro Loma Sanitary District have updated their SSMP's in January 2019.

For the City of Hayward, the city is responsible for maintaining the city-owned sewer mains and lower sewer laterals. The SSMP covers the management, planning, design, operation, and maintenance of the City's sanitary sewer system. The City of Hayward has updated its SSMP in March 2021.

Solid Waste

Solid waste collection services for all existing crossings are provided by Waste Management of Alameda County. Solid waste generated by the project would be collected by Waste Management of Alameda County.

Natural Gas and Electricity Services

Electric and gas services within the City of San Leandro are provided by Pacific Gas and Electric. No new generation peak capacity is necessary to meet the capacity requirements of new construction.

Both unincorporated Alameda County and Hayward are serviced by East Bay Community Energy. No new generation peak capacity is necessary to meet the capacity requirements of new construction.

Regulatory Setting

State

Assembly Bill 939

Assembly Bill 939 (AB 939) relates to solid waste diversion requirements for the State of California. In 1995, all jurisdictions in California were required by AB 939 to divert 25 percent of waste generation

from landfill. By the year 2000, all California Jurisdictions were required to divert 50 percent of waste generation from landfills.

Solid Waste Disposal Measurement System Act

The Solid Waste Disposal Measurement System Act (SB 1016) was passed in 2008 and required the AB 939 50 percent diversion requirement to be calculated in a per capita disposal rate equivalent.

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating impacts to utility and service systems resulting from planned development within the project area. After review of the San Leandro 2035 General Plan and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

Goal 3	To reduce hazards related to flooding and inundation.
Policy P1	Within flood hazard areas, all new construction of buildings, structures, and portions of buildings and structures, including substantial improvement and restoration of substantial damage to buildings and structures, shall be designed and constructed to resist the effects of flood hazards and flood loads.
Policy P2	Surface runoff from new development shall be controlled by on-site measures including, but not limited to structural controls and restrictions regarding changes in topography, removal of vegetation, creation of impervious surfaces, and periods of construction such that the need for off-site flood and drainage control improvements is minimized and such that runoff from development will not result in downstream flood hazards.
Policy P5	Both public and private service facilities and utilities in existing 100-year flood zones, shall be flood-proofed to a point at, or above, the base flood elevation.
Policy P9	Development shall comply with applicable NPDES requirements.

San Leandro 2035 General Plan

The following goals and policies outlined in the Environmental Hazards, and the Open Space, Parks, and Conservation elements of the San Leandro General Plan:

Goal EH-4	Maintain and improve water quality in San Leandro's creeks, wetlands, and offshore waters.
Policy EH-4.1	Urban Runoff Control. Continue to implement water pollution control measures aimed at reducing pollution from urban runoff. These measures should emphasize best management practices by residents, businesses, contractors, and public agencies to ensure that surface water quality is maintained at levels that meet state and federal standards.

Policy EH-4.6	Illicit Discharges. Control illicit discharges into the City's stormwater system through inspections, compliance evaluations, enforcement programs, and tracking activities.
Policy EH-4.7	Pre-Treatment Requirements. Maintain and enforce pre-treatment requirements for industries as needed to minimize the discharge of potentially toxic materials into the City's sanitary sewer system.
Policy EH-4.10	Groundwater Protection. Protect San Leandro's groundwater from the potentially adverse effects of urban uses. Future land uses should be managed to reduce public exposure to groundwater hazards and minimize the risk of future hazards.
Policy OSC-7.4:	Development Standards. Maintain local planning and building standards that require the efficient use of water through such measures as low-flow plumbing fixtures and water-saving appliances. Require water conservation measures as a condition of approval for major developments.

Hayward 2040 General Plan

Policy PFS-5.6:	The City shall impose appropriate conditions on grading projects performed during the rainy season to ensure that silt is not conveyed to storm drainage systems.
Policy PFS-7.12:	The City shall require demolition, remodeling, and major new development projects to salvage or recycle asphalt and concrete and all other non-hazardous construction and demolition materials to the maximum extent practicable.

Impact Discussion

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?

No Impact. The water and sewer utilities systems for the City of San Leandro, the City of Hayward, and unincorporated Alameda County currently serve the existing crossings. The project would not require the relocation or construction of new utility systems. Therefore, no impact would occur, and no mitigation is required.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

No Impact. The water and sewer utilities systems for the City of San Leandro, City of Hayward, and unincorporated Alameda County currently serve the existing crossings. The project would not require the use of potable water and would not require additional resources or entitlements to serve the project. Therefore, no impact would occur, and no mitigation is required.

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?

No Impact. As stated above, all water and sewer utilities system have available capacity to serve the project. The project would improve safety features of existing crossings and is not anticipated to increase wastewater generation. Therefore, no impact would occur, and no mitigation is required.

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?

Less than Significant. Construction activities such as demolition, grading, and paving would generate construction debris and excavated materials on site. Where feasible, such material would be used on site or recycled to reduce impacts on local and regional landfills. Material that cannot feasibly be used on site or recycled would be off-hauled by trucks to the various landfills associated with the respective cities. Once operational, solid waste would not be generated by the project. Given this, the project would be served by the various landfill with sufficient capacity to service the project during construction. There would be a less-than-significant impact, and no mitigation is required.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. Construction activities such as demolition, grading, and paving would generate construction debris and excavated materials on site. Where feasible, such material would be used on site or recycled to reduce impacts on local and regional landfills. Once operational, the project would not generate solid waste. Therefore, the project would not result in a net increase of solid waste that would jeopardize the City of San Leandro's, City of Hayward's, or Alameda County's consistency with AB 939 or SB 1016. Given this, no impact would occur, and no mitigation is required.

4.20 Wildfire

	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 change?	☐	☐	☐	☒

Environmental Setting

The existing crossings are located in developed urbanized areas adjacent to the I-880 freeway. The existing crossings are developed with existing railroad tracks, and surrounded by industrial, commercial, and residential buildings. The California Department of Forestry and Fire Protection identifies fire hazards based on relevant factors such as fuels, terrain, and weather. Most of the Fire Hazard Severity Zones (FHSZ) within Alameda County are located at the northeast end along the Oakland hills.[31] San Leandro does have a small percentage of FHSZs along the outer eastern edge of the city.[32] According to the California Department of Forestry and Fire Protection, the City of Hayward is not listed as having any FHSZs within the city. The existing crossings are not located within or in close proximity to a FHSZ.

Regulatory Setting

Local

Various policies in the General Plans have been adopted for the purpose of avoiding or mitigating wildfire impacts resulting from planned development within the areas. All future development allowed by the proposed land use designations would be subject to the policies listed in the General Plans listed

[31] California Fire. 2008. Map of CAL FIRE's Fire Hazard Severity Zones in Local Responsibility Areas – Alameda County. Available: https://osfm.fire.ca.gov/media/6638/fhszl_map1.pdf. Accessed: May 2021.

[32] California Fire. 2008. Map of CAL FIRE's Fire Hazard Severity Zones in Local Responsibility Areas – San Leandro. Available: https://osfm.fire.ca.gov/media/5609/san_leandro.pdf. Accessed: May 2021.

under each county and city designation. The Alameda County General Plan policies are applicable to the Lewelling Boulevard crossing location only, due to the crossing being located in unincorporated Alameda County. Additionally, review of the San Leandro 2035 General Plan and the Hayward 2040 General Plan, it was determined that the following policies apply to the project:

Alameda County General Plan

Goal 2:	To reduce the risk of urban and wildland fire hazards.
Policy 4:	All urban and rural development, existing and proposed, should be provided with adequate water supply and fire protection facilities and services.
Policy 5:	Structures, features of structures, or uses which present an unacceptable risk of fire should be brought into conformance with applicable fire safety standards.

San Leandro 2035 General Plan

Goal EH-2:	Minimize urban wildfire hazards, both within the city and throughout the East Bay Hills.
Policy EH-2.2:	Ensure that the planning and design of development in very high fire hazard areas minimizes the risks of wildfire and includes adequate provisions for vegetation management, emergency access, and firefighting.
Policy EH-2.3:	Work collaboratively with other jurisdictions and agencies to reduce wildfire hazards in San Leandro, with an emphasis on effective vegetation management and mutual aid agreements.

Hayward 2040 General Plan

Goal HAZ-5:	Protect life and minimize potential property damage from urban wildfire hazards in hillside areas.
Policy HAZ-5.1:	The City shall maintain and implement Interface Guidelines for new development within fire hazard areas.

Impact Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. As discussed in Section 4.9 Hazards and Hazardous Materials, the project would not change the local roadway circulation pattern in a way that would physically interfere with local emergency response plans. Instead, the project would improve safety by restricting access to UPRR tracks, improving signage, accessibility improvements, and other safety features. As the project would not change roadways, local roadway circulation would remain at existing levels and would facilitate implementation of emergency response plans and emergency evacuation plans. Therefore, no impact would occur, and no mitigation is required.

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?

No Impact. The project site and surrounding uses are relatively flat and developed with urban uses, which preclude factors such as slopes or strong winds exacerbating wildfire risks. As such

implementation of the project would not exacerbate wildfire risk, no impact would occur, and no mitigation is required.

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?

No Impact. The project is located on existing developed crossings and would not require the installation or maintenance of infrastructure that may exacerbate fire risk. Further, the existing crossings are not located within a FHSZ. Therefore, the project would have no impact due to wildfire, and no mitigation is required.

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 change?

No Impact. As mentioned previously, the project site and surrounding land are relatively flat and developed with urban uses, which preclude factors such as slopes or strong winds exacerbating wildfire risks. Similarly, post-fire impacts such as drainage changes and landslides would not occur as the existing crossings and their surroundings are highly urbanized, flat, and do not have any steep slopes or hillsides considered susceptible to landslides or flooding. Therefore, the project would have no impact due to wildfire, and no mitigation is required.

4.21 Mandatory Findings of Significance

	Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a) Have the potential to degrade 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) 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) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) Have the potential to degrade 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?

Less than Significant with Mitigation. As described in Section 4.4 Biological Resources, Section 4.5 Cultural Resources, and Section 4.18 Tribal Cultural Resources, the project includes mitigation measures to reduce potential impacts to wildlife and cultural resources. Implementation of mitigation measures described in this Initial Study would reduce all potentially significant impacts of the project to a less-than-significant level.

b) 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)?

Less than Significant with Mitigation. Cumulative impact analysis determines whether an individual project in combination with other approved or foreseeable projects would result in significant impacts. If cumulative impacts could occur, cumulative analysis asks whether the project's contribution to the significant cumulative impact would be cumulatively considerable.

The analysis of cumulative impacts for each environmental factor can employ one of two methods to establish the effects of other past, current, and probable future projects. A Lead Agency may select a list of projects, including those outside the control of the agency, or alternatively, a summary of projections. These projections may be from an adopted general plan or related planning document, or from a prior environmental document that has been adopted or certified, and these documents may describe or evaluate the regional or area-wide conditions contributing to the cumulative impact.

The project will improve safety at existing railroad crossings, including the installation of new fencing, removal of outdated or non-functioning crossing control equipment, fencing, signage, pavement, and other materials, and construction of gates, curb, and gutter. Additionally, operations of the improved railroad crossings will function similar to the existing conditions (i.e., no change in roadway traffic volumes, or number/frequency of trains).

Therefore, mitigation measures outlined within this Initial Study shall be implemented to reduce project-level impacts to a less-than-significant level. As such, the project would not result in any significant impacts that would substantially combine with impacts of other current or probable future projects. Therefore, the project would not considerably contribute to significant cumulative impacts.

c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant with Mitigation. As previously discussed throughout this Initial Study, the project would not result in significant environmental impacts on human beings with implementation of mitigation measures. Mitigation measures are identified in this Initial Study to reduce potential significant impacts related to air quality, biological resources, cultural resources, geology and soils, noise and vibration, and tribal cultural resources which could otherwise affect humans. Implementation of these mitigation measures would ensure that the project would not result in impacts that would cause significant impacts on human beings, either directly or indirectly.

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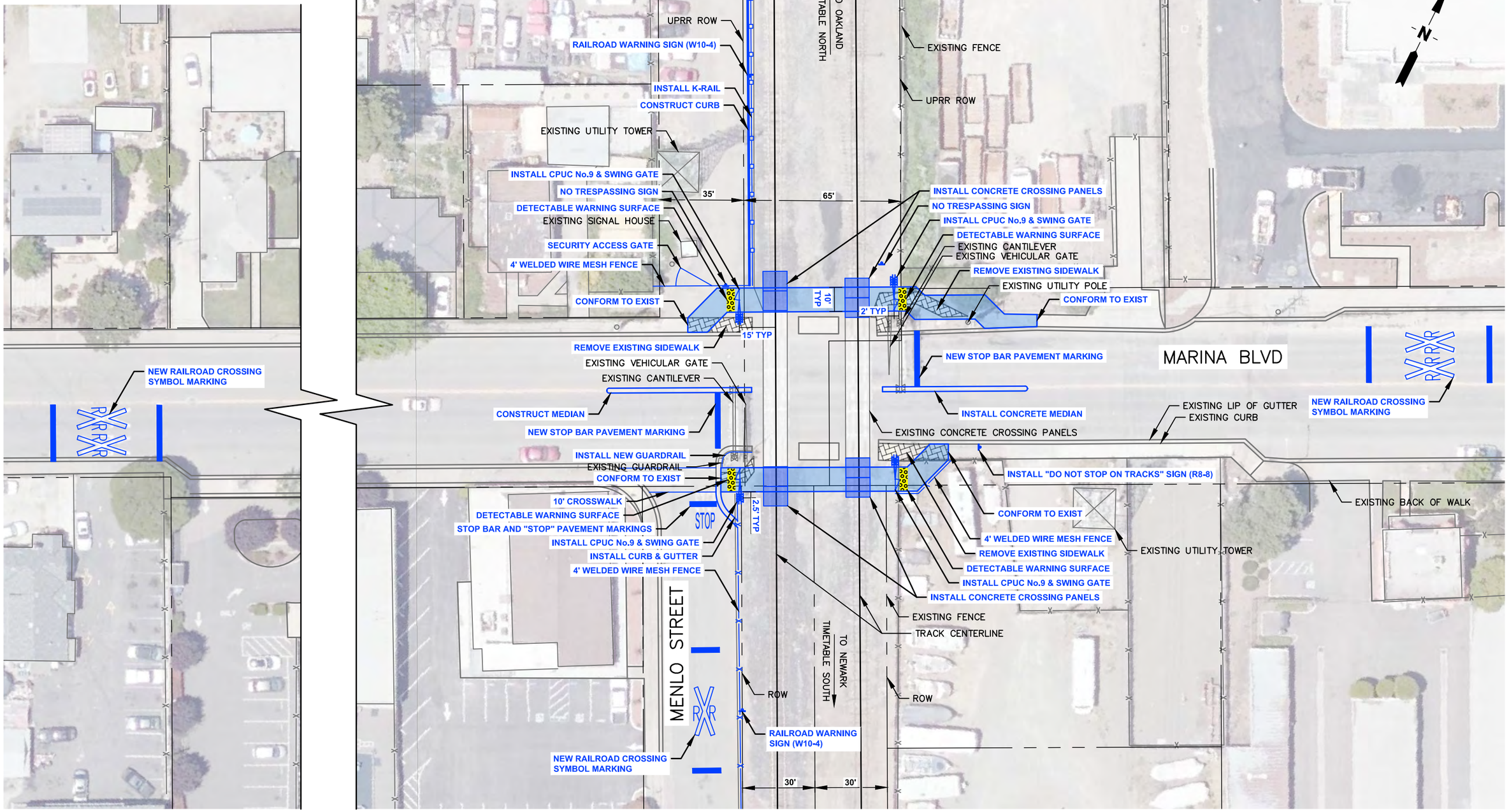
Attachment A - Basis of Design

LEGEND

EXISTING CONDITIONS

PROPOSED CONDITIONS



– PRELIMINARY –

NOT FOR CONSTRUCTION

40' 0 40' 80'

GRAPHIC SCALE

DRAWN BY:	TGL
CHECKED BY:	KPC
DATE:	8/29/19
SHEET NUMBER	

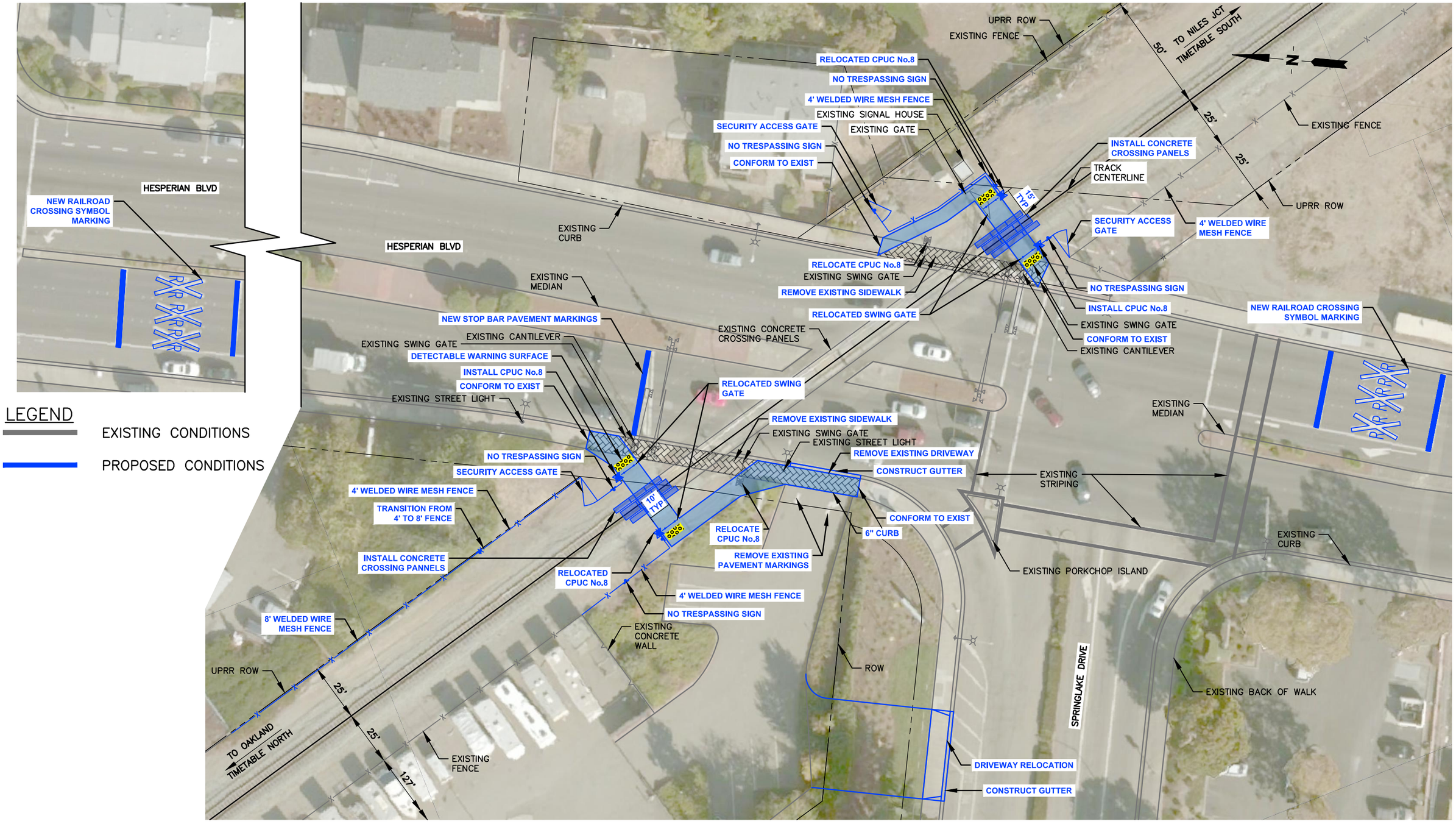
ALAMEDA COUNTY TRANSPORTATION COMMISSION

LOCATION: UPRR COAST SUB MP 15.80
SAN LEANDRO, CA DOT# 749882T

DWG TITLE: MARINA BLVD
AT-GRADE CROSSING

PLOT DATE: Apr 14, 2020 – 8:55am FILE: C:\pwworking\west01\d1238623\EXH-SL-COAST-MARINA_BLVD.dwg

exh-sl-coast-marina_blvd.dwg



– PRELIMINARY –

NOT FOR CONSTRUCTION

40' 0 40' 80'

GRAPHIC SCALE

DRAWN BY:	TGL
CHECKED BY:	KPC
DATE:	8/2919
SHEET NUMBER	

ALAMEDA COUNTY TRANSPORTATION COMMISSION

LOCATION: UPRR NILES SUB MP 17.59
SAN LEANDRO, CA DOT# 749745L

DWG TITLE: HESPERIAN BLVD
AT-GRADE CROSSING

PLOT DATE: Nov 27, 2019 – 4:26pm FILE: C:\pwworking\west01\d1238623\EXH-SL-NILES-HESPERIAN_BLVD.dwg

exh-sl-niles-hesperian_blvd.dwg

ITEMS SHOWN IN BLUE ARE DIAGNOSTIC TEAM RECOMMENDATIONS

ITEMS SHOWN IN RED ARE DIAGNOSTIC TEAM RECOMMENDATIONS UNDER CONSIDERATION

INSTALL CROSSING PANELS (TYP.)

INSTALL CPUC NO. 9 AND SWING GATE (TYP.)

INSTALL MAINTENANCE VEHICLE ACCESS GATE (TYP.)

INSTALL NON-TRAVERSABLE MATERIAL (TYP.)

ADJUST OH UTILITY TO NOT BE IN CONFLICT WITH EXISTING CPUC NO. 9 – TO BE COORDINATED WITH UTILITY OWNER(S)

INSTALL NEW STOP BAR PAVEMENT MARKING (TYP.)

INSTALL W10-2(R) SIGN

INSTALL W10-1 AND RR PAVEMENT MARKING PER CA MUTCD, FIGURE 8B-6 (TYP.)

REMOVE GUARDRAIL AND INSTALL 8" CURB (TYP.)

INSTALL BULBOUT (TYP.)

RESTRICT PARKING 50' FROM TRACKS (ALL QUADRANTS)

REPLACE EXISTING CROSSING PANELS

UPRR NILES SUB MP 23.85
HAYWARD, CA DOT# 768394R

SEPARATE DESIGN PACKAGE AND GO 88-B TO BE PREPARED FOR THE CROSSING

Funds originally allocated for Goecken will be used to complete "separate design package and GO88-B"

INDUSTRIAL PARKWAY

INDUSTRIAL PARKWAY

PACIFIC STREET

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

GENERAL NOTES

1. CROSSING IMPROVEMENTS SHOWN ARE BASED ON THE BOD DESIGN DRAWINGS PROVIDED BY ALAMEDA CTC AND INPUT FROM THE SITE DIAGNOSTIC TEAM.

9/2/2021 PRELIMINARY - FOR DISCUSSION PURPOSES ONLY

NO	REVISION / SUBMISSION	DATE

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE	

NOT FOR CONSTRUCTION

SCALE
HORIZONTAL
1" = 40'
VERTICAL
N/A

Kimley»Horn
1300 CLAY STREET, STE 325
OAKLAND, CA 94612
(510) 625-0712

Alameda County Transportation Commission

RAIL SAFETY ENHANCEMENT PROGRAM
1111 BROADWAY #800, OAKLAND, CA 94607

UPRR NILES SUB MP 23.90
HAYWARD, CA DOT# 749775D
INDUSTRIAL PARKWAY AT-GRADE CROSSING

BASIS OF DESIGN DRAWING

DRAWING NO.

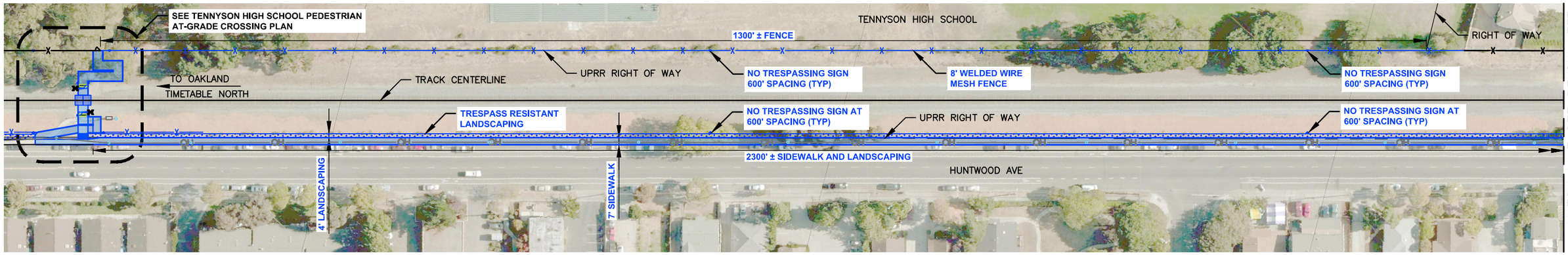
SHEET NO.

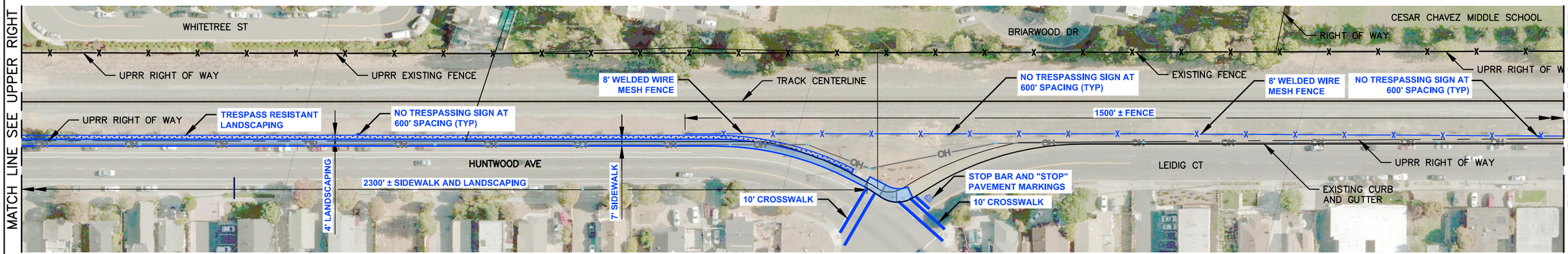
ALAMEDA COUNTY TRANSPORTATION COMMISSION - RAIL SAFETY ENHANCEMENT PROGRAM

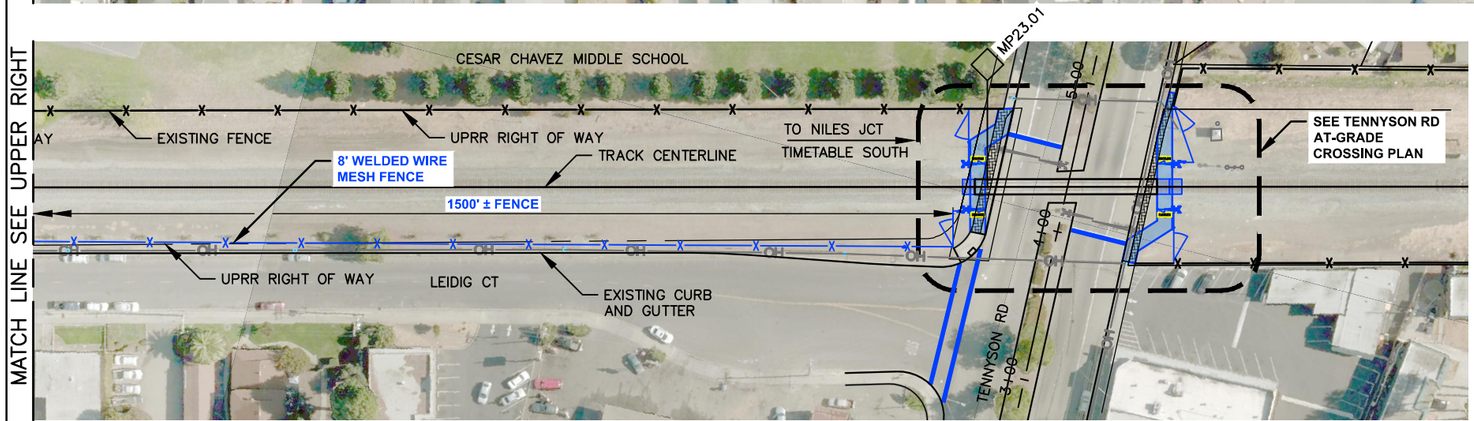
LEGEND

EXISTING CONDITIONS

PROPOSED CONDITIONS







- PRELIMINARY -

NOT FOR CONSTRUCTION

100' 0 50' 100' 200'

GRAPHIC SCALE

DRAWN BY:	CJO
CHECKED BY:	KPC
DATE:	8/27/19
SHEET NUMBER	

ALAMEDA COUNTY TRANSPORTATION COMMISSION

LOCATION: UPRR NILES SUB MP 22.27 TO MP 23.01 HAYWARD, CA

DWG TITLE: HUNTWOOD AVE AND LEIDIG CT ANTI-TRESPASSING IMPROVEMENTS

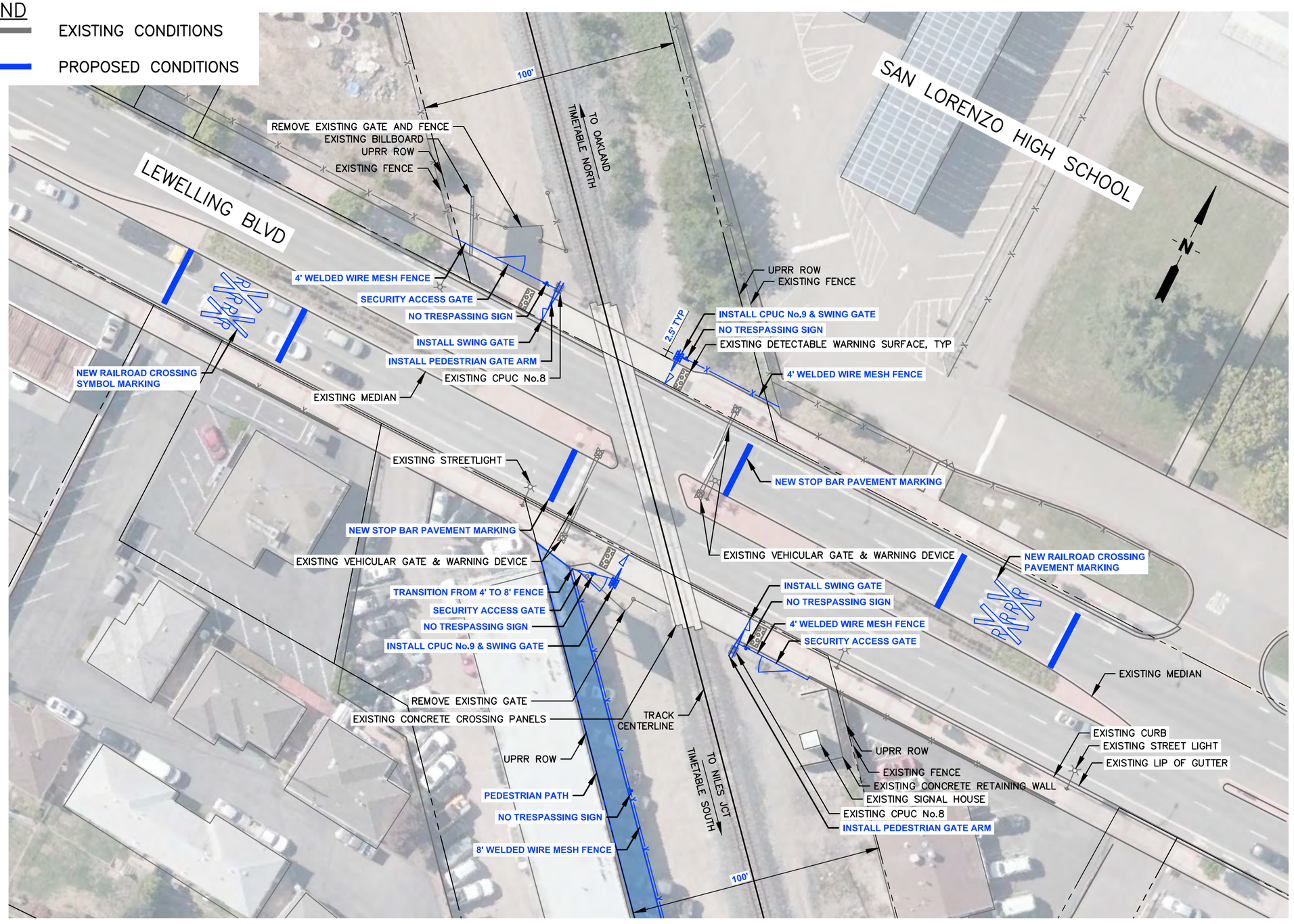
PLOT DATE: Nov 27, 2019 - 4:10pm FILE: C:\pwworking\west01\d1238623\EXH-LEIDIG-HUNTWOOD TRESPASS.dwg

exh-leidig-huntwood trespass.dwg

LEGEND

EXISTING CONDITIONS

PROPOSED CONDITIONS



– PRELIMINARY –

NOT FOR CONSTRUCTION

40' 0 40' 80'

GRAPHIC SCALE

DRAWN BY:	TGL
CHECKED BY:	KPC
DATE:	8/29/19
SHEET NUMBER	

ALAMEDA COUNTY TRANSPORTATION COMMISSION

LOCATION: UPRR NILES SUB MP 18.10
SAN LORENZO, CA DOT# 749747A

DWG TITLE: LEWELLING BLVD
AT-GRADE CROSSING

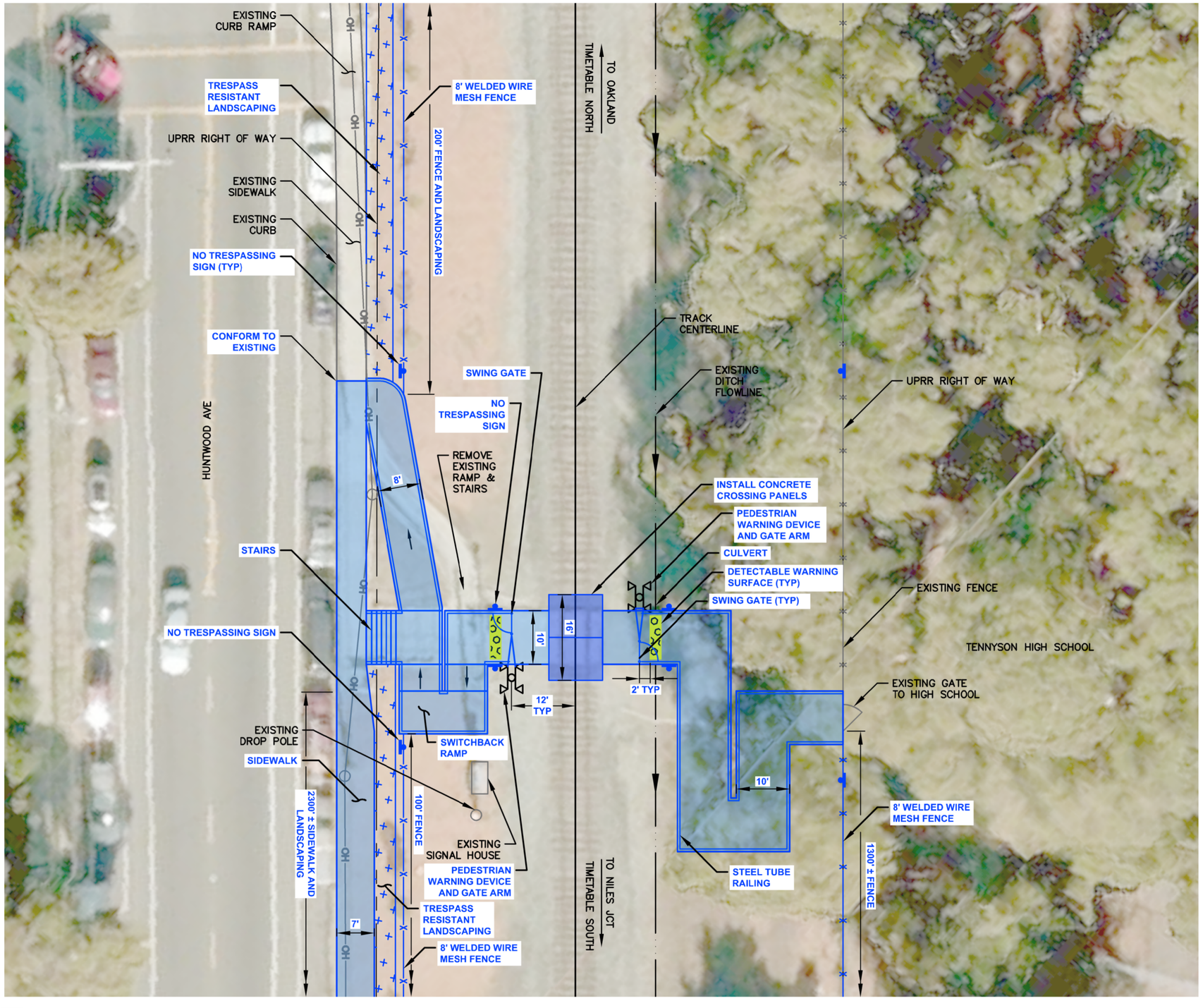
PLOT DATE: Apr 14, 2020 – 8:49am FILE: C:\pwworking\west01\d1238623\EXH-AC-NILES-LEWELLING_BLVD.dwg

exh-ac-niles-lewelling_blvd.dwg

LEGEND

EXISTING CONDITIONS

PROPOSED CONDITIONS



– PRELIMINARY –

NOT FOR CONSTRUCTION

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GRAPHIC SCALE

DRAWN BY:	CJO
CHECKED BY:	KPC
DATE:	8/27/19
SHEET NUMBER	

ALAMEDA COUNTY TRANSPORTATION COMMISSION

LOCATION: UPRR NILES SUB MP 22.27
HAYWARD, CA DOT# 749773P

DWG TITLE: TENNYSON HIGH SCHOOL PEDESTRIAN AT-GRADE CROSSING

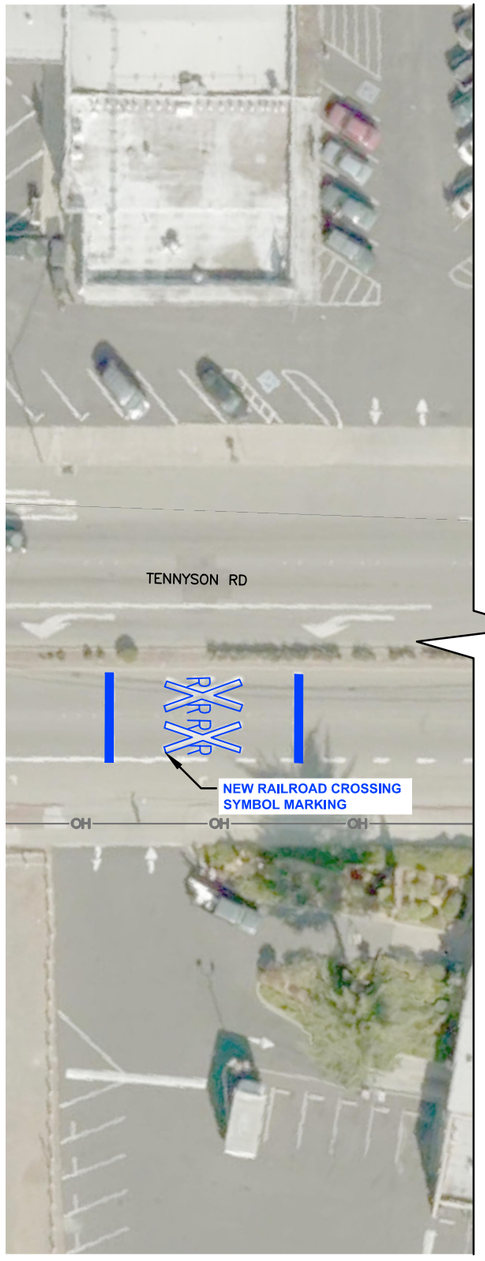
PLOT DATE: Nov 27, 2019 – 4:06pm FILE: C:\pwworking\west01\d1238623\EXH-TENNYSON_HIGH_SCHOOL.dwg

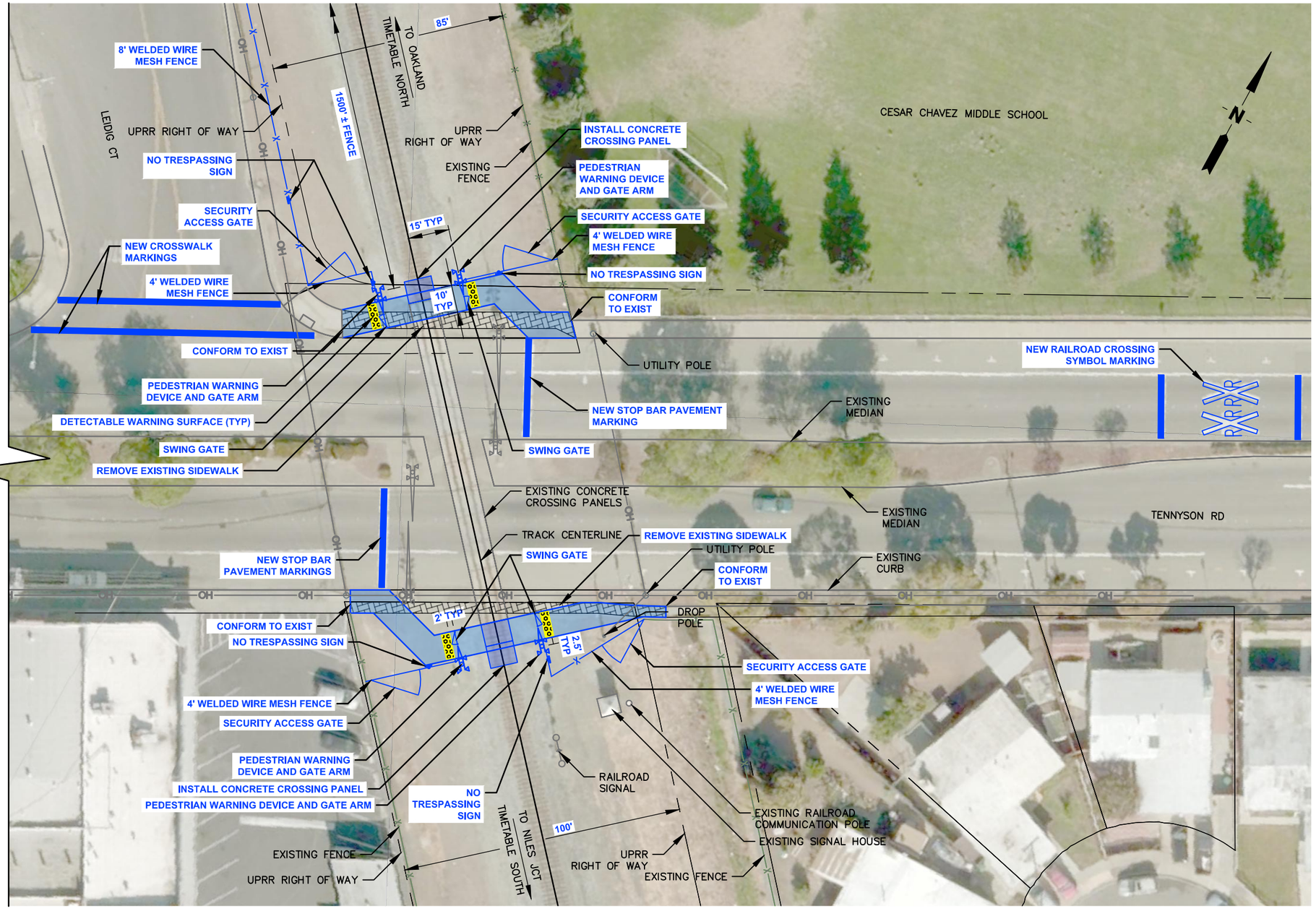
sub_tennyson_high_school.dwg

LEGEND

EXISTING CONDITIONS

PROPOSED CONDITIONS





– PRELIMINARY –

NOT FOR CONSTRUCTION

40' 0 40' 80'

GRAPHIC SCALE

DRAWN BY:	TGL
CHECKED BY:	KPC
DATE:	8/2919
SHEET NUMBER	

ALAMEDA COUNTY TRANSPORTATION COMMISSION

LOCATION: UPRR NILES SUB MP 23.01
HAYWARD, CA DOT# 749774W

DWG TITLE: TENNYSON RD
AT-GRADE CROSSING

PLOT DATE: Nov 27, 2019 – 4:05pm FILE: C:\pwworking\west01\d1238623\EXH-TENNYSON_RD.dwg

exh-tennyson_rd.dwg

LEGEND

EXISTING CONDITIONS

PROPOSED CONDITIONS

– PRELIMINARY –

NOT FOR CONSTRUCTION

40' 0 40' 80'

GRAPHIC SCALE

DRAWN BY:	TGL
CHECKED BY:	KPC
DATE:	8/29/19
SHEET NUMBER	

ALAMEDA COUNTY TRANSPORTATION COMMISSION

LOCATION: UPRR NILES SUB MP 16.56
SAN LEANDRO, CA DOT# 749743X

DWG TITLE: WASHINGTON AVE AT-GRADE CROSSING
SHEET 2

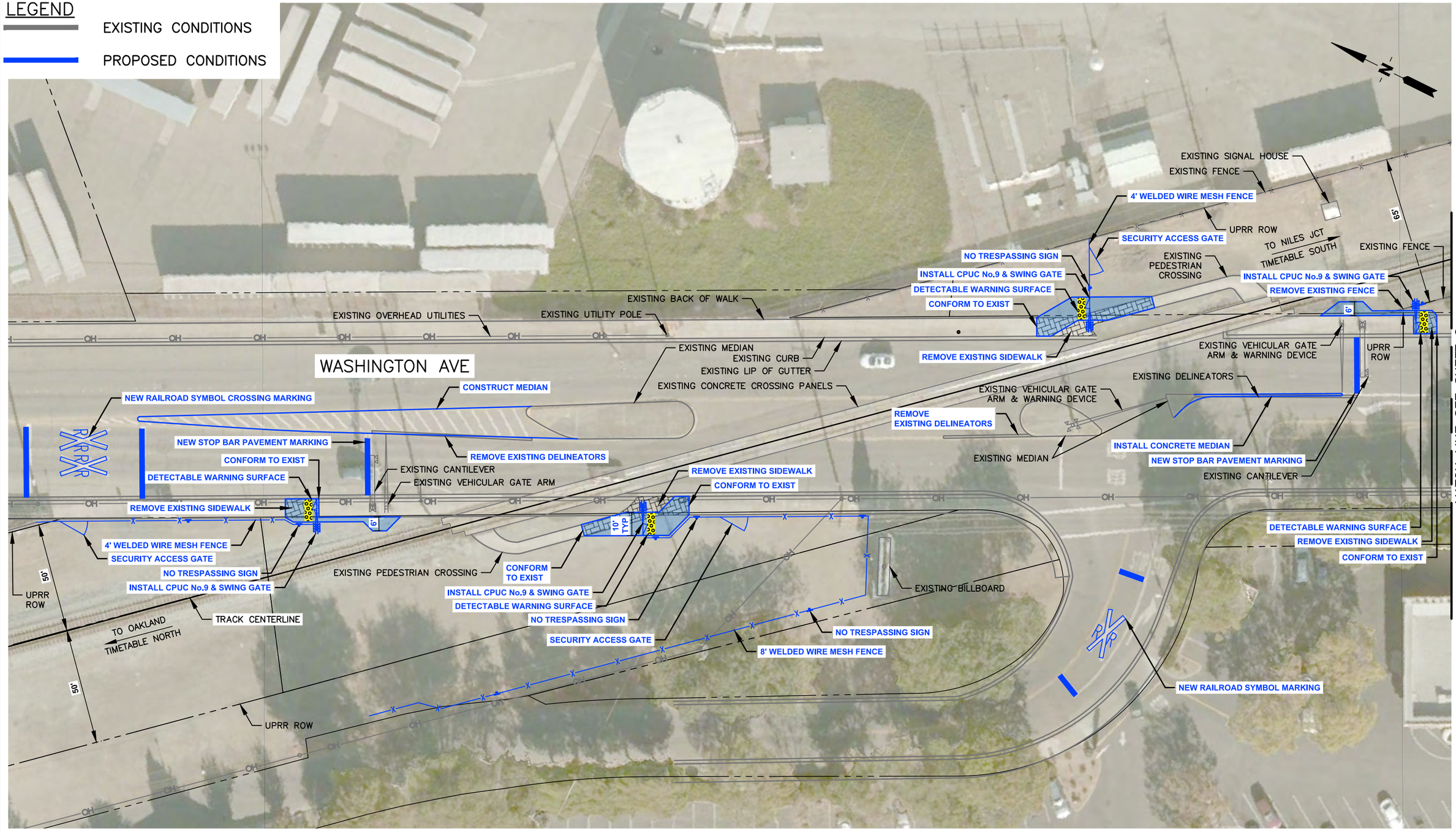
PLOT DATE: Apr 14, 2020 - 8:55am FILE: C:\pwworking\west01\d1238623\EXH-SL-NILES-WASHINGTON_AVE.dwg

exh-sl-niles-washington_ave.dwg

LEGEND

EXISTING CONDITIONS

PROPOSED CONDITIONS



– PRELIMINARY –

NOT FOR CONSTRUCTION

GRAPHIC SCALE 40' 0 40' 80'

DRAWN BY:	TGL
CHECKED BY:	KPC
DATE:	8/29/19
SHEET NUMBER	

ALAMEDA COUNTY TRANSPORTATION COMMISSION

LOCATION: UPRR NILES SUB MP 16.56
SAN LEANDRO, CA DOT# 749743X

DWG TITLE: WASHINGTON AVE AT-GRADE CROSSING
SHEET 1

PLOT DATE: Apr 14, 2020 - 8:54am FILE: C:\pwworking\west01\d1238623\EXH-SL-NILES-WASHINGTON_AVE.dwg

exh-sl-niles-washington_ave.dwg