COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone (626) 458-5100
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MARK PESTRELLA, Director

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

IN REPLY PLEASE
REFER TO FILE

ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

31 July 9, 2024

Edward Yen
EDWARD YEN
EXECUTIVE OFFICER

July 09, 2024

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

Dear Supervisors:

TRANSPORTATION CORE SERVICE AREA
WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK PROJECT
IN THE CITY OF COMPTON
ADOPT THE MITIGATED NEGATIVE DECLARATION AND THE MITIGATION MONITORING AND REPORTING PROGRAM AND APPROVE THE PROJECT
(SUPERVISORIAL DISTRICT 2)
(3 VOTES)

SUBJECT

Public Works is seeking Board approval to adopt the environmental documents for Wilmington Avenue Bridge over Compton Creek project and approve the project located in the City of Compton.

IT IS RECOMMENDED THAT THE BOARD:

1. Consider the Mitigated Negative Declaration for Wilmington Bridge over Compton Creek project, together with any comments received during the public review process; find that the Mitigated Negative Declaration reflects the independent judgment and analysis of the Board; adopt the Mitigation Monitoring and Reporting Program finding that the Mitigation Monitoring and Reporting Program is adequately designed to ensure compliance with the mitigation measures during project implementation. Find that on the basis of the whole record before the Board there is no substantial evidence the project may have a significant effect on the environment and adopt the Mitigated Negative Declaration.

2. Approve the project to replace the Wilmington Bridge over Compton Creek; authorize Public Works to continue with the preconstruction phase of the project, including the preparation of construction documents and applications for all necessary jurisdictional approvals.

PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purpose of the recommended actions is to allow Public Works to move forward with additional preconstruction work, including applying for all necessary permits and approvals to continue advancing this needed safety project toward construction. Once completed, the project will benefit the residents in the City and the surrounding communities by enhancing safety and improving resiliency of the bridge.

Approval of the recommended actions will adopt the Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program, approve the project, and allow Public Works to continue the preconstruction work and permitting process to replace the existing steel bridge.

The purpose of the project is to replace a structurally deficient bridge with a new bridge that will comply with current seismic standards and Caltrans' bridge design specifications. The project will benefit all those traveling across the bridge by providing improved safety and reliability for vehicular traffic, pedestrians, and bicyclists. The project site is in the City, 500 feet north of the Compton Boulevard and Wilmington Avenue intersection.

The existing steel girder bridge is structurally deficient due to extensive cracking and delamination of the deck.

The project would involve replacing the existing two-span, steel girder with a new two-span, precast concrete bridge. The new bridge pier would be constructed in the creek channel, at the same location as the existing pier. The new abutments would be constructed 15 feet behind the existing abutment that would be protected in place to provide clearance for the new bridge structure. No expansion in lane capacity would occur, and no changes to the layout of connecting roadways would occur as part of the bridge replacement.

Implementation of Strategic Plan Goals

These recommendations support the County Strategic Plan: North Star 2, Foster Vibrant and Resilient Communities, Focus Area Goal E, Economic Health; and North Star 3, Realized Tomorrow's Government Today, Focus Area Goal F, Flexible and Efficient Infrastructure. The recommended action supports ongoing efforts to manage and improve public infrastructure assets and provide improved emergency access for residents in historically disadvantaged and under-resourced communities.

FISCAL IMPACT/FINANCING

There will be no impact to the County General Fund.

The project is entirely within the City of Compton. The total project cost is estimated to be $17,000,000. The City-County Cooperative Agreement 78017 provides for the County to perform the preliminary engineering and administer the construction of the project under the Federal Highway Bridge Program. Under this program, Federal-aid funds will be used to finance a portion of the project cost. The non-Federally reimbursable portion of the project cost will be financed by the City.

Funding for the preliminary engineering of the project is available in the Second Supervisorial District's Transportation Improvement Program in the Road Fund (B03 Services and Supplies)

Fiscal Year 2024-25 Budget.

We will return to the Board for approval to advertise for construction.

FACTS AND PROVISIONS/LEGAL REQUIREMENTS

An MND was prepared for the proposed project in accordance with the requirements of the California Environmental Quality Act (CEQA).

ENVIRONMENTAL DOCUMENTATION

An Initial Study (IS) was prepared for this project in compliance with CEQA. The IS identified six potentially significant effects of the project: biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, and tribal cultural resources. Prior to the release of the enclosed IS/MND for public review, revisions in the project were made to avoid or mitigate the effects as follows:

Biological Resources: Preconstruction clearance surveys, avoidance buffers, and/or exclusionary measures shall be employed to reduce impact to potentially nesting birds protected by the Migratory Bird Treaty Act.

Cultural Resources/Tribal Cultural Resources: If unrecorded archaeological resources (sites, features, or artifacts) are encountered during construction activities, allground-disturbing work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist can evaluate the significance of the find and determine whether additional study is warranted. In addition, a Treatment of Historic Properties Action Plan prepared for the project as part of Section 106 process will be implemented to ensure design documents and project construction comply with the Secretary of the Interior Standards for Rehabilitation.

In accordance with the California Health and Safety and Public Resources Code, if human remains are uncovered during ground disturbing activities, the contractor and/or Public Works will immediately halt potentially damaging excavation in the area of the burial and notify the Los Angeles County Department of Medical Examiner-Coroner and a professional archaeologist to determine the nature of the remains.

Prior to the commencement of earthmoving activities, Public Works shall prepare a Construction Monitoring and Treatment Plan that defines the process followed, upon discovery of archaeological resources or tribal cultural resources to ensure proper treatment, evaluation, and management. This includes a requirement for all construction personnel to complete a workers environmental awareness program training prior to commencement of construction activities. Should a potential tribal cultural resource be inadvertently encountered during project construction, ground-disturbing activities shall be temporarily halted within 100 feet of the discovery and Public Works shall notify the consulting Native American tribe and a qualified archaeologist to assess the significance of the finding according to CEQA Guidelines Section 21074. Public Works shall retain a tribal monitor who is culturally affiliated with the project area and/or otherwise approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government to conduct periodic monitoring of ground-disturbing activities within the areas of proposed new abutments and center piers within the creek bed.

Geology and Soils: Prior to commencement of any excavation deeper than 5 feet below ground surface, Public Works shall retain a qualified paleontologist. The paleontologist shall prepare a

Paleontological Resources Impact Mitigation Program for the project. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontologist will temporarily halt and/or divert grading activity to allow recovery of paleontological resources.

Hazards and Hazardous Materials: Prior to construction, Public Works will conduct a hazardous material building survey to identify any hazardous materials that are present on the project site. Should these materials be present, contract specifications for Public Works' construction contractor will incorporate any abatement procedures for the removal of material containing asbestos or lead- and lead chromate-based pain in accordance with local, State, and Federal requirements or construction will be conducted in such a manner as to eliminate the potential to disturb the identified materials.

Noise: Public Works shall inform local residents of the schedule, duration, and progress of the construction. Additionally, nearby noise-sensitive receivers shall be provided contact information for noise- or vibration-related complaints. Noise measures shall be implemented by the contractor, including siting stationary construction equipment away from sensitive noise receptors, turning off idling equipment, minimizing the simultaneous operation of multiple pieces of noisy equipment, ensuring equipment is properly maintained and fitted with noise shielding and muffling devices, installing sound barriers, and rescheduling construction activities.

The IS and project revisions showed that there is no substantial evidence, in light of the whole record before the County, that the project as revised may have a significant effect on the environment. Based on the IS and project revisions, an MND was prepared for this project.

Public notice was published in the Compton Herald on March 21, 2023, pursuant to the California Public Resources Code Section 21092 and posted pursuant to Section 21092.3. Comment letters were received from the California Department of Fish and Wildlife, Caltrans, and a resident. Notice to commenting public agencies was completed pursuant to Section 21092.5. All comments have been addressed and no new substantial environmental issues have been raised that have not been adequately addressed in the IS/MND.

In addition, all tribal cultural resources consultation requirements of CEQA have been met and documented. The Gabrieleño Band of Mission Indians-Kizh Nation tribe requested consultation, and the consultation was completed through agreement. Where feasible mitigation measures have been considered to avoid or minimize damaging effects on any tribal cultural resource.

The documents and other materials constituting the record of the proceedings upon which the Board's decision is based on are located at Public Works, 900 South Fremont Avenue, 11th Floor, Alhambra, California 91803. The custodian of such documents at Public Works is the Transportation Planning and Programs Division, Environmental Planning and Assessments Section, Section Head, 11th floor. The documents are also available at the Public Works website: https://pw.lacounty.gov/uploads/tpp/Wilmington-Ave-Bridge.pdf.

The project is not exempt from payment of a fee to the California Department of Fish and Wildlife pursuant to Section 711.4 of the Fish and Game Code to defray the costs of fish and wildlife protection and management incurred by the California Department of Fish and Wildlife.

Upon the Board's adoption of the MND, Public Works will file a Notice of Determination in accordance with Section 21152 of the California Public Resources Code and pay the required fees to the County Clerk.

IMPACT ON CURRENT SERVICES (OR PROJECTS)

There is no impact on current County Services.

Approval of the MND will enable Public Works to go forward with the preconstruction phase of the project.

CONCLUSION

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

Respectfully submitted,

MARK PESTRELLA, PE
Director

MP:MER:yr

Enclosures

c: Chief Executive Office (Chia-Ann Yen)
County Counsel
Executive Office

ENCLOSURE

July 9, 2024

TRANSPORTATION CORE SERVICE AREA
COMPTON BOULEVARD BRIDGE OVER COMPTON CREEK PROJECT
IN THE CITY OF COMPTON
ADOPT THE MITIGATED NEGATIVE DECLARATION
AND THE MITIGATION MONITORING AND REPORTING PROGRAM
AND APPROVE THE PROJECT
(SUPERVISORIAL DISTRICT 2)
(3 VOTES)

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

2024.06.25 Compton Creek BL (FTP Large Enc)

WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK PROJECT

Notice of Intent to Adopt a Mitigated Negative Declaration:
https://pw.lacounty.gov/tpp/docs/Wilmington-Ave-Bridge-NOI.pdf

Initial Study / Mitigated Negative Declaration (IS/MND):
https://pw.lacounty.gov/tpp/docs/Wilmington-Ave-Bridge-IS-MND.pdf

IS/MND Appendices:
https://pw.lacounty.gov/tpp/docs/Wilmington-Ave-Bridge-Appendices.pdf

Final Initial Study / Mitigated Negative Declaration (IS/MND):
https://pw.lacounty.gov/tpp/docs/Wilmington-Ave-Bridge-Final-ISMND.pdf

Public Works
LOS ANGELES COUNTY

NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION
WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK PROJECT

Public Works proposes to demolish and replace the existing Wilmington Avenue Bridge over Compton Creek (project), located in the northwest portion of the City of Compton where Wilmington Avenue crosses Compton Creek, 500 feet north of the Wilmington Avenue/Compton Boulevard/ intersection (Figure 1). Public Works is the lead agency for the project under the California Environmental Quality Act (CEQA). The Wilmington Avenue Bridge crosses Compton Creek, a concrete flood control channel for most of its course, including where it runs underneath the project site.

The project would replace the existing two-span, steel-girder Wilmington Avenue Bridge with a new two-span, precast concrete bridge. The project includes the reconstruction of the sidewalks adjacent to the project limits. Right-of-way acquisition and temporary use of right-of-way would be required for properties located at 739 West School Street, 245 North Magnolia Court, and 125, 131, 201, 245, 306, and 308 North Wilmington Avenue as they are affected by the raised roadway, sidewalks, and temporary construction easements. Additionally, the project includes the removal of a private tree, relocation of catch basins, driveways, street lighting, and the reconstruction of sidewalks, and driveways along Wilmington Avenue. Lastly, the project includes the replacement of the bike path and access road along the Compton Creek channel. During construction, temporary staging areas would be established in the 300-foot approach on Wilmington Avenueon on either side of the bridge structure. Temporary K-rails would be installed at each end of the project limits, including a six-foot-high perimeter fence to prevent pedestrians from entering the work area. Access for the properties adjacent to the construction site will be maintained during construction. Pursuant to Section 15072 of the CEQA Guidelines, the project site is not on a list of hazardous materials sites enumerated under Government Code Section 65962.5.

Public Works prepared an Initial Study and Mitigated Negative Declaration (IS/MND) to assess the environmental impacts of the project pursuant to CEQA. Significant environmental impacts can be addressed through mitigation. The IS/MND is being circulated for a 30-day public review and comment period starting March 17, 2023, and ending April 17, 2023. The IS/MND may be accessed electronically at the following website: https://pw.lacounty.gov/tpp/docs/Wilmington-Ave-Bridge-Public-Review.pdf. A copy of the IS/MND is also available for review at the following locations:

- Public Works, Transportation Planning and Programs Division, 11th floor, 900 South Fremont Avenue, Alhambra, CA 91803
- Compton Library, 240 West Compton Boulevard, Compton, CA 90220

Interested parties must submit their comments in writing by April 17, 2023. Comments must be submitted via postal or electronic mail to the following address:

Department of Public Works
Attention Ms. Reyna Soriano
P.O. Box 1460
Alhambra, CA 91802-1460
e-mail: rsoriano@pw.lacounty.gov

The final IS/MND will incorporate responses to written comments received during the public review period. The final document will be considered by the Board for approval. Questions regarding this notice should be directed to Reyna Soriano, Transportation Planning and Programs Division, (626) 458-5192 or rsoriano@pw.lacounty.gov, Monday through Thursday, between 8 a.m. and 5 p.m.

Si necesita asistencia con la traducción a Español, por favor comuniquese con el representante del departamento de Obras Públicas del Condado de Los Angeles, Sr. Art Correa (626) 458-3948.

ADA and Title VI Accommodations: Individuals requiring reasonable accommodations, interpretation services, and materials in other languages or in an alternate format may contact the department coordinator at (626) 458-7901. Requests must be made one week in advance of the scheduled meeting date. Individuals with hearing or speech impairment may use California Relay Service 711.

SOURCE: Esri, Digital Globe 2017; Open Street Map 2019

DUDEK

FIGURE 1

Project Location

Wilmington Avenue Bridge Over Compton Creek

DRAFT

Initial Study/Mitigated Negative Declaration

Wilmington Avenue Bridge Over Compton Creek Project

County of Los Angeles Department of Public Works

MARCH 2023

Prepared for:

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
900 South Fremont Avenue
Alhambra, California 91803-5100
Contact: Reyna Soriano

Prepared by:

DUDEK
38 North Marengo
Pasadena, California 91101
Contact: Jason Reynolds

Printed on 30% post-consumer recycled material.

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FIGURES

TABLES

APPENDICES

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
APE	area of potential effects
AQMP	Air Quality Management Plan
bgs	below the ground surface
BMP	best management practice
BSA	biological survey area
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAMUTCD	Caltrans' Manual of Uniform Traffic Control Devices
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFG Code	California Fish and Game Code
CH_4	methane
CHRIS	California Historical Resources Information System
CIDH	cast-in-drilled hole
City	City of Compton
CMTP	Construction Monitoring and Treatment Plan
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of Los Angeles
dBA	A-weighted decibel
DOC	California Department of Conservation
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
in/sec	inches per second
IPaC	Information Planning and Conservation System
IS	Initial Study
JWPCP	Joint Water Pollution Control Plant
LACM	Natural History Museum of Los Angeles County
LAFCD	Los Angeles Flood Control District
L_{eq}	Energy-equivalent noise level
L_{max}	Maximum sound level during a measurement period or a noise event
LST	localized significance threshold

Acronym/Abbreviation	Definition
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MM	mitigation measure
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MT	metric ton
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NF_3	nitrogen trifluoride
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
PCE	passenger car equivalent
PFC	perfluorocarbon
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
ppv	peak particle velocity
PRC	California Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Program
Public Works	County of Los Angeles Department of Public Works
ROW	right-of-way
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SF_6	sulfur hexafluoride
SLF	Sacred Lands File
SO_2	sulfur dioxide
SO_x	sulfur oxides
SoCalGas	Southern California Gas Company
SRA	Source Receptor Area
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCP	Traffic Control Plan
TCR	tribal cultural resource
USFWS	U.S. Fish and Wildlife Service

Acronym/Abbreviation	Definition
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WEAP	Workers Environmental Awareness Program

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1 Introduction

1.1 Project Overview

The County of Los Angeles Department of Public Works (Public Works) proposes to replace the Wilmington Avenue Bridge over Compton Creek (project/proposed project). The proposed project would involve the demolition of the existing two-span Wilmington Avenue Bridge and the construction of a new two-span, pre-cast concrete bridge. The proposed project would be located in southern Los Angeles County in a northwest portion of the City of Compton where the Wilmington Avenue right-of-way (ROW) crosses Compton Creek, 500 feet north of the Compton Boulevard/Wilmington Avenue intersection. Public Works is the lead agency under the California Environmental Quality Act (CEQA).

The proposed project would address existing bridge deficiencies and enhance vehicular safety on the bridge. The existing steel girder bridge and middle pier have been determined to be structurally deficient due to extensive cracking and delamination of the bridge deck. The proposed project would demolish the existing bridge and construct a new bridge. The new bridge soffit (underside) would be raised approximately 2 feet higher than the existing bridge. The new bridge would include a new pier with a new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, and new channel walls/abutments. The new bridge pier would be constructed in the Compton Creek channel, at the same location as the existing pier. The new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place to provide clearance for the new bridge structure. Additionally, a new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. In addition to the proposed bridge replacement, the proposed project would include reconstruction of the existing bicycle path, which runs adjacent to the north of the Compton Creek channel, as well as reconstruction of several sidewalk and driveway locations, and the reconstruction of a new access road as described in Section 2, Project Description.

1.2 California Environmental Quality Act Compliance

CEQA applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. The proposed project constitutes a project as defined by CEQA (California Public Resources Code [PRC] Section 21065). Public Works, as a municipal entity, would implement the proposed project and will therefore act as the CEQA lead agency.

An Initial Study (IS) has been prepared by Public Works as the lead agency in accordance with the CEQA Guidelines to evaluate potential environmental effects and to determine whether an Environmental Impact Report (EIR) or a Negative Declaration or Mitigated Negative Declaration (MND) should be prepared for the proposed project. The IS has also been prepared to satisfy CEQA requirements of agencies that would provide sources of funding for the proposed project or that would otherwise have discretionary approval authority over the project. An MND is prepared for a project when an Initial Study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed Negative Declaration and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur; and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.

The IS determined that the implementation of the proposed project could cause some potentially significant impacts on the environment but, as shown in the environmental analysis contained in Section 3, Initial Study Checklist, all of the project's potentially significant impacts would be reduced to less than significant through implementation of mitigation measures. Consequently, the analysis contained herein concludes that an MND is the appropriate document for the proposed project.

This document consists of both the Initial Study for the project and the MND (IS/MND). This IS/MND is composed of four sections. Section 1 provides an introduction to the proposed project, general information about the contents of the IS/MND, information about the lead agency, the project location, and the environmental setting. Section 2 provides a description of the proposed project components and information about their construction and operation. Section 3 consists of the CEQA Initial Study checklist, which provides the assessment of potential environmental impacts and the applicability of mitigation measures to reduce potentially significant impacts to a less-than-significant level. Section 4, References and Preparers, provides a list of the lead agency staff and consultants involved in preparing the environmental review documents for the proposed project. This document also includes several appendices related to air quality and greenhouse gas (GHG) emissions, biological resources, cultural resources, geology and soils, hydrology and water quality, noise, and traffic.

2 Project Description

2.1 Project Background

The proposed project would involve replacing the existing two-span Wilmington Avenue Bridge over Compton Creek with a new two-span, pre-cast concrete bridge. The existing bridge was built in 1938 and is supported by the abutments and middle pier. The existing bridge includes two 11-foot-wide travel lanes, one 11-foot-wide shoulder, a 13-foot-wide central raised median, and an approximately 4.5-foot-wide sidewalk in each direction. The existing steel girder bridge and middle pier have been determined to be structurally deficient per the California Department of Transportation (Caltrans) Bridge Design Specification and Caltrans Seismic Design Criteria due to extensive cracking and delamination of the bridge deck. The proposed project would address structural deficiencies and improve vehicular safety and efficiency. Further and to qualify for federal funding assistance, the federal funding guidelines require Public Works to design bridges to the current Caltrans adopted bridge design specifications (AASHTO LRFD Bridge Design Specifications). These specifications establish the load carrying capacity of bridges to withstand standard design truck with lane load (HS20 truck or 72,000 pounds with 640 pounds/feet lane loads). Therefore, the proposed project has been designed consistent with current Caltrans adopted bridge design specifications regarding load carrying capacity.

2.2 Project Location

As shown in Figure 1, Project Location, the project site is located in the City of Compton (City) in southern Los Angeles County, approximately 15 miles south of downtown Los Angeles. The project site is located in the northwest portion of the City where the Wilmington Avenue ROW crosses Compton Creek, 500 feet north of the Compton Boulevard/Wilmington Avenue intersection. Wilmington Avenue is a large, north-south running road with two lanes in either direction. The project site consists of 1.72 acres and includes the bridge and roadway approach. Within the project area, Wilmington Avenue includes a central, 13-foot-wide raised median that divides northbound and southbound traffic over the bridge deck. Two 4.5-foot-wide public sidewalks extend on either side of Wilmington Avenue. Although there are no dedicated bikeways within the Wilmington Avenue ROW, an existing bikeway extends parallel to the Compton Creek channel's northern bank on either side of Wilmington Avenue.

The project site crosses Compton Creek, a major tributary of the Los Angeles River. Compton Creek drains a watershed area of approximately 42.1 square miles, and travels south for 8.5 miles from South Main Street in the City of Los Angeles until it meets the Los Angeles River south of Del Amo Boulevard in the City of Carson. Compton Creek is encased within a concrete flood control channel for most of its course, including where it runs underneath the project site.

Major roadways and arterials that provide local and regional access to the project site include Rosecrans Avenue, located approximately 0.5 miles north of the project site; and California State Route 91, located approximately 1.6 miles south of the project site. There are no state designated or eligible scenic highways in proximity to the project site.

2.3 Surrounding Land Uses

As shown in Figure 2, Surrounding Land Uses, the project site is located in an urban, highly developed part of the City. Surrounding land use designations primarily include General Commercial and Single-Family Residential (City of Compton 2007). Land uses in the immediate vicinity of the project site include single-family residential and general commercial to the north, a church, automobile parts store and general commercial uses to the south, and residential land uses to the east and west. The nearest public park is Doctor Walter R. Tucker Park, located approximately 0.34 miles south of the project site. The nearest schools are General Benjamin O. Davis, Jr. Middle School (621 West Poplar Street), located approximately 0.17 miles north of the project site and Dickison Elementary School (905 N Aranbe Avenue), located approximately 0.33 miles northeast of the project site.

2.4 Project Design

As shown in Figure 3, Proposed Project (60% Elevation View), and Figure 4, Proposed Project (60% Plan View), the proposed project would include demolishing the existing steel girder bridge, concrete piers, and bridge deck and constructing a new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, as well as a new pier, channel walls/abutments, and a new bridge deck. Minor modifications to the existing abutments and channel walls would also be required. The proposed bridge surface would be constructed of similar materials (i.e., concrete) as existing bridge deck and the proposed concrete deck surface would be constructed in compliance with Caltrans' specifications to minimize noise generation. Lastly, the proposed lane configuration, number of lanes, and the center line location for the new bridge deck would remain the same as existing.

Proposed Bridge

The proposed bridge would be approximately 163 feet long and 92 feet wide. The new bridge pier would be constructed in the creek channel, at the same location as the existing pier. The new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place with minor modifications to provide clearance for the new bridge structure. Additionally, a new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. The proposed design would remedy the existing bridge deficiencies and enhance vehicular safety on the bridge. The proposed design of the bridge would not change the number of lanes and striping as compared to existing conditions.

Reconstruction of Sidewalks and Driveways

As shown in Figure 5, Proposed Project Details, in addition to the construction of the proposed bridge, the proposed project would also include the reconstruction of sidewalks and driveways in the immediate vicinity. Approximately 1,260 feet of driveways and/or sidewalks would be reconstructed under the proposed project. The majority of these proposed improvements would occur at private residences located in the immediate area. Additionally, drainage improvements, such as catch basins would be required on private properties at some driveway entrances.

Reconstruction of Bicycle Path and Access Road

The proposed project would include the reconstruction of approximately 400 feet of the existing bike path located along the north side of the channel. Reconstruction would include the construction of a concrete slab structure with cast-in-drilled hole (CIDH) piles intended for support. The proposed project would also include the reconstruction of approximately 200 feet of the existing access road located along the channel at the southwest corner (see Figure 5). Reconstruction would include the construction of a concrete slab structure intended for support and repaving. Reconstruction of the access roads and bicycle path would take approximately 60 days and the segment of the creek/channel trail nearest to the proposed project area of direct impact would be temporarily closed during construction.

Retaining Walls

Two retaining walls would be constructed under the proposed project, specifically; the retaining walls would be constructed at the southwest and northeast corners of the Wilmington Avenue Bridge. The retaining walls, as proposed, would be located behind the sidewalk within the existing Wilmington Avenue ROW. Temporary construction easements would be implemented approximately 5 feet behind the walls to accommodate construction access to these locations.

Right-of-Way Acquisition

As shown in Figure 5, the proposed project would include several permanent and temporary ROW acquisitions and/or permits. Specifically, the proposed project would include permanent ROW acquisitions to reconstruct the proposed access road, slope easements, drainage catch basins, and bike path; temporary ROW use to establish construction staging areas during the proposed project's 300-day construction period; and temporary permits to enter and reconstruct those private driveways impacted by construction. Most of these ROW acquisitions and temporary use would take place along Wilmington Avenue; however, a majority of the temporary permits would be needed to perform driveway rehabilitation at the private residences both east and west of the proposed project along School Street.

Anticipated temporary and permanent right-of-way acquisitions and use are listed below in Table 1, Anticipated Temporary and Permanent ROW Acquisitions.

Table 1. Anticipated Temporary and Permanent ROW Acquisitions and Use

APN[1,2]	Owner Address	Area (SF)[1]
Road Right-of-Way (Permanent)		
615-100-8900	LAFCD	400
615-100-8908	LAFCD	1,280
615-601-3900	LAFCD	2,017
615-601-3034	LAFCD	1,282
615-601-3904	LAFCD	1,235
	Total	**6,214**
Temporary Construction Area		
615-100-6040	739 W School St, Compton, CA 90220	744
615-100-6041	306 N Wilmington Ave, Compton, CA 90220	605
615-100-6042	306 N Wilmington Ave, Compton, CA 90220	151
615-100-6043	308 N Wilmington Ave, Compton, CA 90220	145
615-100-8001	245 N Magnolia Ct, Compton, CA 90220	366
615-100-8900	LAFCD	79
615-100-8908	LAFCD	3,500
615-601-3034	201 N Wilmington Ave, Compton, CA 90220	2,494
615-601-3900	LAFCD	3,175
615-601-3904	LAFCD	1,384
615-601-4001	131 N Wilmington Ave, Compton, CA 90220	213
615-601-4028	125 N Wilmington Ave, Compton, CA 90220	138

Table 1. Anticipated Temporary and Permanent ROW Acquisitions and Use

APN[1,2]	Owner Address	Area (SF)[1]
615-601-4032	131 N Wilmington Ave, Compton, CA 90220	209
	Total	**13,203**
Access Ramp Structure and Bike Path Reconstruction		
615-100-8005	LAFCD	400
615-100-8053	LAFCD	600
615-100-8900	LAFCD	400
615-100-8901	LAFCD	200
615-601-2018	LAFCD	750
	Total	**2,350**
Driveway/Sidewalk Reconstruction		
615-100-6039	735 W School St, Compton, CA 90220	635
615-100-6040	739 W School St, Compton, CA 90220	302
615-100-6044	314 N Wilmington Ave, Compton, CA 90220	100
615-100-8001	245 N Magnolia Ct, Compton, CA 90220	299
615-100-8002	245 N Magnolia Ct, Compton, CA 90220	344
615-601-2018	303 N Wilmington Ave, Compton, CA 90220	999
615-601-2019	307 N Wilmington Ave, Compton, CA 90220	478
615-601-2020	305 N Wilmington Ave, Compton, CA 90220	500
615-601-3026	809 W School St, Compton, CA 90220	401
615-601-3034	201 N Wilmington Ave, Compton, CA 90220	606
615-601-4001	131 N Wilmington Ave, Compton, CA 90220	1,862
615-601-4004	810 W School St, Compton, CA 90220	630
	Total	**7,156**

Notes:

[1] Location and area (SF) is approximate and is subject to change due to further design plan refinements during the final phase of the project.

[2] Additional parcels within the project area may be included as potential ROW acquisition and or temporary construction easements are identified as design plans are develop during the final design phase.

Other Components

In addition to the items described above, the proposed project may include removal of private trees. Aesthetic elements may also be incorporated upon the City's recommendation.

2.5 Project Construction

The proposed project would include demolition and construction activities. Generally, construction activities would include demolition, grading, pile drilling, installation of metal beam guardrail system, construction of bridge abutments, bridge pier reconstruction, reconstruction of sidewalks, drainage improvements (catch basins at driveway entrances) bicycle path reconstruction, roadway reconstruction to accommodate and full road closures within project limits.

For purposes of this analysis, project construction activities have been divided into the following stages:

- Site Preparation
- Existing Bridge Demolition
- Proposed Bridge Construction
- Reconstruction of Access Road, Sidewalks, and Bicycle Path

Approximately 41,000 square feet of roadway would be reconstructed and repaved during proposed demolition and construction activities. During construction, approximately 1,906 cubic yards of excavated soils would be used as unclassified fill to reconstruct the existing bike paths, after which approximately 1,661 cubic yards of excavated soils would be exported from the project area. Excavated materials would be disposed of at the Savage Canyon Landfill, located approximately 14 roadway miles northeast of the project site.

Site Preparation

Site preparation would involve clearance of the project area and preparation for demolition activities. Surrounding businesses and residents would be notified of upcoming construction activities. Construction equipment and materials would arrive at the site and detours would be set up to direct traffic. The construction staging locations would also be determined. Site preparation activities would occur over a 6-week period.

Existing Bridge Demolition

Under the proposed project, the existing two-span Wilmington Avenue Bridge over Compton Creek would be demolished. The existing pier timber piles would be removed 3 feet below the finished grade, followed by the removal of the existing steel girders, cross brace members, reinforced concrete, asphalt pavement (bridge deck), and any excavated soil within the project limits of work. Specifically, the concrete bridge deck would be demolished by saw cutting and the steel girders would be removed by torch cutting before the transporting the fragmented pieces to the dump trucks using a crane. Once the bridge deck has been removed, all existing bridge bearing components would also be removed, including portions of the concrete abutments, which would be demolished using hoe rams and jackhammers, after which any gaps/voids would be patched with epoxy grout to obtain a smooth plane finish. The site of the new pile caps would be graded in preparation for the new bridge structure. Soils from the existing bridge and roadways would be reconstructed and used to fill bicycle path areas that would be reconstructed.

Proposed Bridge Construction

Once the existing structure has been demolished, a new two-span, precast, pre-stressed concrete box beam structure would be constructed in the same location. The new concrete bridge pier would be constructed in the Compton Creek channel, at the same location as the existing pier. Bridge pier construction would involve the installation of CIDH concrete piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations), construction of concrete pier footings and the stem wall. Specifically, a hydraulic crane and drill rig would be used to drill the holes and install the rebar cages, while a concrete truck, concrete pump, forklifts and loaders would be needed to fill the drilled holes and construct the footings and stem wall. This stage would require pile drilling, grading, construction of the bridge abutments and bridge pier reconstruction. Concrete barriers per Caltrans' standards with tubular hand railing would be installed along either side of the bridge and metal beam guardrails would be installed at the bridge approaches where conditions allow.

As shown in Figure 3, the new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place with minimal modification to accommodate clearance for the new bridge structure. Modification to the existing abutments that act as the channel walls would include removal of existing backwall down to the seat elevation to allow new bridge superstructure to span over the existing abutments. The existing channel walls outside of this limit will not be modified. The new bridge soffit (underside) would be raised approximately 2 feet higher than the existing bridge in order to meet the freeboard requirement. Similar to the construction of the bridge pier, the construction of the new bridge abutments would involve the installation of CIDH concrete piles, pile caps, and backwalls, which would use a drill rig and hydraulic crane, while an excavator and crane would be used to install the formwork and the reinforcement for the pile caps. Additional equipment needed to install the pile caps and backwall includes forklifts, loaders, concrete pumps, and a concrete truck.

Additionally, as shown in Figure 4, a new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. The construction of the bridge superstructure would involve the installation of precast/pre-stressed adjacent concrete box beams, a cast-in-place reinforced concrete deck, sidewalks, and bridge barriers. Installation of these superstructure components would use a hydraulic crane, concrete slipform machine, concrete truck, and concrete pump. After the superstructure has been constructed, the bike paths, and access ramp would be reconstructed and the roadway would be paved and restriped.

Reconstruction of Access Road, Sidewalks, and Bicycle Path

As shown in Figure 5, project construction would also include the reconstruction of the sidewalks adjacent to the project limits. ROW acquisition would be required for the parcels located along the east and west and at the southwest and northeast corners where the adjacent properties would be affected by the raised roadway and sidewalks. Furthermore, drainage improvements, such as catch basins, would occur on several private property driveways.

As shown in Figure 5, project construction would also include the replacement of the bike paths along the Compton Creek channel. Specifically, reconstruction of the bike paths would include 400 feet of bike path along the north side of the channel on either side of Wilmington Avenue, where the bike path would be supported on a concrete slab structure with CIDH piles. An access road, approximately 200 feet long, would be reconstructed along the channel at the southwest corner to accommodate the 2-foot change in bridge elevation. Proposed construction activities would include installing CIDH concrete piles using a drill rig, hydraulic crane, concrete truck, and concrete pump, and installing a reinforced concrete slab using forklifts, loaders, concrete trucks, and a concrete pump.

Construction Workers and Equipment

Construction activities, durations, workers, and equipment would vary during each construction phase. In general, the proposed project would require an average of 10 to 15 workers per day throughout the construction period. Daily vehicular trips that are expected to occur throughout construction are as follows: a maximum of 10 round trips per day for transportation of construction equipment to and from the work areas when necessary; approximately 10 to 30 round trips per day for transportation of construction workers to and from the work areas; and 10 round trips per day for haul trucks (i.e., dump trucks).

Construction equipment for each construction sub-phase is shown in Table 2 (see Section 3.3, Air Quality).

Construction Staging Locations

Given that full road closures would occur, the 300-foot approach roadways on either side of the bridge structure would likely be used as construction staging areas. See Figure 5 for approximation of staging area boundaries. As such, the proposed project would extend in a north-south direction within the Wilmington Avenue ROW from approximately North Brazil Street to approximately West Magnolia Street, with some driveway and easement re-construction taking place along School Street (see Figure 5) for purposes of fence/block wall reconstruction and hardscape adjoining the public sidewalk. Temporary K-rails would be installed at each end of the project limits, including a 6-foot-high perimeter fence to block pedestrians from entering the work area. Access for the properties adjacent to the construction site would be maintained during construction.

Construction-Related Road Closures

During construction, full road closures over the Wilmington Avenue Bridge would occur for approximately 300 days and planned detour routes would be established via Rosecrans Avenue, Compton Boulevard and Alameda Street. Specifically, northbound traffic would be directed east on Compton Boulevard, north on Alameda Street, west on Rosecrans Avenue, and north back onto Wilmington Avenue. Southbound traffic would be directed east on Rosecrans Avenue, south on Alameda Street, west on Compton Boulevard, and south back onto Wilmington Avenue. Wilmington Avenue Bridge would be closed to traffic and the bridge approaches would be used for construction staging and construction parking. Construction staging and parking would occur within the Direct APE as depicted on Figure 5.

Public Works construction projects, such as the proposed project, implement traffic control plans for work within road ROWs (PDF-TRAF-1). Therefore, PDF-TRAF-1, would be included as part of the proposed project.

PDF-TRAF-1 Traffic Control Plans (TCP) would be required for all construction work within the road right of way which modifies vehicular, bicycle, pedestrian and/or transit traffic patterns and are necessary to ensure the safe and efficient movement of traffic through construction work zones. The TCP would be prepared by the project's contractor and reviewed and managed by the County of Los Angeles.

Elements of a TCP should include, but are not necessarily limited to, the following:

a. Provision of public workshops and/or neighborhood meetings to notify and inform adjacent residents, impacted stakeholders and the general public regarding the schedule and duration of street closures, and implementation of detour routes and temporary traffic calming measures.

b. Develop detour plans to minimize impacts to local or residential streets, especially minimize truck traffic on local roadways to the extent possible and ensure least interference to pedestrians, bicyclists, transit and other vehicle users in the area. Develop traffic calming measures such as signage and speed radar warning signs needed to manage cut-through traffic along local residential streets adjacent to Wilmington Avenue and Compton Creek bridges.

c. Install temporary traffic control devices as specified in Part 6 of Caltrans' Manual of Uniform Traffic Control Devices (CAMUTCD) to maintain safe and effective movement of all road users (including pedestrians and bicyclists) through or around temporary traffic control zones while reasonably protecting from traffic incidents and equipment.
   - Use flaggers, signage, traffic control barricades, channelizing devices, pavement markings and/or work vehicles to safely direct traffic through construction work zones.
   - Use warning signs and plaques as specified in CAMUTCD for detours and temporary traffic control zones.

d. Coordinate with emergency service providers such as police, fire stations, hospitals as well as all stakeholders i.e. abutting property owners, residents and businesses and schools to ensure adequate accessibility to all road users during the construction period. Provide advance notification of the timing, location, and duration of construction activities and detour routes to residents, business or facility owners and administrators.

e. Coordinate with County and City officials, to obtain all necessary encroachment and trip permits.

f. To the extent feasible, schedule truck trips (equipment delivery and haul) outside of AM and PM peak commute hours. Encourage carpooling among workers to reduce worker commute trips.

Construction Schedule

Project construction is anticipated to begin in spring 2026, and would last for approximately 300 working days.[1] Demolition activities would last approximately 15 days. Bridge replacement and construction would last approximately 220 days (50 days for the bridge pier and pier nose construction; 60 days for the bridge abutment construction; 50 days for the bridge superstructure construction; and, 60 days for the bike path ramp and access road reconstruction). Construction would occur Monday through Friday from 7 a.m. to 3:30 p.m.

2.6 Project Operation

Public Works is solely responsible for design and construction. Once project construction has been completed, operation and maintenance would be the responsibility of the City of Compton. Implementation of the proposed project would improve transportation efficiency by enabling larger trucks to use the bridge. Operational activities would be limited to scheduled inspections. The primary responsibilities would be the maintenance and upkeep of the bridge.

2.7 Approvals Required for the Proposed Project

Numerous approvals and/or permits would be required to implement the proposed project. These approvals and permits may include, but may not be limited to, the items listed below:

- Adoption of the Mitigated Negative Declaration by the County of Los Angeles (County) Board of Supervisors
- Proposed project plan approval by the City of Compton
- Proposed project approval National Environmental Policy Act clearance by Caltrans
- A U.S. Army Corps of Engineers Section 404 Nationwide Permit
- Regional Water Quality Control Board Clean Water Act Section 401 Certification
- California Department of Fish and Wildlife Section 1602 Streambed Alteration Agreement

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[1] For the purposes of the air quality analysis (Table 2, Construction Scenario Assumptions), construction was assumed to start in April 2026 and last for approximately 300 working days. During the preparation of the IS/MND, an April 2026 start date was analyzed to represent the earliest possible construction schedule. Assuming an earlier start date for project construction represents the worst-case scenario for criteria air pollutant emissions, because equipment and vehicle emission factors for later years would be less due to more stringent standards for off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles. It should also be noted this construction schedule may change based on actual field conditions.

3 Initial Study Checklist

1. **Project title:**

   Wilmington Avenue Bridge over Compton Creek Project

2. **Lead agency name and address:**

   County of Los Angeles Department of Public Works
   900 South Fremont Avenue
   Alhambra, California 91803-1331

3. **Contact person and phone number:**

   Reyna Soriano
   Civil Engineer
   626.458.5199

4. **Project location:**

   City of Compton, Los Angeles County

5. **Project sponsor's name and address:**

   County of Los Angeles Department of Public Works
   900 South Fremont Avenue
   Alhambra, California 91803-1331

6. **General plan designation:**

   Surrounding properties are general designated as Low Density Residential, General Commercial, and Mixed Use.

7. **Zoning:**

   Surrounding properties are zoned Low Density Residential, Medium Density Residential, and Limited Commercial.

8. **Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):**

   The proposed project would involve the demolition of the existing two-span Wilmington Avenue Bridge and the construction of a new two-span, pre-cast concrete bridge. The proposed project would be located in southern Los Angeles County in a northwest portion of the City of Compton where the Wilmington Avenue ROW crosses Compton Creek, 500 feet north of the Compton Boulevard/Wilmington Avenue intersection. Refer to Section 2, Project Description, for additional details.

9. Surrounding land uses and setting (Briefly describe the project's surroundings):

The proposed project site is located in an urban, highly developed part of the City. Surrounding land use designations include General Commercial, Single-Family Residential and Low-density Multi-family Residential.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

See Section 2.7, Approvals Required for the Proposed Project.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Yes. See Section 3.18, Tribal Cultural Resources, of this IS/MND for details.

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 on the following pages.

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

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

March 8, 2023
Date

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
    a. Earlier Analysis Used. Identify and state where they are available for review.
    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
    c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
    a. The significance criteria or threshold, if any, used to evaluate each question; and
    b. The mitigation measure identified, if any, to reduce the impact to less than significance

3.1 Aesthetics

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	**AESTHETICS** – Except as provided in Public Resources Code Section 21099, would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b)	Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from 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?	☐	☐	☐	☒

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact. Scenic vistas generally refer to views of expansive open space areas or other natural features, such as mountains, undeveloped hillsides, large natural water bodies, or coastlines. There are no views of scenic vistas from the project site, and the project site is located in an area that would not contribute to a view of a scenic vista. Rather, existing views from the project site are predominantly characterized by urban development, including single-family and multi-family residential to the north and south, and views of the Compton Creek channel to the east and west. Views in every direction are low to moderate quality due to the prevailing hardscaping and urban streetscaping, which includes overhead utility poles and wires, streetlights, signage, and incongruent urban landscaping. Additionally, the proposed project is a bridge replacement project, which, upon operation, would be aesthetically similar when compared to existing conditions. During the construction phase, the visual character of the area would be temporarily affected. However, these impacts would be temporary and would not constitute a significant impact. As such, the project would have no impact to scenic vistas.

b) Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The proposed project would not be located within the vicinity of an eligible or designated state scenic highway. The nearest designated state scenic highway is Highway 2 (Angeles Crest Scenic Highway) where it traverses from La Canada Flintridge to San Bernardino County, approximately 23 miles north of the project site (Caltrans 2022). Due to the distance and intervening development between this state scenic highway and the project site, the proposed project would not substantially damage scenic resources within a state scenic highway. While private trees would be removed during project construction, street and landscape trees within the project area are not visible from an eligible or designated scenic highway. Further, the trees within the project area are generally ornamental and commonplace to urban environments. Lastly, there are, rock outcroppings or historic buildings located on the project site. No impact would occur.

c) ***In non-urbanized areas, would the project 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 Impact. As stated in Section 3.1(a), the project site is located in a developed, urban portion of the City of Compton. Views in every direction from the project site are low to moderate quality due to the prevailing hardscaping and urban streetscaping, which includes overhead utility poles and wires, streetlights, signage, and incongruent urban landscaping. Additionally, the proposed project is a bridge replacement project, which, upon operation, would be aesthetically similar when compared to existing conditions. During the construction phase, the visual character of the area would be temporarily affected. However, these impacts would be temporary and would not constitute a significant impact. The proposed project would comply with applicable development standards as indicated in the County’s General Plan and Municipal Code. Because the proposed project involves demolition and reconstruction of an existing bridge, the proposed use is consistent with the existing land use. As such, the project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant.

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

No Impact. As stated above, the proposed project would include the replacement of the existing Wilmington Avenue Bridge over Compton Creek with a new two-span, concrete bridge. Neither the new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, nor the new pier and new abutments would be constructed with materials commonly associated with producing day/nighttime light or glare. The project would not include the construction of any additional buildings or infrastructure that could potentially create a new source of substantial light or glare when compared to existing conditions. No impact would occur.

3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project area includes, and is surrounded by, low-density residential, mixed use, and general commercial land uses (City of Compton 2011). The project area is not mapped by the California Department of Conservation (DOC) because of the developed nature of the area (DOC DLRP 2018). The project site is occupied with an existing bridge. No farmland occurs on, or in the vicinity of, the project site (DOC DLRP 2018). Therefore, the proposed project would not convert Farmland to non-agricultural uses, and no impact would occur.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project area includes, and is surrounded by, low-density residential, mixed use, and general commercial land uses (City of Compton 2011). The project area does not include land zoned or used for agricultural purposes (City of Compton 2011). Additionally, the project area is not included in any existing Williamson Act contracts (DOC DLRP 2016). The proposed project would include the replacement of an existing bridge. As such, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

c) Would the project 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 project area includes, and is surrounded by, low-density residential, mixed use, and general commercial land uses (City of Compton 2011). The project area does not include land zoned or used as forest land or timberland (City of Compton 2011). The proposed project would include the replacement of an existing bridge. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forestland, timberland, or timberland zoned Timberland Production. No impact would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project area includes, and is surrounded by, low-density residential, mixed use, and general commercial land uses (City of Compton 2011). As characterized above, no forest land is located within the project area or in the vicinity of the project. As such, no forest land would be converted or otherwise affected by the proposed project, and no impact would occur.

e) Would the project 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 described above, the project area includes, and is surrounded by, low-density residential, mixed use, and general commercial land uses (City of Compton 2011). No farmland or forest land is located in the project area or within the vicinity. The proposed project would include the replacement of an existing bridge, which, upon operation, would function the same as when compared to existing conditions. As such, the proposed project would not 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 would occur.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

a) Would the project conflict with or obstruct implementation of the applicable air quality plan?

Less-Than-Significant Impact. The project site is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County, and is within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD).

The SCAQMD administers the Air Quality Management Plan (AQMP) for the SCAB, which is a comprehensive document outlining an air pollution control program for attaining all California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The most recent adopted AQMP is the 2016 AQMP (SCAQMD 2017), which was adopted by the SCAQMD Governing Board in March 2017.[2] The 2016 AQMP represents a new approach, focusing on available, proven, and cost-effective alternatives to traditional strategies while seeking to achieve multiple goals in partnership with other entities promoting reductions in GHGs and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017).

The purpose of a consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and, thus, if it would interfere with the region's ability to comply with federal and state air quality standards. The SCAQMD has established criteria for determining

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[2] SCAQMD is currently working on the next iteration of the AQMP, the 2022 Air Quality Management Plan. The 2022 AQMP will incorporate the recently adopted SCAG's 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS). However, until the adoption of the 2022 AQMP, project AQMP consistency will be analyzed off the 2016 AQMP and the RTP/SCS that was adopted at the time, the 2016–2040 RTP/SCS.

consistency with the currently applicable AQMP in Chapter 12, Sections 12.2 and 12.3, in the SCAQMD CEQA Air Quality Handbook. The criteria are as follows (SCAQMD 1993):

- Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP.
- Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

To address the first criterion regarding the project's potential to result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP, project-generated criteria air pollutant emissions were estimated and analyzed for significance and are addressed under Section 3.3(b). Detailed results of this analysis are included in Appendix A, CalEEMod Outputs. As presented in Section 3.3(b), project construction would not generate criteria air pollutant emissions that would exceed the SCAQMD thresholds, and the project is not anticipated to generate operational criteria air pollutant emissions.

The second criterion regarding the project's potential to exceed the assumptions in the AQMP or increments based on the year of project buildout and phase is primarily assessed by determining consistency between the project's land use designations and potential to generate population growth. In general, projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook). The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the Southern California Association of Governments (SCAG) for its Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) (SCAG 2016), which is based on general plans for cities and counties in the SCAB, for the development of the AQMP emissions inventory (SCAQMD 2017).[3] The SCAG 2016 RTP/SCS, and associated Regional Growth Forecast, are generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans.

As discussed in Section 2 of this IS/MND, the project would involve the replacement of the existing bridge. Construction of the new bridge would not change or affect the existing zoning or land use designations in the project area. Accordingly, the project is consistent with the SCAG RTP/SCS forecasts used in the SCAQMD AQMP development.

In summary, based on the considerations presented for the two criteria, impacts relating to the project's potential to conflict with or obstruct implementation of the applicable AQMP would be less than significant.

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[3] Information necessary to produce the emission inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including the California Air Resources Board (CARB), the California Department of Transportation, and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into its Travel Demand Model for estimating/projecting vehicle miles traveled and driving speeds. SCAG's socioeconomic and transportation activities projections in their 2016 RTP/SCS are integrated in the 2016 AQMP (SCAQMD 2017).

b) Would the project 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 Impact. Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003).

A quantitative analysis was conducted to determine whether proposed construction activities would result in a cumulatively considerable net increase in emissions of criteria air pollutants for which the SCAB is designated as nonattainment under the NAAQS or CAAQS. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), and lead. Pollutants that are evaluated herein include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are important because they are precursors to O_3, as well as CO, sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$.

Regarding NAAQS and CAAQS attainment status,[4] the SCAB is designated as a nonattainment area for national and California O_3 and $PM_{2.5}$ standards (CARB 2017a; EPA 2017a). The SCAB is designated as a nonattainment area for California PM_{10} standards; however, it is designated as an attainment area for national PM_{10} standards. The SCAB nonattainment status of O_3, PM_{10}, and $PM_{2.5}$ standards is the result of cumulative emissions from various sources of air pollutants and their precursors within the SCAB, including motor vehicles, off-road equipment, and commercial and industrial facilities. The SCAB is designated as an attainment area for national and California NO_2, CO, and SO_2 standards. Although the SCAB has been designated as partial nonattainment (Los Angeles County) for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard.[5]

Appendix G of the CEQA Guidelines indicates that, where available, the significance criteria established by the applicable air district may be relied upon to determine whether a project would have a significant impact on air quality. The SCAQMD has established Air Quality Significance Thresholds, as revised in March 2015, which set forth quantitative emissions significance thresholds below which a project would not have a significant impact on ambient air quality (SCAQMD 2015). The quantitative air quality analysis provided herein applies the SCAQMD thresholds to determine the potential for the project to result in a significant impact under CEQA. The SCAQMD mass daily construction thresholds are as follows: 75 pounds per day for VOC, 100 pounds per day for NO_x, 550 pounds per day for CO, 150 pounds per day for SO_x, 150 pounds per day for PM_{10}, and 55 pounds per day for $PM_{2.5}$.

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[4] An area is designated as in attainment when it is in compliance with the NAAQS and/or the CAAQS. The NAAQS and CAAQS are set by the Environmental Protection Agency and CARB, respectively, for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. Attainment = meets the standards; attainment/maintenance = achieve the standards after a nonattainment designation; nonattainment = does not meet the standards.

[5] Re-designation of the lead NAAQS designation to attainment for the Los Angeles County portion of the SCAB is expected based on current monitoring data. The phase out of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

The following discussion quantitatively evaluates project-generated construction impacts and qualitatively evaluates operational impacts that would result from implementation of the proposed project.

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment and soil disturbance) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

The California Emissions Estimator Model (CalEEMod) Version 2022.1.5 was used to estimate emissions for construction of the proposed project CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with construction activities from a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters, including the project size, construction schedule, number of worker/delivery/haul trips, and anticipated construction equipment utilization, were based on information provided by Public Works and default model assumptions when project-specific data were not available.

For the purpose of conservatively estimating project emissions, it is assumed that construction of the project would start in spring 2026 and would occur over approximately 300 days. The construction phasing schedule and duration, vehicle trip assumptions and construction equipment mix used for estimating the project-generated emissions are shown in Table 2.

Internal combustion engines used by construction equipment, trucks, and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. PM_{10} and $PM_{2.5}$ emissions would also be generated by entrained dust, which results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil. It is anticipated that the project would require the export of approximately 1,000 cubic yards of soil. Excavated material would be transported to the Whittier or Puente Landfills, which are located approximately 30 miles from the project site. It was assumed that the project would require a maximum of 10 round trips per day for delivery of construction materials to and from the work areas; and approximately a maximum of 15 round trips per day for transportation of construction workers to and from the work areas; and a total of 525 round trips per day for haul trucks required for excavation and demolition over the entire construction period. Overall, the proposed project would result in a maximum daily vehicle miles traveled (VMT) of 1,384 miles, due to the augur drilling and bridge construction phases, and a total VMT of approximately 199,372 miles over the entire construction duration. In addition, the proposed project would be required to comply with SCAQMD Rule 403 to control dust emissions during any dust-generating activities (SCAQMD 2005). Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active grading areas two times per day, with additional watering depending on weather conditions.

Estimated maximum daily construction criteria air pollutant emissions from all on-site and off-site emission sources is provided in Table 3.

Table 2. Construction Scenario Assumptions

Construction Phase	Start Date	Finish Date	One-Way Vehicle Trips			Equipment		
			Average Daily Workers	Average Daily Vendor Trucks[1]	Average Daily Haul Trucks[2]	Type	Quantity	Usage Hours
Clear and Grub and AC Removal	04/01/2026	04/14/2026	6	2	10	Graders	1	8
						Tractors/Loaders/Backhoes	2	8
Drainage/Sub-Grade	04/08/2026	05/05/2026	6	2	0	Graders	1	8
						Tractors/Loaders/Backhoes	1	8
Grading/Excavation	05/04/2026	05/15/2026	8	2	5	Graders	1	8
						Rollers	2	8
						Tractors/Loaders/Backhoes	3	8
Retaining Walls	05/18/2026	07/10/2026	8	2	0	Aerial Lifts	1	8
						Cranes	1	8
						Pumps	1	8
						Rough Terrain Forklifts	1	8
Access Ramp	06/02/2026	08/24/2026	10	2	0	Bore/Drill Rigs	1	8
						Cranes	1	8
						Pumps	1	8
						Rough Terrain Forklifts	1	8
						Tractors/Loaders/Backhoes	1	8
Diversion Structure/Excavation	07/09/2026	07/22/2026	8	2	0	Graders	1	8
						Tractors/Loaders/Backhoes	1	8
Bridge Demolition	07/21/2026	08/31/2026	6	0	10	Concrete/Industrial Saws	1	8
						Tractors/Loaders/Backhoes	1	8
Augur Drilling	08/27/2026	11/18/2026	8	22	10	Bore/Drill Rigs	1	8
Bridge Construction	10/13/2026	03/22/2027	30	20	0	Aerial Lifts	1	8
						Cranes	2	8
						Pumps	1	8
						Rough Terrain Forklifts	2	8

Table 2. Construction Scenario Assumptions

			One-Way Vehicle Trips			Equipment		
Construction Phase	Start Date	Finish Date	Average Daily Workers	Average Daily Vendor Trucks[1]	Average Daily Haul Trucks[2]	Type	Quantity	Usage Hours
Subgrade	03/23/2027	04/19/2027	6	2	0	Graders	1	8
						Tractors/Loaders/Backhoes	1	8
Paving	04/20/2027	07/19/2027	10	24	0	Graders	1	8
						Paving Equipment	1	8
						Pumps	1	8
						Rollers	3	8
						Sweepers/Scrubbers	1	8
						Tractors/Loaders/Backhoes	2	8
Electrical/Striping	07/20/2027	08/16/2027	6	2	0	Air Compressors	1	8

Source: Public Works 2019a.

Notes: See Appendix A for details.

Equipment types provided by the Public Works were matched with the construction equipment presented in CalEEMod.

[1] Water trucks are included as vendor trips for construction modeling.

[2] Dump trucks are included as haul trips for construction modeling.

Table 3. Estimated Maximum Daily Construction Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2026	1.83	17.40	23.80	0.05	1.55	0.70
2027	1.37	10.90	15.10	0.03	0.91	0.47
Maximum daily emissions	1.83	17.40	23.80	0.05	1.55	0.70
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD 2015.
Notes: See Appendix A for detailed results.
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

As shown in Table 3, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during project construction.

As discussed in previously, the SCAB has been designated as a federal nonattainment area for O_3 and $PM_{2.5}$ and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. Proposed construction activities of the project would generate VOC and NO_x emissions (which are precursors to O_3) and emissions of PM_{10} and $PM_{2.5}$. However, as indicated in Table 3, project-generated construction emissions would not exceed the SCAQMD emission-based significance thresholds for VOC, NO_x, PM_{10}, or $PM_{2.5}$, and therefore the project would not cause a cumulatively significant impact.

Cumulative localized impacts would potentially occur if a construction project were to occur concurrently with another off-site project. One Public Works project, the Compton Boulevard Bridge over Compton Creek Project, has been identified as a cumulative project located approximately 800 feet southeast of the project site where the Compton Boulevard ROW crosses Compton Creek. Construction of the Compton Boulevard Bridge over Compton Creek would not, however, occur concurrently with the proposed project. Construction schedules for other potential future projects near the project site are currently unknown; therefore, potential construction impacts associated with two or more simultaneous projects would be considered speculative.[6] However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would also be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD (SCAQMD 2005). Based on the previous considerations, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant.

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[6] The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145). This discussion is nonetheless provided in an effort to show good-faith analysis and comply with CEQA's information disclosure requirements.

Operational Emissions

Once project construction is complete, minimal operational activities associated with the proposed project would occur (infrequent maintenance including use operation of equipment or vehicle trips). Because proposed maintenance activities associated with the proposed project would generate a minimal amount of vehicle trips, operational emissions would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less-Than-Significant Impact. Localized project impacts associated with construction criteria air pollutants emissions are assessed as follows.

Sensitive Receptors

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The closest sensitive receptor land uses are residences adjacent to the project site to the east.

Localized Significance Thresholds

The SCAQMD recommends a localized significance threshold (LST) analysis to evaluate localized air quality impacts to sensitive receptors in the immediate vicinity of the project site as a result of construction activities. The impacts were analyzed using methods consistent with those in the SCAQMD's Final Localized Significance Threshold Methodology (SCAQMD 2009). The project is located in Source Receptor Area (SRA) 12 (South Central Los Angeles County). The project's construction activities would occur over a 1.72-acre work area; therefore, for the purposes of the LST analysis, emissions thresholds based on a 1-acre site were used. This is a conservative approach, as LSTs increase with the size of project site. As mentioned previously, the closest sensitive receptors are residences adjacent to the project site to the east. The closest receptor distance available in the SCAQMD LST Methodology is 25 meters (82 feet) and is what was assumed for this analysis.

Project construction activities would result in temporary sources of on-site criteria air pollutant emissions associated with construction equipment exhaust and dust-generating activities. The maximum daily on-site construction emissions generated during construction of the proposed project is presented in Table 4, and compared to the SCAQMD localized significance criteria for SRA 12 to determine whether project-generated on-site construction emissions would result in potential LST impacts.

Table 4. Construction Localized Significance Thresholds Analysis

Year	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day (on site)			
2026	17.10	22.20	1.58	0.64
2027	10.30	14.40	0.70	0.38
Maximum Daily On-Site Construction Emissions	17.10	22.20	1.58	0.64
SCAQMD LST Criteria	*46*	*231*	*4*	*3*
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: SCAQMD 2009.
Notes: See Appendix A for detailed results.
NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
Localized significance thresholds are shown for a 1-acre project site corresponding to a distance to a sensitive receptor of 25 meters.

As shown in Table 4, proposed construction activities would not generate emissions in excess of site-specific LSTs; therefore, localized project construction impacts would be less than significant.

CO Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO "hotspots." CO transport is extremely limited because CO disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections. Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots. During construction of the project, construction traffic would affect the intersections near the project site. However, the project would be temporary and would not be a source of daily, long-term mobile-source emissions. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing. Finally, as discussed in Section 3.17, Transportation, of this IS/MND, transportation impacts would be less than significant. Therefore, the proposed project would not generate additional traffic volumes and impacts related to CO hot spots would be less than significant.

Toxic Air Contaminants

Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. As discussed under the LST analysis, the nearest sensitive receptors are residences adjacent to the project site to the east.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SCAQMD recommends an incremental cancer risk threshold of 10 in 1 million. "Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of

Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. The SCAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) non-carcinogenic effects.[7] TACs that would potentially be emitted during construction activities associated with the proposed project would be diesel particulate matter.

Diesel particulate matter emissions would be emitted from heavy equipment operations and heavy-duty trucks. Heavy-duty construction equipment is subject to a California Air Resources Board (CARB) Airborne Toxics Control Measure for in-use diesel construction equipment to reduce diesel particulate emissions. As described for the LST analysis, PM_{10} and $PM_{2.5}$ (representative of diesel particulate matter) exposure would be minimal. According to the Office of Environmental Health Hazard Assessment, health risk assessments (which determine the exposure of sensitive receptors to toxic emissions) should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should also be limited to the period/duration of activities associated with the project. The duration of the proposed construction activities would constitute a small percentage of the total 30-year exposure period. The construction period for the project would be approximately 300 workdays, after which construction-related TAC emissions would cease. Due to this relatively short period of exposure and minimal particulate emissions on site, TACs generated during construction would not be expected to result in concentrations causing significant health risks.

Following completion of on-site construction activities, the project would not involve routine operational activities that would generate TAC emissions. Operation of the project would not result in any non-permitted direct emissions (e.g., those from a point source such as diesel generators). For the reasons previously described, the project would not result in substantial TAC exposure to sensitive receptors in the vicinity of the project, and impacts would be less than significant.

Asbestos

Demolition activities could result in airborne entrainment of asbestos, particularly where structures built prior to 1980 would be demolished. The regulation of asbestos is covered under the U.S. Environmental Protection Agency's National Emissions Standards for Hazardous Air Pollutants. In addition, these materials would be removed in accordance with regulatory requirements prior to demolition (pursuant to SCAQMD Rule 1403, Asbestos Emissions), which establishes survey, notification, and work practice requirements to prevent asbestos emissions during building demolition. Because adherence to this rule is mandatory, the potential for significant adverse health impacts would be reduced to a less-than-significant level.

Health Effects of Criteria Air Pollutants

Construction emissions of the project would not exceed the SCAQMD thresholds for any criteria air pollutants, including VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$.

Health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2019). VOCs and NO_x are precursors to O_3, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of VOCs

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[7] Non-cancer adverse health risks are measured against a hazard index, which is defined as the ratio of the predicted incremental exposure concentrations of the various non-carcinogens from the project to published reference exposure levels that can cause adverse health effects.

and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SCAB due to O_3 precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Further, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O_3 NAAQS and CAAQS tend to occur between April and October when solar radiation is highest. Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of O_3 precursors is speculative. Because the project would not exceed the SCAQMD thresholds, the project would not contribute to health effects associated with O_3.

Health effects associated with NO_x include lung irritation and enhanced allergic responses (CARB 2019). Because project-related NO_x emissions would not exceed the SCAQMD mass daily thresholds, and because the SCAB is a designated attainment area for NO_2 and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards, it is not anticipated that the project would cause an exceedance of the NAAQS and CAAQS for NO_2 or result in potential health effects associated with NO_2 and NO_x.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2019). CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots was discussed previously and determined to be less than significant. Thus, the project's CO emissions would not contribute to significant health effects associated with CO.

Health effects associated with PM_{10} include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2019). Construction of the project would not exceed thresholds for PM_{10} or $PM_{2.5}$, would not contribute to exceedances of the NAAQS and CAAQS for particulate matter, and would not obstruct the SCAB from coming into attainment for these pollutants. The project would also not result in substantial diesel particulate matter emissions during construction. Additionally, the project would be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction (SCAQMD 2005). Due to the minimal contribution of particulate matter during construction, the project is not anticipated to result in health effects associated with PM_{10} or $PM_{2.5}$.

In summary, construction and operation of the project would not result in exceedances of the SCAQMD significance thresholds for criteria pollutants, and potential health effects associated with criteria air pollutants would be less than significant.

d) ***Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

Less-Than-Significant Impact. The occurrence and severity of potential odor impacts depend on numerous factors. The nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress among the public, and generate citizen complaints.

During project construction, exhaust from equipment may produce discernible odors typical of most construction sites. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. However, such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Accordingly, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). Operation of the project would not entail any of these potentially odor-causing land uses. Therefore, the project would not create any new sources of odor during operation. Accordingly, impacts associated with project operations would be less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game 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 Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The following analysis is based on a Natural Environmental Study (Minimal Impacts), which included a biological resource survey, conducted by Dudek biologist Tracy Park under the supervision of senior biologist Michael Cady on August 1, 2019, in the 45.08-acre biological survey area (BSA). The BSA was established around the project site and a 500-foot buffer to determine the biological resources within and near the proposed project that could potentially be affected by project implementation. The Natural Environment Study (Minimal Impacts) included a pre-field review of the latest relevant literature and databases, maps, special-status species occurrence, and critical habitat designation (Appendix B, Natural Environment Study).

A search of the California Natural Diversity Database, California Native Plant Society On-Line Electronic Inventory of Rare and Endangered Vascular Plants of California, and National Marine Fisheries Service Species List was conducted to identify sensitive biological flora and fauna potentially present in the BSA. In addition, the U.S. Fish and Wildlife Service (USFWS) Information Planning and Conservation (IPaC) System and USFWS Critical Habitat Mapper was reviewed for special-status species occurrence data and critical habitat designation within the BSA.

Vegetation communities and land covers found within the BSA are entirely non-native and non-natural land covers composed of urban/developed land, ornamental vegetation, and concrete-lined channels associated with Compton Creek (Figure 6, Vegetation Types and Impact Areas). The vegetation communities and land covers identified within the BSA are discussed in further detail below. The BSA is generally situated in a heavily urbanized setting with vegetation limited to ornamental plantings or ruderal vegetation. One plant species was found in the BSA that is rated as “Moderate” by the California Invasive Plant Council: shortpod mustard (*Hirschfeldia incana*). Species rated as “Moderate” have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure (Cal-IPC 2019).

No special-status plant or wildlife species were detected within the BSA during the biological resource survey conducted on August 1, 2019. Based on the review of current state and federal databases, including the California Natural Diversity Database and USFWS IPaC System, no special-status plant or wildlife species have a moderate or higher potential to occur in the BSA. In addition, the BSA is not located within any USFWS-designated critical habitat or a designated wildlife movement corridor. The BSA also does not reside within any approved or proposed Habitat Conservation Plans or Natural Community Conservation Plans. The BSA does contain ornamental vegetation that could provide suitable nesting habitat for resident and migratory bird species protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFG Code).

a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less-Than-Significant Impact With Mitigation Incorporated. No special-status plant species are expected to occur based on the lack of suitable habitat. However, nesting birds could be indirectly impacted from short-term construction-related noise. Based on compliance with the MBTA and CFG Code, impacts would be less than significant.

Special-Status Plant Species

A total of 17 plant species were recorded during the field survey. A full list of plant species observed within the proposed project area is provided in Appendix B. No special-status plant species were detected during the biological reconnaissance survey. Due to the extent of developed lands and disturbed vegetation within the BSA, there are no special-status plant species with a moderate or high potential to occur within the BSA. Additionally, proposed project activities will primarily occur within existing paved areas (i.e., roadways, bridge decks, and concrete channel bottom). Therefore, no impacts to potentially occurring special-status plant species would occur.

Special-Status Wildlife Species

A total of eight wildlife species were recorded during the field survey. A full list of wildlife species observed within the proposed project area is provided in Appendix B. No special-status wildlife species were observed during the biological reconnaissance survey. Due to the extent of developed lands and disturbed vegetation within the BSA, there are no special-status wildlife species with a moderate or high potential to occur within the BSA.

No bats or signs of bats (i.e., urine staining and guano droppings) were visually observed at the time of the site visit; however, it should be noted that specific focused surveys for bats were not conducted. Seven special-status bat species have recorded occurrences in the project vicinity (CDFW 2019): pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), silver-haired bat (*Lasionycteris noctivagans*), hoary bat (*Lasiurus cinereus*), western yellow bat (*Lasiurus xanthinus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and big free-tailed bat (*Nyctinomops macrotis*). All the species have potential to forage over the project site, but only pallid bat has a potential to roost within the bridge due to the lack of suitable roosting habitat for the other six species. Pallid bat is commonly found on bridges (Erickson 2002); however, the BSA lacks the habitat that the species is associated with and there are few modern records from the Los Angeles Basin (CDFW 2019; GBIF 2019). Additionally, the project is within a highly urbanized area, which is a deterrent to roosting (Erickson 2002).

Ornamental vegetation within the BSA and the underside of the bridge deck mat provide suitable nesting habitat for a number of common resident and migratory bird species protected under the MBTA and CFG Code Section 3500. Suitable nesting habitat for common, urban-adapted species such as house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), and lesser goldfinch (*Spinus psaltria*) occurs within the BSA.

Although the proposed project is not expected to impact special-status wildlife species, ornamental vegetation scattered throughout the BSA and the underside of the bridge deck could provide suitable habitat for nesting birds protected under the MBTA and CFG Code. Nesting birds could be directly impacted by the removal of the existing bridge deck. Nesting birds could also be indirectly impacted from short-term construction-related noise, resulting in decreased reproductive success or nest abandonment. Therefore, if project activities were to occur during the general avian breeding season of February 1 through September 30, the project may directly and indirectly impact nesting birds protected under the MBTA and CFG Code (MM-BIO-1).

MM-BIO-1 To avoid potential direct and indirect impacts to nesting birds protected by the Migratory Bird Treaty Act and California Fish and Game Code, project activities should avoid the general nesting season of February 1 through September 30. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species under the bridge deck and in vegetation within 300 feet (for non-raptor bird species) and 500 feet (for raptor species) of the proposed work area. If an active bird nest is found within the bridge deck, work would not be able to proceed until the nest is determined to be inactive (fledged or failed) by a qualified biologist. If an active bird nest is found within portions of the survey area adjacent to the bridge, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.

Upon implementation of MM-BIO-1 impacts to species identified as a candidate, sensitive, or special status species would be less than significant.

b) ***Would the project 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. As shown in Figure 6, vegetation communities and land covers found within the BSA are entirely non-native and non-natural land covers composed of urban/developed land, ornamental vegetation, and concrete-lined channels associated with Compton Creek. None of the above identified vegetation communities are recognized by the Natural Communities List. Additionally, based on a review of the USFWS Critical Habitat viewer, there is no USFWS-designated critical habitat for listed wildlife species within the BSA (USFWS 2019). As a result, there would be no impact to riparian or sensitive vegetation communities.

c) ***Would the project 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 Impact. The concrete channel contains the waters of Compton Creek that are likely to be determined Waters of the U.S., Waters of the State, and a California Department of Fish and Wildlife (CDFW)-regulated stream. A formal jurisdictional waters delineation was not conducted; however, the limits of jurisdiction are expected to be delineated along the channel bottom for U.S. Army Corps of Engineers and the Regional Water Quality Control Board (RWQCB), and along the top of the vertical wall of the channel for CDFW, with the horizontal demarcation for each of these jurisdictions being concurrent. The channel is devoid of vegetation within the BSA.

As shown in Figure 6, temporary and permanent impacts to waters of the U.S. and State are anticipated to occur as a result of the proposed project. Construction of the proposed project would temporarily impact 0.49 acres of the concrete channel. The proposed new pier in the middle of the channel would be constructed where the existing bridge pier is located and the proposed footing (including the sloping pier nose) would result in very small increase over the existing footing (0.01 acres). Therefore, the proposed project would likely require a Section 404 Permit from U.S. Army Corps of Engineers, a Section 401 Water Quality Certification from the RWQCB, and a 1600 Streambed Alteration Agreement from CDFW.

Potential temporary impacts to jurisdictional waters within the concrete channel would result from proposed construction activities. Temporary impacts would include vehicles and equipment within the channel, the generation of concrete debris and sediment due to the demolition of the existing bridge, and the potential introduction of chemical pollutants (fuel, oil, lubricants, paints, release agents, and other construction materials). The release of chemical pollutants can reduce the water quality downstream, especially if water is actively flowing through a project site. Work would be conducted during the dry season (April 15 to October 15); however, based on historical imagery, urban runoff is present in the Compton Creek channel throughout the year.

To reduce temporary impacts, work areas would be reduced to the maximum extent feasible, and staging areas would be along the roadways and outside of Compton Creek. During construction, erosion-control measures would be implemented by the contractor as part of their County-certified Stormwater Pollution Prevention Plan (SWPPP) for the proposed project. The SWPPP will identify the sources of pollutants that may affect the quality of stormwater and include best management practices (BMPs) to control the pollutants. All work shall conform to the site specific surface water diversion plan prepared for the project that will comply with the conditions included in the Water Quality Certification from the RWQCB and include pertinent BMPs from the Construction Site Best Management Practices (BMPs) Manual (Public Works 2010). These include, but are not limited to, temporary sediment control, temporary soil stabilization, waste management and materials pollution control, wind erosion control, and other non-stormwater BMPs.

For these reasons, impacts related to substantial adverse effect on state or federally protected wetlands would be less than significant.

d) ***Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

Less-Than-Significant Impact. The BSA is surrounded by urban, developed land uses, and does not contain any greenbelts for wildlife movement, or native vegetation and undeveloped land capable of facilitating the movement of species between large tracts of native habitat. The Compton Creek watershed is entirely urban, so the channel does not connect any large natural areas upstream with the Los Angeles River and Pacific Ocean downstream. On a local level, urban-adapted wildlife, such as coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*), may use the below-grade Compton Creek Channel to move within the urban environment and as a source of water. As such, the proposed project would not interfere with the movement of any resident or migratory fish or wildlife species. Impacts would be less than significant.

e) ***Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

No Impact. The County implements an Oak Tree Ordinance that applies to all unincorporated areas of the County. The ordinance prohibits cutting, destroying, removing, relocating, inflicting damage on, or encroaching into the protected zone of any tree of the oak tree genus (*Quercus*) without first obtaining a permit. Per Chapter 20-4 of the City's Municipal Code, the removal of any City trees requires the Director of Public Works to authorize such work. The project site (including Temporary Construction Area) supports several ornamental trees and the proposed project may include the removal of trees located on private property. As the removal of private trees may occur, Public Works would coordinate with the City Department of Public Works to obtain authorization for proposed removals (including trees located on private property). Therefore, no impacts associated with local policies or ordinances protecting biological resources would occur.

f) ***Would the project 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 BSA does not reside within any approved or proposed Habitat Conservation Plans or Natural Community Conservation Plans. Therefore, the proposed project would not be in conflict with any such plans, and no impact would occur.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. **CULTURAL RESOURCES** – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

a) ***Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?***

Less-Than-Significant Impact. An area of potential effects (APE) was established for the project and includes a Direct APE that encompasses all areas where ground disturbance is expected to occur and any areas to be used for staging and transportation of materials. An Indirect APE was also established and includes a one-parcel bump-out around all portions of the Direct APE where ground-disturbing activities are expected to occur that could potentially result in indirect effects (e.g., noise, vibration, alteration of setting) to adjacent properties. A total of 16 built environment resources over 50 years old, consisting of both residential and commercial properties, fall within the Indirect APE. These include residences along School Street and commercial storefronts and businesses along Wilmington Avenue (Figure 7, Area of Potential Effects Map).

A California Historical Resources Information System (CHRIS) records search (Confidential Appendix C, Records Search Map and Finding of No Adverse Effect) was conducted at the South Central Coastal Information Center on October 2, 2019. The search included any previously recorded cultural resources (including archaeological and historic built environment resources) and previous investigations within the proposed project APE and a 0.5-mile radius. Results of the records search indicate that two cultural resource studies have been conducted within a 0.5-mile radius of the proposed project APE from 2007 through 2009. None of these studies overlap or are adjacent to the proposed project APE. Results of the records search also indicate the no prehistoric or historic-era archaeological resources were identified within the proposed project's APE or the 0.5-mile search radius. The Wilmington Avenue Bridge (#53C0907) was constructed in 1938 and was individually evaluated as part of the Caltrans Historic Bridge Inventory (Caltrans 2019) and was assigned a Category 5 (not eligible for the National Register of Historic Places).

The project site was surveyed by qualified cultural resources specialists trained in archaeological and historic built environment fieldwork on October 22, 2019. The surveyed included examination and photo-documentation of the Compton Creek Channel, Wilmington Avenue Bridge, and a windshield survey of properties within the Indirect APE. All privately owned residential and commercial properties within the Indirect APE were exempt from evaluation as part of the Programmatic Agreement used as part of the Section 106 of the National Historic Preservation Act process by Caltrans. Although this Programmatic Agreement does not apply to CEQA, these exempted properties also do not qualify as historical resources under CEQA because they were found to be unremarkable Post-World War II builders' houses and housing tracts with no potential for historical significance, a heavily altered building, or an unremarkable building less than 50 years old. As such, none of these properties appear eligible for the National Register of Historic Places, California Register of Historical Resources, or local register.

Three historic properties were identified within the project APE as a result of the background research: the potentially Los Angeles Flood Control District (LAFCD) historic district, and two of its contributing resources, the Compton Creek Channel and the Wilmington Avenue Bridge.

The Compton Creek Channel has the potential to be adversely impacted by the demolition and construction of the new Wilmington Avenue Bridge and adjacent bicycle path improvements. However, with implementation of the project-specific SOIS Action Plan (being implemented as part of the Caltrans Section 106 process), the major character-defining features of the Compton Creek Channel will be retained and protected such that project impacts on the channel would be less than significant. As a result, the Compton Creek Channel will remain a contributing feature of the LAFCD upon completion of the project.

The Wilmington Avenue Bridge would be directly impacted by the proposed project in that it would be demolished and replaced with a new bridge. The Wilmington Avenue Bridge is not eligible at the individual level of significance and is a Caltrans Category 5 bridge (not eligible for the National Register of Historic Places). Despite its integrity issues, the Wilmington Avenue Bridge was assumed eligible for the National Register of Historic Places under Criterion A as a contributor to the larger LAFCD, as it is still serving its intended function, in its original alignment and configuration within the larger LAFCD system. Given that the Wilmington Avenue Bridge has already been altered and is not eligible under Criterion C for its engineering merits, nor is it eligible at the individual level, only the most basic character-defining features that convey the bridge's historical associations with the LAFCD require consideration. These features include its function as a crossing, its location, alignment, approximate size, use of compatible replacement materials, and its relationship to the Compton Creek Channel. Therefore, the overall impact on the larger resource is not significant. With replacement of the original bridge in the same location and alignment, the LAFCD will continue to convey its significance under Criterion A despite the loss of the already altered Wilmington Avenue Bridge as a contributor.

As a result of the Finding of No Adverse Effect document (Confidential Appendix C) prepared during the Caltrans Section 106 process and the associated SOIS Action Plan being implemented as mitigation to retain and protect the major character-defining features of the Compton Creek Channel as part of both the National Environmental Policy Act and CEQA process, the proposed project would have a less-than-significant impact on historical resources with mitigation incorporated.

MM-CUL-1 Public Works shall implement the Secretary of the Interior's Standards for the Treatment of Historic Properties Action Plan (SOIS Action Plan) prepared for the project as part of the Section 106 process to ensure that design documents and project construction comply with the Rehabilitation Standards throughout the design and construction process. The SOIS Action Plan is included as Appendix C to this Mitigated Negative Declaration and details required tasks for responsible parties at each stage of project development and progress (i.e., plan development/construction documents, during construction, and post-construction).

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less-Than-Significant Impact with Mitigation Incorporated. The archaeological survey report prepared for the proposed project (contained in this document as Confidential Appendix C) documents the results of an archaeological resources inventory and whether the implementation of the proposed project would have the potential to impact known or previously identified archaeological resources and discusses the likelihood of encountering previously unknown archaeological resources. No newly or previously recorded archaeological resources were identified within the project during the CHRIS records search, Native American Heritage Commission Sacred Lands File (NAHC SLF) search, or pedestrian survey (Confidential Appendix C). Furthermore, the potential for previously unknown, intact, buried archaeological deposits to be present within the previously disturbed soils is highly unlikely based on a review of as-built engineering drawings, a geotechnical report, historic maps and site records, and a review of aerial images. These documents demonstrate that the project site has been subject to significant ground disturbances (approximately 42 feet and 11 inches at the pier/abutments, 15 feet 10 inches in the conduit, and 24 inches from the ground surface within approach areas such as driveways, curbs and gutters, and roadways). However, previously undisturbed soils would be encountered during excavation activities for the replacement of the existing Wilmington Avenue Bridge. These activities include pile drilling associated with new abutments, which would extend approximately 50 feet deep, and cut/fill activity 15 feet behind the existing abutments that is anticipated to reach depths of 10 feet. Given the negative CHRIS and NAHC SLF records search results and pedestrian survey, and the review of as-built engineering drawings, historic aerials and topo maps demonstrating significant disturbance within the project site, and the fact that some undisturbed soils would exist at depths too low for cultural deposits, potential impacts to unknown archaeological resources is considered low. However, it is possible that previously undiscovered intact archaeological deposits are present at subsurface levels in areas of previously undisturbed soils and could be uncovered during ground disturbing activities. As such, mitigation measure MM-CUL-2 is provided to address inadvertent discoveries during construction. Impacts related to archaeological resources would be less than significant with mitigation incorporated.

MM-CUL-2 In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5(f); California PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, data recovery, and/or monitoring may be warranted.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less-Than-Significant Impact. There is no indication that human remains are present within the boundaries of the project site. However, the discovery of human remains would require handling in accordance with California PRC 5097.98, which states that if human remains are discovered during construction, construction activity shall be halted and the area shall be protected until consultation and treatment can occur as prescribed by law. In addition and in accordance with California PRC Section 5097.98, the Native American Heritage Commission must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The most likely descendant would then determine, in consultation with the property owner, the disposition of the human remains. Upon discovery, a qualified archaeologist will be retained to ensure proper implementation of the treatment agreed upon by the most likely descendant and property owner. Therefore, through compliance with Section 7050.5 of the California Health and Safety Code and California PRC 5097.98, impacts associated with unexpected discovery of human remains unearthed during construction activities would be less than significant.

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy – 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?	☐	☐	☒	☐

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

Less-Than-Significant Impact. The service providers, supply sources, and estimated consumption for electricity, natural gas, and petroleum is discussed as follows.

Energy Overview

Electricity

Southern California Edison (SCE) is the utility provider within the project area. SCE provides electric services to 15 million customers, located within a 50,000-square-mile area in central, coastal, and Southern California. According to SCE, customers consumed approximately 84 billion kilowatt-hours of electricity in 2017 (CEC 2018a). SCE receives electric power from a variety of sources. According to the SCE Sustainability Report, 32% of SCE's power came from renewable energy sources in 2017, including biomass/waste, geothermal, hydroelectric, solar, and wind sources (SCE 2018). Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita has remained stable for more than 30 years, while the national average has steadily increased (CEC 2015).

Natural Gas

Southern California Gas Company (SoCalGas) serves the proposed project area. SoCalGas serves 21.6 million customers in a 20,000-square-mile service area that includes over 500 communities (SoCalGas 2018). In 2017 (the most recent year for which data are available), SoCalGas delivered 5,142 million therms of natural gas, with the majority going to residential uses (CEC 2018b). Demand for natural gas can vary depending on factors such as weather, price of electricity, the health of the economy, environmental regulations, energy-efficiency programs, and the availability of alternative renewable energy sources. Natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand.

Petroleum

Transportation accounts for the majority of California's total energy consumption (CEC 2020). According to the Energy Information Association, California used approximately 672 million barrels of petroleum in 2016 (EIA 2018). This equates to a daily use of approximately 1.8 million barrels of petroleum. There are 42 U.S. gallons in a barrel, so California consumes approximately 77 million gallons of petroleum per day, adding up to an annual consumption of 28 billion gallons of petroleum. However, technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and GHG emissions, and reduce vehicle miles traveled.

Construction Energy Use

Electricity

Temporary electric power for as-necessary lighting and electronic equipment would be provided by SCE. The amount of electricity used during construction would be minimal because typical demand would stem from electrically powered hand tools. The electricity used for construction activities would be temporary and minimal; therefore, proposed project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity. Impacts would be less than significant.

Natural Gas

Natural gas is not anticipated to be required during construction of the proposed project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the subsection "Petroleum." Any minor amounts of natural gas that may be consumed as a result of proposed project construction would be temporary and negligible and would not have an adverse effect; therefore, proposed project construction would not result in wasteful, inefficient, or unnecessary consumption of natural gas. Impacts would be less than significant.

Petroleum

Petroleum would be consumed throughout construction. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction. Transportation of construction materials and construction workers would also result in petroleum consumption. Heavy-duty construction equipment, vendor trucks, and haul trucks would use diesel fuel. Construction workers would likely travel to and from the project area in gasoline-powered vehicles. Construction is expected to take approximately 300 workdays, beginning construction in spring 2026. Once construction activities cease, petroleum use from off-road equipment and transportation vehicles would end. Because of the short-term nature of construction and relevantly small scale of the project, impacts would be less than significant.

Operational Energy Use

As discussed in Section 2, the project consists of replacing the existing Wilmington Avenue Bridge with a new pre-cast concrete bridge. Thus, there would minimal operational or maintenance activities associated with the proposed project. Therefore, there operational energy use associated with the project would be less than significant.

b) ***Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?***

Less-Than-Significant Impact. The project would follow applicable energy standards and regulations during the construction phases. Worker vehicles would meet the applicable standards of Assembly Bill (AB) 1493 (vehicles manufactured 2009 or later) and, as a result, would likely consume less energy as fuel efficiency standards are increased and vehicles are replaced. As such, impacts related to the project's potential to conflict with plans for renewable energy and energy efficiency would be less than significant.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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.	☐	☐	☐	☒
i) ii) Strong seismic ground shaking?	☐	☐	☒	☐
ii) iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iii) iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

a) Would the project 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 project site does not lie within an Alquist-Priolo Special Studies Zone. The closest such fault zone is located approximately 1.3 miles west-southwest of the project site, along the Newport-Inglewood Fault Zone (CGS 1986). No other Holocene-active or pre-Holocene (i.e., Quaternary) faults are located in the vicinity of the site (CGS 2010). In addition, the project would not exacerbate the potential for fault rupture to occur. Therefore, the project would not directly or indirectly cause potential substantial adverse effects involving rupture of a known earthquake fault. No impacts would occur.

ii) Strong seismic ground shaking?

Less-Than-Significant Impact. The project site is in a seismically active region of Southern California, which is subject to substantial hazards as a result of strong seismically induced ground shaking. Ground shaking due to earthquakes on the nearby Newport-Inglewood Fault, or other regional faults, can be anticipated during the life of the structure. The maximum probable earthquake on the Newport-Inglewood Fault is moment magnitude (Mw) 6.0 to 7.4 (SCEDC 2013). Design and construction of the project would comply with provisions of the California Building Code and Caltrans seismic design protocol, including Caltrans Memo to Designers 20-1, Seismic Design Methodology (Caltrans 2010) and Memo to Designers 20-4, Seismic Retrofit Guidelines for Bridges in California (Caltrans 2016). In addition, the project would not exacerbate the potential for seismic ground shaking to occur. Conversely, seismic upgrades included in the proposed project design would result in beneficial impacts with respect to ground shaking. Therefore, the project would not directly or indirectly cause potential substantial adverse effects involving strong seismic ground shaking. Impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less-Than-Significant Impact. Liquefaction occurs when shallow, loose, unconsolidated, fine- to medium-grained sediments, saturated with groundwater, are subjected to strong seismically induced ground shaking. Lateral spreading is the lateral movement of gently to steeply sloping, saturated soils deposits caused by liquefaction. The possibility of liquefaction occurring at any specific site is dependent on the intensity of the earthquake, shallowness of groundwater, and on the grain size, plasticity, relative density, and confining pressure of the soils at the project site. Liquefaction typically occurs when groundwater is located at a depth of 50 feet or less. The project site is underlain primarily by stiff to very stiff clay and silt, with a layer of very dense, well-graded sand from a depth of 65 to 75 feet. Groundwater is present at a depth of 45 to 53 feet (Appendix D, Geotechnical Memorandum).

The project is in a potential liquefaction zone (CGS 1999). However, design and construction of the project would comply with provisions of the California Building Code and Caltrans seismic design protocol, as discussed in Section 3.7(a-ii). In addition, the project would not exacerbate the potential for seismically related ground failure, including liquefaction, to occur. Conversely, seismic upgrades included in the proposed project design would result in beneficial impacts with respect to seismic related ground shaking, including liquefaction. Therefore, the project would not directly or indirectly cause potential substantial adverse effects involving seismically related ground failure, including liquefaction. Impacts would be less than significant.

iv) Landslides?

Less-Than-Significant Impact. The topography of the site is relatively flat to gently sloping and therefore not conducive to slope instability. No hillsides that might be prone to landslides are in the vicinity of the site. During construction, the existing bridge would be removed, including the existing pier and pier invert, the existing steel girder, and the existing superstructure as well as the reinforced concrete, asphalt pavement, and soils within the limits of the new work. All existing bridge bearing components would be removed, including bearings, anchor bolts and grout pads. Removal of the bridge and appurtenances would include preserving the existing abutments/channel walls, which would remain in place, thereby avoiding the need for any temporary steep creek banks. Prior to cutting the backwall across the existing abutments, the soil behind the wall would be removed. The new abutments would then be constructed behind the remaining channel walls, which would retain the soil at all times. The removal and reconstruction of the existing pier in the middle of the channel would include excavation of approximately 2 to 3 feet. Based on these methodologies the project would prevent caving and creek bank slope failure. All demolition and construction would be completed in accordance with provisions of the California Building Code, which includes measures for stabilization of temporary slopes during construction and long-term slope stability during operations. Therefore, impacts would be less than significant and no mitigation is required.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less-Than-Significant Impact. The project site is currently paved and therefore not susceptible to erosion. However, the proposed project would result in excavation and removal of approximately 73,630 square feet (1.72 acres) of roadway and removal of the existing bridge and underlying structural supports. Demolition and new construction would result in temporary exposure of soil, which could result in short-term erosion and sedimentation of Compton Creek. Sedimentation of the creek can result in adverse biological impacts, including disturbance of existing roadway and sediments underlying the bridge. Since the project would likely result in disturbance of slightly greater than 1 acre of soil, the proposed project would comply with the provisions of the Construction General Permit, which is National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Associated with Construction Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002). Additionally, Public Works would be required to submit a Notice of Intent to the RWQCB to obtain approval to complete construction activities under the Construction General Permit. This permit would include a number of design, management, and monitoring requirements for the protection of water quality and the reduction of construction phase impacts related to stormwater discharges. Permit requirements would include the preparation of a SWPPP, implementation and monitoring of BMPs, and periodic submittal of performance summaries and reports to the RWQCB. In addition, demolition and construction would be completed in compliance with the County of Los Angeles Construction Site Best Management Practices (BMPs) Manual and the Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual.

Issues related to stream scour would be further evaluated and addressed during final design. All bridge components would be designed using the Memo to Designers 20-4, Seismic Retrofit Guidelines for Bridges in California (Caltrans 2016), which addresses stream scour in combination with seismic hazards on new bridges, in accordance with Caltrans Seismic Design Criteria Section 2.2.5. As a result, impacts related to soil erosion and loss of topsoil would be less than significant.

c) Would the project 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 Impact. As previously discussed in Sections 3.7(a-i) through 3.7(a-iii), seismic upgrades included in the proposed project design would result in beneficial impacts with respect to seismic related ground failure. The project would result in less-than-significant impacts related to unstable soils and no mitigation is required.

d) ***Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?***

Less-Than-Significant Impact. Expansive soils generally have a high clay content that causes soil shrinkage when dry and swelling when wet. The change in volume exerts stress on buildings and other structural loads. The extent of shrink/swell is influenced by the amount and type of clay in the soil. Based on geotechnical borings drilled at the site, the project site is underlain by clay and sandy clay (Appendix D), which may be prone to soil expansion. However, design and construction of the project would comply with provisions of the California Building Code, which includes remedial measures to protect against risks to life or property associated with expansive soils. Therefore, impacts would be less than significant and no mitigation is required.

e) ***Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

No Impact. Neither septic tanks nor alternative wastewater disposal systems are part of the project. Therefore, no impacts would occur.

f) ***Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

Less-Than-Significant Impact With Mitigation Incorporated. The project site is in the City of Compton and lies within the northernmost Peninsular Ranges Geomorphic Province (CGS 2002; Norris and Webb 1990). Northwest trending mountain ranges and valleys that extend over 900 miles from the tip of the Baja Peninsula to the Transverse Ranges (i.e., the San Bernardino and San Gabriel Mountains in southern California) characterize this geomorphic province. Regionally, the Peninsular Ranges are bounded to the east by the Colorado Desert and the west by the continental shelf and offshore islands (Santa Catalina, Santa Barbara, San Nicholas, and San Clemente) (CGS 2002; Norris and Webb 1990). Regional mountain ranges in the Peninsular Ranges geomorphic province include the Santa Ana, San Jacinto, and Santa Rosa Mountains. Geologically, these mountains are dominated by Mesozoic, plutonic igneous and metamorphic rocks that are part of the Peninsular Ranges batholith (Southern California batholith) (Jahns 1954).

More specifically, the project site lies within the southwestern block of the Los Angeles Basin (Yerkes et al. 1965). The Los Angeles Basin (also called the coastal plain) extends from the Santa Monica Mountains in the north to the San Joaquin Hills of Orange County in the south and is a structural basin that in some areas has been subsiding and filling with sediments since the late Cretaceous (Yerkes et al. 1965). The Los Angeles Basin is characterized by alluvial coastal plains, underlain by older alluvial and marine sediments, and punctuated by uplifted highlands owing to the numerous faults underlying the Basin. These faults, which include the Newport-Inglewood fault zone (a strike-slip fault zone) in the south and the Sierra Madre fault zone in the north (a reverse fault), are part of the greater San Andreas fault system, characterized by numerous strike-slip faults. According to geological mapping by Jennings (1962) at a scale of 1:250,000, the project site is underlain by Holocene (<11,700 years ago) alluvium (map unit Qal) east of Compton Creek and Quaternary nonmarine terrace deposits (map unit Qt) west of Compton Creek. The Quaternary nonmarine terrace deposits are generally late Pleistocene age (approximately 126,000 years ago to 11,700 years ago). More recent and larger-scale (more detailed) mapping of Saucedo et al. (2003) at a scale of 1:62,500 mapped the entire project site as Holocene young alluvium (map unit Qya_2).

Dudek requested a paleontological records search of the Natural History Museum of Los Angeles County (LACM) vertebrate paleontological collections for the project and a one-half mile radius buffer on June 21, 2019, and the results were received on July 15, 2019. Not citing specific geological mapping, the LACM indicated the project site is underlain by Holocene alluvium, which is in turn underlain by Pleistocene alluvium (McLeod 2019). The LACM did not report any previously recorded vertebrate fossil localities within the proposed project site or within the one-half mile radius buffer; however, they did report fossil localities from Pleistocene alluvium near the proposed project site. The closest vertebrate fossil locality (LACM 4685), approximately 3 kilometers northwest of the proposed project near Avalon Boulevard between 135th and 136th Streets, yielded a fossil proboscidean at an unknown depth below the ground surface (bgs). A fossil mammoth (*Mammuthus*) locality (LACM 3382) was recovered east of Wilmington Boulevard and north of Artesia Boulevard from a depth of approximately 5 feet bgs (McLeod 2019). Vertebrate fossil localities LACM 1344, 3266, and 3365, located around the Harbor Freeway (Interstate 110) and Athens on the Hill, produced fossil specimens of mammoth (*Mammuthus*), squirrel (*Sciuridae*), horse (*Equus*), and pronghorn antelope (*Breameryx*) from between 15 and 20 feet bgs. Finally, the LACM reported a Pleistocene fauna (LACM 1295 and 4206) from the Harbor Freeway (Interstate 110) between 112th and 113th Streets and near Main Street and the Imperial Highway that included pond turtle (*Clemmys*), puffin (*Mancalla*), turkey (*Paroparvo*), ground sloth (*Paralmylodon*), mammoth (*Mammuthus*), dire wolf (*Canis dirus*), horse (*Equus*), deer (*Cervus*), pronghorn antelope (*Capromeryx*), bison (*Bison*), rabbit (*Sylvilagus*), squirrel (*Sciuridae*), deer mouse (*Microtus*), and pocket gopher (*Thomomys*) from relatively shallow depths bgs (McLeod 2019).

In addition to the vertebrate fossil localities reported by the LACM, Jefferson (1991) and Miller (1971) reported numerous Pleistocene fossil vertebrate localities in this portion of the Los Angeles Basin. Specimens include amphibians, reptiles, birds, and large and small mammals.

The institutional records search or desktop geological and paleontological review did not reveal any fossil localities within the proposed project site, and the proposed project is not anticipated to be underlain by unique geologic features. While this area is underlain by Holocene sediments that are generally too young to contain significant paleontological resources, intact paleontological resources may be present below the Holocene alluvial sediments where older, Pleistocene, sediments are anticipated. The LACM records search suggested Pleistocene sediments could be as shallow as 5 feet bgs. If intact paleontological resources are located on site, ground-disturbing activities associated with construction of the proposed project, such as grading during site preparation and trenching for utilities, have the potential to destroy a unique paleontological resource or site. As such, the proposed project site is potentially sensitive for paleontological resources and without mitigation, the potential damage to paleontological resources during construction associated with the project is considered a potentially significant impact. Given the proximity of past fossil discoveries in Pleistocene sediments within this part of the Los Angeles Basin and the potential for underlying, Pleistocene-age older alluvial deposits, the proposed project area is highly sensitive for supporting paleontological resources below the depth of fill and recent Quaternary alluvium. However, upon implementation of MM-GEO-1, impacts would be reduced to below a level of significance. Impacts of the project are considered less than significant with mitigation incorporated during construction.

MM-GEO-1 Prior to commencement of any grading activity on site that is greater than 5 feet below ground surface, the applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology's 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the proposed project.

The PRIMP shall be consistent with the Society of Vertebrate Paleontology's 2010 guidelines and should outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the proposed project area based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The qualified paleontologist shall attend the preconstruction meeting and a paleontological monitor shall be on site during all rough grading and other significant ground-disturbing activities in previously undisturbed, fine-grained older Quaternary alluvial deposits. These deposits may be encountered at depths as shallow as 5 feet below ground surface or below the depth of any artificial fill present on site. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – 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?	☐	☐	☒	☐

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

Less-Than-Significant Impact. Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature, and it creates a livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (see also 14 CCR 15364.5). The three GHGs evaluated herein are CO_2, CH_4, and N_2O. Emissions of HFCs, PFCs, SF_6, and NF_3 are generally associated with industrial activities including the manufacturing of electrical components, heavy duty air conditioning units, and insulation of electrical transmission equipment (substations, power lines, and switch gears). Therefore, emissions of these GHGs were not evaluated or estimated in this analysis because the project would not include these activities or components and would not generate HFCs, PFCs, SF_6, and NF_3 in measurable quantities.

Gases in the atmosphere can contribute to climate change both directly and indirectly.[8] The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of CO_2 equivalent (MT CO_2e). Consistent with CalEEMod, this GHG emissions analysis assumed the GWP for CH_4 is 25 (emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC 2007).

As discussed in Section 3.3 of this IS/MND, the project is located within the jurisdictional boundaries of the SCAQMD. In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008). This document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 MT CO_2e per-year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (see SCAQMD Resolution No. 08-35, December 5, 2008).

The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for

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[8] Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2017b).

residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

Tier 1. Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2. Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

Tier 3. Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO_2e per-year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e per year), commercial projects (1,400 MT CO_2e per year), and mixed-use projects (3,000 MT CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4. Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per-service population for project-level analyses and 6.6 MT CO_2e per-service population for plan-level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5. Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, establish specific thresholds of significance, or mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance that are consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009).

To determine the project's potential to generate GHG emissions that would have a significant impact on the environment, the project's GHG emissions were compared to the non-industrial land project quantitative threshold of 3,000 MT CO_2e per year. Because the project does not include operational sources of emissions, and because the project does not conform to the standard land use types, the 3,000 MT CO_2e per year threshold, which was identified under Tier 3 Option 1, was applied herein. Per the SCAQMD guidance, construction emissions should be amortized over the operational life of the project, which is assumed to be 30 years (SCAQMD 2008). This impact analysis, therefore, compares amortized construction emissions to the proposed SCAQMD threshold of 3,000 MT CO_2e per year.

Construction Emissions

Construction of the project would result in GHG emissions primarily associated with the use of off-road construction equipment, on-road trucks, and worker vehicles. A depiction of expected construction schedules (including information regarding phasing, equipment used during each phase, truck trips, and worker vehicle trips) assumed for the purposes of emissions estimation is provided in Table 2 and in Appendix A. On-site sources of GHG emissions include off-road equipment; off-site sources include trucks and worker vehicles. Table 5 presents construction GHG emissions for the project from on-site and off-site emissions sources.

Table 5. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
2026	313.00	0.01	0.02	0.12	318.00
2027	203.00	0.01	0.01	0.06	205.00
Total	**516.00**	**0.02**	**0.03**	**0.18**	**523.00**
				Amortized Construction Emissions	**17.43**

Source: See Appendix A for complete results.
Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R = refrigerants; CO_2e = carbon dioxide equivalent.

As shown in Table 5, the estimated total GHG emissions in 2026 and 2027, would be approximately 523 MT CO_2e. Amortized over 30 years, construction GHG emissions would be approximately 17 MT CO_2e per year. In addition, as with project-generated construction criteria air pollutant emissions, GHG emissions generated during proposed construction activities would be short term, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions.

Operational Emissions

Once project construction is complete, the project would result in minimal maintenance activities consisting of use of equipment and worker vehicles. Because the proposed project would generate a minimal amount of vehicle trips, operational emissions would be less than significant.

As shown in Table 5, amortized project-generated construction emissions would not exceed the 3,000 SCAQMD threshold. Therefore, GHG emissions impacts would be less than significant.

b) ***Would the project generate conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

Less-Than-Significant Impact. The project would result in less-than-significant impacts related to conflicts with GHG emission reduction plans, for the reasons described as follows.

Consistency with CARB's Scoping Plan

The CARB Scoping Plan, approved by CARB in 2008 and updated in 2014 and 2017, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations.[9] Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others.

Consistency with the Southern California Association of Governments 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

On September 3, 2020, the Regional Council of SCAG formally adopted the 2020–2045 RTP/SCS as a regional growth management strategy, which targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California Region pursuant Senate Bill (SB) 375. In addition to demonstrating the region's ability to attain the GHG emission-reduction targets set forth by CARB, the 2020–2045 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands (SCAG 2020). Thus, successful implementation of the 2020–2045 RTP/SCS would result in more complete communities with various transportation and housing choices while reducing automobile use.

The 2020 RTP/SCS incorporates local land use projections and circulation networks in city and county general plans. The 2020 RTP/SCS is not directly applicable to the project because the purpose of the 2020 RTP/SCS is to provide direction and guidance by making the best transportation and land use choices for future development. Therefore, the project would not conflict with implementation of the strategies identified in the 2020 RTP/SCS that would reduce GHG emissions.

Consistency with Executive Order S-3-05 and Senate Bill 32

The project would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in Executive Order S-3-05 and SB 32. Executive Order S-3-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. SB 32 establishes a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

CARB has expressed optimism about both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). Regarding the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update

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[9] The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

to the Climate Change Scoping Plan states that the level of reduction is achievable in California (CARB 2014). CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and Executive Order S-3-05. This is confirmed in the 2017 Scoping Plan, which states (CARB 2017b):

> The Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities.

The project would not interfere with implementation of any of the previously described GHG reduction goals for 2030 or 2050 because the project would not exceed the SCAQMD's recommended threshold of 3,000 MT CO_2e per year (SCAQMD 2008). Because the project would not exceed the threshold as presented in Table 5, this analysis provides support for the conclusion that the project would not impede the state's trajectory toward the previously described statewide GHG reduction goals for 2030 or 2050.

The project's consistency with the state's Scoping Plan would assist in meeting the City's contribution to GHG emission reduction targets in California. With respect to future GHG targets under SB 32 and Executive Order S-3-05, CARB has also made clear its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet the SB 32 40% reduction target by 2030 and the Executive Order S-3-05 80% reduction target by 2050. This legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the trajectory toward meeting these future GHG targets.

Based on the considerations previously outlined, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be less than significant.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS – 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?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

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

Less-Than-Significant Impact. Relatively small amounts of commonly used hazardous substances such as gasoline, diesel fuel, lubricating oil, adhesive materials, grease, solvents, and architectural coatings would be used during construction. These materials are not considered acutely hazardous and are used routinely throughout urban environments for both construction projects and structural improvements. Further, these materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials, including requirements to protect the Compton Creek waterway, such as Spill Prevention, Control, and Countermeasure Plans, and/or an NPDES water discharge permit. The City's Public Safety Element of the General Plan (City of Compton 2011), identifies four Public Safety Policies that minimize risks to health and safety associated with handling, transporting, treating, generating, and storing hazardous materials. These policies require adherence to, and are in support of, existing state and federal hazardous material handling laws and regulations. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or environment. Once construction has been completed, fuels and other petroleum products would no longer remain within the work area. Operation of the proposed project would not require the use, storage, or disposal of hazardous substances. Impacts would be less than significant.

b) ***Would the project 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 Impact With Mitigation Incorporated. During project construction, potentially hazardous materials are likely to be handled on the project site. Improper handling and/or use of these materials during construction would represent a potential threat to the public and the environment. All contractors are required to comply with applicable laws and regulations regarding hazardous materials and hazardous waste management and disposal. Examples of hazardous materials management include preventing the disposal or release of hazardous materials onto the ground or into groundwater or surface water during construction and ensuring the proper use and disposal of these materials would not pose a significant risk to the public and the environment.

Asbestos was widely used in a variety of building materials up until the 1980s. This includes components used for bridge construction, such as caulking, cement, fireproofing materials, and tar. Additionally, yellow traffic paint and yellow thermoplastic stripes contain lead chromate. The lead and chromium concentrations in older yellow paint and yellow thermoplastic stripes are high enough to make these materials hazardous wastes when they are removed (Caltrans 2015). Based on the age of the bridge (between 1938 and 1947), there is a potential for the building materials to contain asbestos and/or lead-based paint. If removed, these materials could be classified as hazardous waste. Construction of the proposed project would include pavement and superstructure removal, grading, and excavation; bridge replacement; and repaving, electrical, and restriping. MM-HAZ-1 requires a hazardous material survey be conducted to determine if hazardous materials are present in the existing building materials on the project site.

MM-HAZ-1 Prior to construction, a hazardous material building survey will be conducted to determine if asbestos-containing materials and lead-based paints are present on the project site. The survey will be conducted by a licensed contractor in accordance with local, state, and federal requirements. A report documenting material types, conditions and general quantities will be provided, along with photos of positive materials and diagrams. Should these materials be present, demolition plans and contract specifications shall incorporate any abatement procedures for the removal of materials containing asbestos or lead-based paint. Materials will be abated in accordance with local, state, and federal requirements by a licensed abatement contractor, or construction would be conducted in such a manner as to eliminate the potential to disturb the identified materials. Applicable regulations include, but are not limited to, those of the Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District.

Construction of the proposed project would remove the existing structure, thereby likely removing potential asbestos-containing materials and/or paints that contain lead and chromium. In the event some of these materials remain, operation of the proposed project would not disturb existing building materials. Therefore, potential risks associated with the above-mentioned potentially hazardous materials is limited to the construction phase. With implementation of MM-HAZ-1, impacts would be less than significant.

c) ***Would the project 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 Impact With Mitigation Incorporated. One school, Davis Middle School, 621 W Poplar Street, is located 0.12 miles north of the project site (CSCD 2019). As discussed in Section 3.9(a), hazardous materials used during construction would be handled and transported in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. These laws are also protective of the nearby school. Demolition of the existing bridge could result in a release of hazardous building materials, such as asbestos and lead, as discussed in Section 3.9(b). However, with implementation of MM-HAZ-1, these materials would be surveyed, abated, and managed in accordance with all appropriate laws and regulations, mitigating the risk of hazardous emissions near the school. Once construction is complete, operation of the proposed project would not require the use, storage, or disposal of hazardous substances. With implementation of MM-HAZ-1, and strict adherence to applicable regulations, the impacts would be less than significant.

d) ***Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

No Impact. Government Code Section 65962.5 requires the California Environmental Protection Agency to compile a list of hazardous waste and substances sites (Cortese List). While the Cortese List is no longer maintained as a single list, the following databases provide information that meet the Cortese List requirements:

- List of Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) Envirostor database (Health and Safety Codes 25220, 25242, 25356, and 116395)
- List of Open Active Leaking Underground Storage Tank (LUST) Sites from the State Water Resources Control Board (SWRCB) GeoTracker database (Health and Safety Code 25295)
- List of solid waste disposal sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management unit (Water Code Section 13273(e) and California Code of Regulations Title 14 Section 18051)
- List of “active” Cease and Desist Orders and Cleanup and Abatement Orders from the SWRCB (Water Code Sections 13301 and 13304)
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC

The following Cortese List sites were identified within 0.5 miles of the project site.

- Former Juarez Carwash, 906 West Rosecrans Avenue, is located 0.36 miles north-northwest of the project site. The site is a former gasoline service station and carwash. The most recent environmental sampling report (Stantec 2018) indicated contamination in soil and groundwater from the former gasoline service station. It was noted that the groundwater contamination had migrated northward off site. The groundwater gradient at the former carwash is northward, away from the project site. Based on the distance from the project site and environmental conditions of the former carwash, it does not appear this site has impacted environmental conditions at the project site.

- Arco #1691, 740 Rosecrans Avenue, is located 0.30 miles north of the project site. The site is an active gasoline service station, with active underground storage tanks. Based on results of the most recent available environmental report (Arcadis 2018), contamination is limited to the former gasoline station, and is currently under remediation. Based on the distance from the project site and environmental conditions of the gasoline station, it does not appear this site has impacted environmental conditions at the project site.

No additional hazardous waste and substance sites, solid waste disposal sites, active Cease and Desist Order/Cleanup and Abatement Order sites, or hazardous waste facilities were identified within 0.5 miles of the project site. Three closed LUST sites were identified within 0.5 miles of the project site. Two of the sites reported contamination to soil only and are more than 0.25 miles from the project site. Based on this distance and characteristics of the contaminated sites, they are not likely to have impacted the project site. The third site was closed with residual contamination allowed to remain in the groundwater beneath the site. However, based on the characteristics of the remaining contamination (LARWQCB 2014) and the distance from the project site, it is unlikely that this closed LUST site has impacted the environmental conditions of the project site.

Dudek also conducted a search of environmental regulatory databases to further investigate potential hazardous materials on or near the project site. The project site was not identified in the California Environmental Protection Agency's Regulated Site Portal. Three sites were identified within one quarter mile of the project site. These listings are administrative in nature, identifying use, storage, and/or disposal of hazardous materials, and do not necessarily indicate a release to the environment. One site is located adjacent to the project site: T-Mobile West LLC, 127 N Wilmington Avenue, stores electrolyte/sulfuric acid batteries and hydrogen gas. There are no reported violations associated with this listing.

The National Pipeline Mapping System Public Map Viewer is a web-based application designed to assist the public with displaying and querying data related to gas transmission and hazardous liquid pipelines, liquefied natural gas plants, and breakout tanks under Department of Transportation Pipeline and Hazardous Material Safety Administration jurisdiction. An active non-highly volatile liquid (non-HVL) product (petroleum) pipeline runs north-south along Wilmington Avenue to the south of the project site, turns west on Compton Boulevard at the intersection of Wilmington Avenue and Compton Boulevard, then runs north-south along Kemp Avenue. The pipeline is owned by Shell Pipeline Co. L.P. The pipeline does not transect the project site but transects the intersection of N Wilmington Avenue and W Compton Boulevard, which is approximately 275 feet south of the project site.

The site is not located on a Cortese List site. There are two Cortese List sites located within one half mile; the impacts at these sites are unlikely to affect the environmental conditions of the project site. Additionally, there are no sites with reported hazardous material contamination not otherwise listed on the Cortese List that have likely impacted the project site. Therefore, the proposed project would not be located on a site that is included in the list of hazardous materials sites under Government Code Section 65962.5, and no impact would occur.

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. The Compton-Woodley Airport, 901 W Alondra Boulevard, is located approximately 0.40 miles south of the project site. The Airport Influence Area does not include the project site (LADRP 2004). No other airports are located within 2 miles of the project site, and the project site does not fall within any additional Airport Influence Areas. Under 14 CFR 77.9, the Federal Aviation Administration requires notification of construction or alteration if the construction rises above ground level as described in Part 77.9. As the construction and operation of the proposed project would not substantially change the existing height of the bridge, this notification is not required. Therefore, the project would not result in a safety hazard or excessive noise for people residing or working in the project area, and no impact would occur.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less-Than-Significant Impact. The project site encompasses a portion of Wilmington Avenue, north of the intersection of Compton Boulevard and Wilmington Avenue. The project site is within the jurisdiction of the City of Compton Fire Department, which includes the Compton Office of Emergency Management. The Compton Office of Emergency Management is responsible for coordinating emergency mitigation, planning, response, and recovery efforts for all disasters or other major emergencies affecting the City. The nearest fire station is Compton Fire Station #1 (Headquarters), 201 S. Acacia Avenue, located 0.64 miles east of the project site.

Emergency response procedures are discussed as part of the Public Safety Element of the City's General Plan 2030 (City of Compton 2011). The Public Safety Element supports emergency preparedness by documenting City policies for responding to major emergencies that threaten life, safety, and property. The plan establishes a chain of command and outlines the responsibilities of various City departments in the event of an emergency. According to the Public Safety Element, "the City of Compton is an urban environment with little danger of wildfires. There are only three properties in the City that have over twenty acres of grass that can burn, leaving the City a low risk for any wildfires beyond a minor brush fire" (City of Compton 2011). The Public Safety Element designates Wilmington Avenue as an evacuation route, as well as Compton Boulevard to the south and Willowbrook Avenue to the east, Alondra Boulevard to the south, and Rosecrans Avenue to the north.

Proposed construction and operation of the proposed project are discussed in Sections 2.5 and 2.6 of this IS/MND, respectively. During construction, complete road closures over the Wilmington Avenue Bridge would occur for approximately 300 days and planned detour routes would be established via Rosecrans Avenue, Compton Boulevard and Alameda Street. Specifically, northbound traffic would be directed east on Compton Boulevard, north on Alameda Street, west on Rosecrans Avenue, and north back onto Wilmington Avenue. Southbound traffic would be directed east on Rosecrans Avenue, south on Alameda Street, west on Compton Boulevard, and south back onto Wilmington Avenue.

Additionally, a Traffic Control Plan would be developed to identify the duration of road closures, appropriate detour routes, and required signage. As part of the Traffic Control Plan, emergency service providers that serve the area would be notified of the closure and detour route so that service would not be disrupted.

Specifically, as explained in Section 3.17, incorporation of a Traffic Control Plan, as described in PDF-TRAF-1, would be included for all construction work within the road ROW that modifies vehicular, bicycle, pedestrian and/or transit traffic patterns and are necessary to ensure the safe and efficient movement of traffic through construction work zones. Implementation of PDF_TRAF-1 would avoid impacts to local emergency service providers and impacts to emergency response plans or emergency evacuation plans would be less than significant. Following construction, the roadway would be restored to existing conditions, and emergency access would not be affected during project operation. Therefore, impacts would be less than significant upon operation.

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

No Impact. As described in City Public Safety Element, "the City of Compton is an urban environment with little danger of wildfires. There are only three properties in the City that have over twenty acres of grass that can burn, making the City a low risk for any wildfires beyond a minor brush fire" (City of Compton 2011). As such, the construction and operation of the proposed project would not expose people or structures to a significant risk of wildland fires, and no impact would occur.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on or off site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less-Than-Significant Impact. Water quality standards in the project area are enforced by the RWQCB and are listed in the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (LARWQCB 2014). Demolition of the existing bridge and installation of the new bridge could require work within the creek, which could result in a temporary increase in turbidity. In addition, bridge demolition and replacement, vegetation removal, and equipment storage and fueling would generate construction debris, wastes, loose soils, and fuels that could potentially enter the creek if not properly contained. If these pollutants were to enter the creek, they could impact water quality and violate existing standard discharge requirements.

During construction, erosion-control measures would be implemented by the contractor as part of their County-certified SWPPP for the proposed project. The SWPPP will identify the sources of pollutants that may affect the quality of stormwater and include BMPs to control the pollutants. All work shall conform to the site specific surface water diversion plan prepared for the project that will comply with the conditions included in the Water Quality Certification from the RWQCB and include pertinent BMPs from the Construction Site Best Management Practices (BMPs) Manual (Public Works 2010). These include, but are not limited to, temporary sediment control, temporary soil stabilization, waste management and materials pollution control, wind erosion control, and other non-stormwater BMPs. Upon implementation of BMPs, water quality impacts associated with project construction would be less than significant (Appendix E, Water Quality Assessment Report).

Once operational, the project could result in a slight increase in impervious surface area; however, the project would not result in direct permanent impacts to Compton Creek. Net impervious surface area increase would be minor and would not result in changes to water quality conditions. The project could result in a permanent minor increase in impervious surface area (approximately 0.05 acres), resulting from an access road (currently dirt) on the southwest corner of the bridge that would be reconstructed with a concrete slab. Impacts to drainage facilities would include the relocation of catch basins on private properties at some driveway entrances to accommodate the new geometry of the roadways. The new drainage inlets would be similar to existing facilities and would comply with community, regional, state, and federal objectives. Therefore, impacts would be less than significant.

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

Less-Than-Significant Impact. Project construction could require a temporary use of water supply. However, the required quantity of water would be negligible compared to the total water supply. Following project completion, the project would no longer require a long-term water supply.

The project would include removal and replacement of an existing bridge. No groundwater supplies are required for the operation of the bridge. However, the project could result in a slight increase of impervious surfaces in the project area. Increases to impervious surface area would be minor and would not significantly impact groundwater recharge in the project area. Therefore, impacts would be less than significant.

c) Would the project 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 Impact. Project construction would require ground disturbance, which could temporarily alter the existing drainage pattern in the project area. However, standard BMPs and requirements of the SWPPP would be implemented during construction to minimize soil erosion and siltation of local drainages and receiving waterways. Additionally, drainage facilities could be relocated during construction if existing facilities are unable to be protected in place. Facilities would be reinstalled following project construction. Changes to facilities would not affect the existing drainage (Appendix E).

The addition of impervious surface area could result in changes to the drainage patterns of a watershed and receiving water bodies, including erosion and siltation of local waterways. The project would include removal and replacement of an existing bridge. The project could result in a minor increase of impervious surface. Increases to impervious surface would result in negligible increases in discharge to the City's storm drainage system and receiving waterways. Therefore, impacts would be less than significant.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

Less-Than-Significant Impact. As discussed previously in Section 3.10(c)(i), the proposed project would require standard BMPs and requirements of the SWPPP would be implemented during construction to minimize surface runoff. Additionally, drainage facilities could be relocated during construction if existing facilities are unable to be protected in place. Facilities would be reinstalled following project construction. Changes to facilities would not affect the existing drainage (Appendix E).

The addition of impervious surface area could result in changes to the drainage patterns of a watershed and receiving water bodies, including erosion and siltation of local waterways. The project would include removal and replacement of an existing bridge. The project could result in a minor increase of impervious surface. Increases to impervious surface would result in negligible increases in discharge to the City's storm drainage system and receiving waterways. Therefore, impacts would be less than significant.

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

Less-Than-Significant Impact. Oils and fluids deposited by vehicles and roadside trash are primary sources of pollution within the project area. Stormwater washes pollutants from the roadways into local drainages that discharge into receiving waters. Construction activities would include the use of construction vehicles and equipment, staging, and vegetation removal. Approximately 1.72 acres of land would be disturbed because of the project. There is potential that exposed soils, construction debris, and other pollutants could enter stormwater runoff that discharges into the catch basin and local sewers. Project construction would include standard BMPs, including implementation of soil binders, silt fencing, straw mulch, and other approved standard practices. A SWPPP would also be prepared for the project to outline how project construction will minimize stormwater pollution (Appendix E).

The project would not be capacity increasing and would not influence growth in or around the project area. Therefore, traffic volume would not increase because of the project. Pollution sources during project operation would be consistent with existing conditions. Therefore, impacts would be less than significant.

iv) impede or redirect flood flows?

Less-Than-Significant Impact. The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. In addition, the proposed bridge structure is similar to the existing structure. Because proposed drainage conditions would be similar to existing conditions, stormwater runoff and creek flows would remain similar to existing flow conditions. Therefore, impacts would be less than significant.

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

No Impact. The project area is included in Panel 1815F of the Federal Emergency Management Agency Flood Insurance Risk Map for Los Angeles County, California (FEMA 2008). The project area is identified as Zone X, which is defined as an area determined to be outside of the 0.2% annual chance floodplain. The Los Angeles River floodplain is located approximately 0.4 miles to the east of the project area. Therefore, the project would not result in flood hazard risk that could lead to the release of pollutants due to project inundation.

A seiche is a temporary disturbance or oscillation in the water level of a lake or partially enclosed body of water. A tsunami is a long, high ocean wave caused by an earthquake, submarine landslide, or other disturbance. A mudflow is a fluid or hardened stream or avalanche of mud. The project area is not near a lake or ocean and therefore, is not susceptible to seiche or tsunami hazards. Therefore, the project would not result in seiche or tsunami risks that could lead to the release of pollutants due to project inundation.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The project would include replacement of a structurally deficient bridge over Compton Creek. The project would not result in significant impacts on water quality, groundwater recharge, or the capacity of existing stormwater systems. Therefore, the project would be consistent with applicable water quality control plans and groundwater management.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – 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?	☐	☐	☐	☒

a) Would the project physically divide an established community?

No Impact. A significant impact would occur if the proposed project included the construction of buildings, roads, or other infrastructure that would physically divide an existing community. As stated in Section 2 of this IS/MND, the proposed project would include the replacement of the existing Wilmington Avenue Bridge over Compton Creek with a new, two-span concrete bridge, concrete pier and abutments. While the project would require temporary easements and partial ROW acquisition from surrounding residential properties, proposed easements and ROW acquisition would not create a physical barrier in/to the community nor would it physically divide the local neighborhood. Upon operation, the new bridge would function in much the same way than under existing conditions. Given this, the proposed project would not physically divide an established community, and no impact would occur.

b) Would the project 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 proposed project site is in a highly developed portion of the City in southern Los Angeles County. The project site is within the Wilmington Avenue ROW and is surrounded by residential land uses and City land use zones. The project would require temporary easements and partial ROW acquisition from surrounding residential properties; however, the proposed project's construction would not conflict with City zoning, land use plans, or regulations adopted for avoiding or mitigating an environmental effect. Upon operation, the proposed project would function in much the same way than under existing conditions. As such, no impact would occur.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – 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?	☐	☐	☐	☒

a) Would the project 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. According to the DOC's Division of Geologic Energy Management, there are no oil or natural gas wells on the project site or within the vicinity of the project site; the nearest well, which was abandoned in 1928 (DOC GEM 2012), is located approximately 0.55 miles south of the project site (DOC GEM 2019). The DOC, Division of Mines classifies the project site as Mineral Resource Zone- (MRZ) 1, which is considered an "area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence" (DOC and USGS 1982). Additionally, low-density residential, mixed use, general commercial, and medium-density residential land uses surround the project area (City of Compton 2011). The project site is occupied with an existing bridge. As such, the project site and area do not currently support mineral resource extraction activities. Therefore, the project would not result in temporary or permanent impacts to the availability of a known mineral resource. No impact would occur.

b) Would the project 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. The City of Compton does not identify any important mineral resource recovery sites in its General Plan (City of Compton 2011). As described above, the proposed project would include the replacement of an existing bridge in an urban area that is fully developed under existing conditions. The project site is not used for mineral resource extraction purposes. Moreover, the project site is designated as MRZ-1, which is an area, "where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence" (DOC and USGS 1982). Therefore, the proposed project would not result in the loss of availability of a locally important mineral resource recovery site. No impact would occur.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – 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?	☐	☐	☐	☒

a) Would the project result in 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?

Less-Than-Significant Impact With Mitigation Incorporated. Existing noise level measurements were taken on a single day (i.e., May 14, 2019) from three locations in proximity to the project area (see Figure 8, Noise Measurement Locations) and are provided in Table 6. The project area is surrounded by residential and commercial land uses. The nearest noise-sensitive land uses are residences immediately adjacent (less than 25 feet) to the project area to the west and east.

Table 6. Noise Level Measurements

Site Number	Monitoring Period	Primary Noise Source	L_{eq} (15 minutes [dBA])	L_{max} (15 minutes [dBA])
ST 1	9:16 – 9:31	Vehicle Traffic	75.4	90.2
ST 2	9:46 – 10:01	Vehicle Traffic	67.1	82.2
ST 3	10:08 – 10:23	Vehicle Traffic	60.7	73.9

Source: Appendix F, Field Noise Measurement Data.
Notes: Noise measurements were conducted on May 14, 2019, using a Piccolo SLM-3 sound level meter.
dBA = A-weighted decibels; L_{eq} = Energy-equivalent noise level; and L_{max} = Maximum sound level during a measurement period or a noise event.

Short-Term Construction Noise

The project would include demolition and replacement of Wilmington Avenue Bridge over Compton Creek. As shown in Table 7, equipment noise levels associated with the project would range from 75 to 90.3 dBA maximum noise level (L_{max}) at 50 feet.

Table 7. Typical Construction Equipment Noise

Equipment	Actual Measured L_{max} at 50 feet from Source (dBA)
Jackhammer	88.9
Backhoe	77.6
Dump Truck	76.5
Hoe Ram	90.3
Loader	79.1
Crane	80.6
Concrete Pump Truck	81.4
Dump Truck	76.5
Drill Rig Truck	79.1
Grader	85[1]
Roller	80
Paver	77.2
Pickup Truck	75
Sweeper	81.6

Source: FHWA 2008.
Notes: L_{max} based on noise levels stated in the CA/T Construction Noise Control Specification 721.560.
[1] Actual noise levels not available.

Noise levels associated with on-site construction activities at nearby noise-sensitive land uses were quantified based on the Federal Highway Administration's Roadway Construction Noise Model, version 1.1 (FHWA 2008) and are summarized in Table 8, Construction Noise Levels at Nearby Noise-Sensitive Land Use – Unmitigated. It is important to note that the predicted noise levels identified in Table 8 reflect the highest predicted construction noise levels anticipated to occur during project construction. Actual noise levels will vary depending on various factors, including the activities conducted, the type and number of pieces of equipment used, and duration of use.

Table 8. Construction Noise Levels at Nearby Noise-Sensitive Land Use – Unmitigated

	ST1				ST2				ST3			
	Calculated dBA		Noise Limit Exceedance (dBA)[1]		Calculated dBA		Noise Limit Exceedance (dBA)[1]		Calculated dBA		Noise Limit Exceedance (dBA)[1]	
Equipment	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}
Jackhammer	86.8	79.9	None	None	74.8	67.8	None	None	75.4	68.4	None	2.7
Backhoe	75.5	71.5	None	None	63.5	59.5	None	None	64	60.1	None	None
Hoe Ram	88.2	81.2	None	0.8	76.2	69.2	None	None	76.8	69.8	None	4.1
Front End Loader	83.1	79.1	None	None	75.1	71.2	None	None	65.6	61.6	None	None
Crane	78.5	70.6	None	None	66.5	58.5	None	None	67	59.1	None	None
Concrete Pump Truck	85.4	78.4	None	None	77.4	70.4	None	None	67.9	60.9	None	None
Dump Truck	74.4	70.4	None	None	62.4	58.4	None	None	62.9	58.9	None	None
Drill Rig Truck	77.1	70.1	None	None	65.1	58.1	None	None	65.6	58.6	None	None
Grader	89	85	None	4.6	81	77	None	4.9	71.5	67.5	None	1.8
Roller	84	77	None	None	76	69	None	None	66.5	59.5	None	None
Paver	81.2	78.2	None	None	73.2	70.2	None	None	63.7	60.7	None	None
Pickup Truck	73	69	None	None	60.9	56.9	None	None	61.5	57.5	None	None
Sweeper	85.6	75.6	None	None	77.6	67.6	None	None	68.1	58.1	None	None
Total[2]	**89**	**89.6**	**None**	**9.2**	**81**	**80.7**	**None**	**8.6**	**76.8**	**74.9**	**None**	**9.2**

Source: FHWA 2008.

Note: Construction noise levels were evaluated based on typical equipment noise levels derived from the Federal Highway Administration's Roadway Construction Noise Model, version 1.1 (2008). Includes up to 10 dB shielding provided by intervening structures (Department of Housing and Urban Development 2009). Assumes the above listed equipment was operating between 10 and 80 feet from the nearest residential property.

[1] The noise limit is equivalent to the baseline ambient noise levels at each receptor location plus 5 dBA (level at which a noticeable change in community response would be expected). An exceedance greater than 5 dBA would be considered adverse.

[2] The total L_{max} is equivalent to the maximum among individual equipment L_{max} values. Because decibels are logarithmic units, the total L_{eq} is calculated on a logarithmic scale and assumes that multiple pieces of equipment would be operating simultaneously.

A 10 dB change can correlate with an adverse change in community response. For the purposes of this analysis, the noise limit is equivalent to the baseline ambient noise levels at each receptor location plus 5 dB (i.e., the level at which a noticeable change in community response would be expected). Therefore, an exceedance up to 5 dB would be noticeable to the public and an exceedance greater than 5 dB would be considered adverse. As shown in Table 8, project construction would result in noise levels that would exceed the noise limit at the nearest noise-sensitive land uses. Exceedances could range from 8.6 to 9.2 dBA L_{eq} at the noise monitoring locations. Therefore, exceedances at ST 1, ST 2, and ST 3 would be considered potentially significant.

Construction activities would be limited to daytime hours, between 7:00 a.m. and 7:00 p.m. on Monday through Saturday, in compliance with the City's Municipal Code. In addition, Section 12.08.440 of the Los Angeles County Code governs construction noise. According to the County Code, operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer, is prohibited. However, Section 12.08.570(H) states that public health and safety activities are exempt from the provisions of the County's Noise Control Ordinance. Specifically, all transportation, flood control, and utility company maintenance and construction operations occurring at any time within the public ROW (and those situations that may occur on private real property) deemed necessary to serve the best interest of the public and to protect the public's health and wellbeing are exempt. Exempt activities include (but are not limited to) street sweeping; debris and limb removal; removal of downed wires; restoring electrical service; repairing traffic signals; unplugging sewers; snow removal; house moving; vacuuming catch basins; removal of damaged poles and vehicles; and repair of water hydrants and mains, gas lines, oil lines, sewers, and other utilities. The proposed project would address existing bridge deficiencies and enhance vehicular safety on the bridge. As such, the proposed project would be considered exempt from the construction noise provisions of the County's Noise Control Ordinance. Nevertheless, Public Works and its construction contractor would reduce construction noise levels associated with the project to the extent practicable. To further minimize noise impacts, the public would be notified of potential noise and vibration impacts from construction activities and would be provided procedures for registering complaints (MM-NOI-1). The project contractor would be responsible for responding to noise complaints and complaints would be reviewed and addressed as they are received.

Construction equipment would be equipped with mufflers in compliance with Section 14-8.02, Noise Control, of Caltrans Standard Specifications. The project would include implementation of abatement measures to reduce impacts on nearby noise-sensitive land uses (MM-NOI-2). Additionally, temporary sound barriers (e.g., a plywood wall or vinyl "curtains") would be constructed between the project area and residences to the east (ST 1) and west (ST 2 and ST 3) as specified in MM-NOI-3. Based on the Caltrans Technical Noise Supplement, temporary noise curtains have been shown to reduce noise levels up to 15 dB (Caltrans 2013). The effectiveness of mitigation measures MM-NOI-2 would vary from several decibels (which in general is a relatively small change) to 10 or more decibels (which subjectively would be perceived as a substantial change), depending on the specific equipment, the original condition of that equipment, the specific locations of the noise sources and receivers, and other factors. Installation of more effective mufflers could range in a reduction of noise from several decibels to well over 10 decibels. Mitigation measure MM-NOI-3, which requires the construction of a temporary noise barrier in the form of a temporary wall or sound curtains adjacent to the nearest residences to the west and east during construction, would provide an additional noise reduction of approximately 10 dB or more. Cumulatively, these measures would result in substantial decreases of noise from construction, estimated to be approximately 15 dB at receiver ST1, and approximately 10 dB or more at receivers ST2 and ST3. With implementation of abatement measures, noise limit exceedances at ST 1, ST 2, and ST 3 would be reduced to less-than-significant levels, as shown in Table 9. Therefore, the project would not generate a substantial temporary 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. Therefore, with implementation of MM-NOI-1 through MM-NOI-3, construction impacts would be less than significant.

In regard to noise complaints, Public Works has agreed to hold a meeting with the local community prior to the start of construction wherein the duration and hours of construction, construction phasing, and Public Works contact information for noise complaints would be discussed.

MM-NOI-1 Nearby residents within 500 feet of construction activities shall be notified about the project and the potential noise and vibration effects resulting from construction activities. Residents shall be provided with procedures for registering complaints, including an appropriate contact person and phone number or email address, in the event that noise and vibration are found to be excessive by the public.

MM-NOI-2 Appropriate noise measures shall be implemented by the contractor, including, but not limited to, siting stationary construction equipment away from sensitive noise receptors to the greatest extent feasible, turning off idling equipment after no more than 5 minutes of inactivity, minimizing the simultaneous operation of multiple pieces of noisy equipment to the extent feasible, ensuring that construction equipment is properly maintained and fitted with state-of-the-art noise shielding and muffling devices (consistent with manufacturer's specifications), and rescheduling construction activity to avoid noise-sensitive days (i.e., holidays) or times.

MM-NOI-3 Temporary sound barriers (e.g., plywood or loaded vinyl "curtains") shall be placed between the project site and residences to the west and east (areas represented by ST 1, ST 2, and ST 3 on Figure 8). The noise barrier shall be a minimum of 8 feet in height, shall have a surface density of at least 4 pounds per square foot, and shall be free of openings and cracks.

With implementation of MM-NOI-1 through MM-NOI-3, construction noise impacts would be less than significant.

Table 9. Construction Noise Levels at Nearby Noise-Sensitive Land Use – With Mitigation[1]

	ST1				ST2				ST3			
	Calculated dBA		Noise Limit Exceedance (dBA)[2]		Calculated dBA		Noise Limit Exceedance (dBA)[2]		Calculated dBA		Noise Limit Exceedance (dBA)[2]	
Equipment	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}
Jackhammer	71.8	64.9	None	None	64.8	57.8	None	None	65.4	58.4	None	None
Backhoe	60.5	56.5	None	None	53.5	49.5	None	None	54	50.1	None	None

Table 9. Construction Noise Levels at Nearby Noise-Sensitive Land Use – With Mitigation[1]

Equipment	ST1				ST2				ST3			
	Calculated dBA		Noise Limit Exceedance (dBA)[2]		Calculated dBA		Noise Limit Exceedance (dBA)[2]		Calculated dBA		Noise Limit Exceedance (dBA)[2]	
	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}
Hoe Ram	73.2	66.2	None	None	66.2	59.2	None	None	66.8	59.8	None	None
Front End Loader	68.1	64.1	None	None	65.1	61.2	None	None	55.6	51.6	None	None
Crane	63.5	55.6	None	None	56.5	48.5	None	None	57	49.1	None	None
Concrete Pump Truck	70.4	63.4	None	None	67.4	60.4	None	None	57.9	50.9	None	None
Dump Truck	59.4	55.4	None	None	52.4	48.4	None	None	52.9	48.9	None	None
Drill Rig Truck	62.1	55.1	None	None	55.1	48.1	None	None	55.6	48.6	None	None
Grader	74	70	None	None	71	67	None	None	61.5	57.5	None	None
Roller	69	62	None	None	66	59	None	None	56.5	49.5	None	None
Paver	66.2	63.2	None	None	63.2	60.2	None	None	53.7	50.7	None	None
Pickup Truck	58	54	None	None	50.9	46.9	None	None	51.5	47.5	None	None
Sweeper	70.6	60.6	None	None	67.6	57.6	None	None	58.1	48.1	None	None
Total[3]	**74**	**74.6**	**None**	**None**	**71**	**70.7**	**None**	**None**	**66.8**	**64.9**	**None**	**None**

Source: FHWA 2008.

Note: Construction noise levels were evaluated based on typical equipment noise levels derived from the Federal Highway Administration's Roadway Construction Noise Model, version 1.1 (2008). Includes up to 10 dB shielding provided by intervening structures (HUD 2009). Assumes the above listed equipment was operating between 10 and 125 feet from the nearest residential property.

[1] Combined estimated noise reduction from mitigation measures MM-NOI-2 and MM-NOI-3 of 15 dB at ST1, and an estimated reduction from MM-NOI-2 of 5 dB at ST2 and ST3.

[2] The noise limit is equivalent to the baseline ambient noise levels at each receptor location plus 5 dBA (level at which a noticeable change in community response would be expected). An exceedance greater than 5 dBA would be considered adverse.

[3] The total L_{max} is equivalent to the maximum among individual equipment L_{max} values. Because decibels are logarithmic units, the total L_{eq} is calculated on a logarithmic scale and assumes that multiple pieces of equipment would be operating simultaneously.

Long-Term Operational Noise

Once operational, the project would not result in increased roadway capacity, and it would not change bridge or roadway alignment. Traffic noise would not change as a result of the project, and therefore, traffic noise levels would not be impacted. The project would not introduce new permanent sources of noise to the project area. Following project implementation, the acoustic setting would be similar to existing conditions, and the project would not result in increased exposure of persons to noise levels. The project would not generate a substantial 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. Therefore, there would be no impacts from project operation.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less-Than-Significant Impact With Mitigation Incorporated. The project would include demolition and replacement of Wilmington Avenue Bridge over Compton Creek. Project construction is anticipated to begin in spring 2026 and would last for approximately 300 working days. Project construction would include temporary construction activities that would generate groundborne vibration, such as auger drilling, excavation, and vibratory compaction. Project construction would use cast-in-place or auger cast piles instead of pile driving, which would limit vibration generation to the negligible amount generated by drilling (Caltrans 2013).

A summary of potential impacts from groundborne vibration levels are identified in Table 10. Based on Caltrans vibration criteria, construction-generated vibration levels would have a potentially significant impact if vibration levels at the nearest structures would exceed the minimum criteria of 0.2 inches per second (in/sec) peak particle velocity (ppv) at fragile structures, 0.3 in/sec ppv at residential dwellings, or 0.5 in/sec ppv at newer buildings, including non-residential structures (Caltrans 2013). This same level corresponds to the level at which vibrations typically become annoying to people in buildings.

Based on the typical construction equipment that would be used for this project, as shown in Table 11, the project could generate vibration levels up to 0.210 in/sec ppv at 25 feet. Therefore, the project could result in groundborne vibration levels that have potential to cause human annoyance and "architectural" damage.

Table 10. Summary of Groundborne Vibration Levels and Potential Effects

Vibration Level (in/sec ppv)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic but would cause "architectural" damage and possibly minor structural damage.

Source: Caltrans 2013.
Notes: The vibration levels are based on ppv in the vertical direction for continuous vibration sources, which includes most construction activities, except for transient or intermittent construction activities, such as pile driving. For pile driving, the minimum criterion level is typically considered to be 0.2 in/sec ppv.
in/sec = inches per second; ppv = peak particle velocity.

Table 11. Representative Vibration Levels for Construction Equipment

Equipment		Peak Particle Velocity at 25 Feet (inches per second)
Pile Driver (Impact)	Upper Range	1.518
	Typical	0.644

Table 11. Representative Vibration Levels for Construction Equipment

Equipment	Peak Particle Velocity at 25 Feet (inches per second)
Vibratory Roller	0.210
Hoe Ram	0.089
Large Bulldozers	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozers	0.003

Source: FTA 2018.

Construction activities would be limited to between 7:00 a.m. and 7:00 p.m. on Monday through Saturday in compliance with the City's Municipal Code. To minimize impacts from groundborne noise and vibration, the public would be notified of potential noise and vibration impacts from construction activities and would be provided procedures for registering complaints (MM-NOI-1). In addition, noise reduction measures listed in MM-NOI-2, would help reduce impacts from groundborne noise and vibration. Therefore, construction impacts would be less than significant with mitigation.

Once operational, the project would not result in increased roadway capacity, and it would not change bridge or roadway alignment. Groundborne noise and vibration levels associated with the project would be similar to existing conditions. The project would not introduce new permanent sources of groundborne noise or vibration to the project area. Therefore, there would be no impacts from project operation.

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?

No Impact. The project area is approximately 0.45 miles northeast of the Compton/Woodley Airport. The project area is outside of the 70 Community Noise Equivalent Level noise contour area identified for the airport (LADRP 2004). Additionally, the project area is outside of the Airport Influence Area/Planning Boundary for the Compton/Woodley Airport. The project would comply with the Los Angeles County Airport Land Use Plan. Therefore, the project would not result in temporary or permanent exposure of people residing or working in the project area to excessive noise levels.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) ***Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

No Impact. The proposed project would include the replacement of an existing bridge. No new homes or businesses would be introduced to the project site under the proposed project. Construction workers would be hired from the local area and the greater Los Angeles metropolitan area and would commute to the job site, rather than relocate from more distant areas. As the proposed project would not result in the construction of new homes or businesses, the number of residents, employees, or visitors to the project area or surrounding community is not expected to increase. The project would not increase the capacity of existing roadways or extend existing roadways to undeveloped areas, such that indirect growth would be induced in the project area. Therefore, the project would not temporarily or permanently induce substantial population growth in the project area either directly or indirectly. No impact would occur.

b) ***Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

No Impact. The project area is primarily located within existing Los Angeles County ROW. The proposed project would require temporary easements and partial ROW acquisition from surrounding residential properties. However, the ROW acquisitions would not result in displacement of any residential properties. Therefore, the project would not result in displacement of existing housing or necessitate housing elsewhere. No impact would occur.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES				
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?	☐	☐	☐	☒

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:

Fire protection?

Less-Than-Significant Impact. The Compton Fire Department provides fire protection services to the City through operation of four fire stations. The nearest fire station to the project area is Fire Station 1, located at 201 S. Acacia Avenue, approximately 0.66 miles to the southeast of the project area. In the unlikely event of a fire in the project area, Fire Station 1 would respond.

The need for new or altered fire facilities is typically associated with a substantial increase in population such that existing facilities cannot meet the associated increase in demand for services. As described under Section 3.14, Population and Housing, the proposed project would not alter population in the project area. The proposed project would include the replacement of an existing bridge and associated improvements; the proposed project would not include any habitable structures or businesses that could result in direct or indirect population growth.

Construction of the proposed project could have the potential to temporarily reduce access for emergency vehicles near work areas. However, all construction activities and associated traffic control measures would be carried out in accordance with applicable City of Compton Fire Department emergency access standards and detours would be established per City and County requirements so that emergency access is maintained during construction of the proposed project. Operation of the proposed project would not require additional fire services. As such, the proposed project would not be anticipated to alter service ratios, response times, or other performance objectives to the extent that new or expanded fire protection facilities, equipment, or staff would be required. Impacts would be less than significant.

Police protection?

Less-Than-Significant Impact. The City of Compton's police protection services are provided by the Los Angeles County Sheriff's Department. The nearest police station to the project area is located at 200 W. Compton Boulevard #404, approximately 0.66 miles to the southeast of the project area (LASD 2019).

The need for new or altered police facilities is typically associated with a substantial increase in population such that existing facilities cannot meet the associated increase in demand for services. As described under Section 3.14, the proposed project would not alter population in the project area. The proposed project would include the replacement of an existing bridge and associated improvements; the proposed project would not include any habitable structures or businesses that could result in direct or indirect population growth.

Construction of the proposed project could have the potential to temporarily reduce access for emergency vehicles near the work areas. However, all construction activities would be carried out in accordance with all applicable Los Angeles County Sheriff's Department emergency access standards and detours would be established per City and County requirements so that emergency access is maintained during construction of the proposed project. Operation of the proposed project would be passive and would not require additional police protection. As such, the proposed project would not alter service ratios, response times, or other performance objectives to the extent that new or expanded police protection facilities, equipment, or staff would be required. Impacts would be less than significant.

Schools?

No Impact. The Compton Unified School District includes four high schools, seven middle schools, and 21 elementary schools (CUSD 2019). Additionally, the school district offers adult and alternative schooling at four campuses in the city. The nearest schools to the project area include General Benjamin O. Davis, Jr. Middle School (621 West Poplar Street), approximately 0.17 miles to the north, and Dickison Elementary School (905 N Aranbe Avenue), approximately 0.33 miles to the northeast. The need for new or altered school facilities is typically associated with an increase in population. As described under Section 3.14, the proposed project would not alter population in the project area and, as such, would not result in increased student enrollment at local schools. The proposed project would include the replacement of an existing bridge and associated improvements; the proposed project would not include any habitable structures or businesses that could result in direct or indirect population growth.

Although construction of the proposed project could have the potential to cause nuisance due to temporary road closures, access to these schools would not be directly restricted during construction as none of the planned detours would occur within the same block as any existing schools. Additionally, these effects would be temporary, and access to each school would be maintained throughout construction. Operation of the project would have no impact to local schools when compared to existing conditions. For these reasons, the proposed project would not alter the ability of existing schools to accommodate students to the extent that new or expanded school facilities, materials, or staff would be required. No impact would occur.

Parks?

No Impact. The City of Compton Parks and Recreation Department operates and maintains a total of 16 parks, which encompass approximately 118 acres of total parkland (City of Compton 2019a). Facilities include six community centers, seven neighborhood parks, two walking parks, two community competition-size swimming pools, three regulation size gymnasiums, a skate park, Jackie Robinson Baseball Stadium, Par 3 Golf Course, newly constructed Douglas F. Dollarhide Community Center, and Alondra Regional Park. The nearest park to the project area is Walter R. Tucker Park, which encompasses approximately 4 acres and is 0.34 miles to the southeast of the project area.

The need for new or altered parks is typically associated with an increase in population. As described under Section 3.14, the proposed project would not alter population in the project area. The proposed project would include the replacement of an existing bridge and associated improvements; the proposed project would not include any habitable structures or businesses that could result in direct or indirect population growth. Furthermore, there are no parks adjacent to the project site. As stated above, the nearest park is Walter R. Tucker Park, which encompasses approximately 4 acres and is 0.34 miles to the southeast of the project area. As such, project construction would not create temporary effects to nearby parks. For these reasons, the proposed project would not alter the ability of parks to serve the region to the extent that new or expanded parks would be required. No impact would occur.

Other public facilities?

No Impact. Other public facilities include libraries and government administrative services. The need for new or altered libraries or administrative services is typically associated with an increase in population. As described under Section 3.14, the proposed project would not result in an increase in population and, as such, would not result in the need for libraries or other government administrative services. The proposed project would include the replacement of an existing bridge and associated improvements; the proposed project would not include any habitable structures or businesses that could result in direct or indirect population growth. No new or expanded facilities would be required. No impact would occur.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
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?	☐	☐	☐	☒

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 City of Compton Parks and Recreation Department operates and maintains a total of 16 parks, which encompass approximately 118 acres of total parkland (City of Compton 2019a). Facilities include six community centers, seven neighborhood parks, two walking parks, two community competition-size swimming pools, three regulation size gymnasiums, a skate park, Jackie Robinson Baseball Stadium, Par 3 Golf Course, newly constructed Douglas F. Dollarhide Community Center, and Alondra Regional Park. The proposed project would include the replacement of an existing bridge and would not be located within the immediate vicinity of an existing neighborhood or regional park. The nearest park to the project area is Walter R. Tucker Park, which encompasses approximately 4 acres and is 0.34 miles to the southeast of the project area. Proposed bridge improvements would not result in the physical deterioration of recreational facilities or cause an acceleration of deterioration. Additionally, as discussed in Section 3.14, the proposed project would not result in population increases resulting in an increased need for park facilities. No impact would occur.

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 proposed project would not include recreational facilities. As discussed in Section 3.14, the proposed project would not result in population increases resulting in a need for construction or expansion of recreational facilities. No impact would occur.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – 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 inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

This section analyzes the potential impacts of the proposed project based on CEQA Guidelines Section 15064.3(b), which focuses on newly adopted criteria (VMT) pursuant to SB 743 for determining the significance of transportation impacts. Pursuant to SB 743, the focus of transportation analysis has changed from level of service or vehicle delay to VMT. The Los Angeles County Public Works Transportation Impact Analysis Guidelines provide new transportation analysis criteria and thresholds (Public Works 2020), which include VMT analysis requirements per CEQA Guidelines Section 15064.3(b). Additionally, guidance provided in the California Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018) is also used to determine a project's transportation impact.

The proposed project would include demolition and construction activities involving replacement of an existing steel girder bridge with a pre-cast concrete bridge in the City of Compton, where the Wilmington Avenue crosses Compton Creek, just north of the Compton Boulevard/Wilmington Avenue intersection.

The following describes the existing transportation setting.

Existing Roadway Network and Traffic Volumes

The City of Compton has a well-established grid network of roadways, which follows the classification system as shown in Table 12.

Table 12. City of Compton Roadway Classification

Functional Classification	Right of Way (Feet)	Number of Travel Lanes
Major Highway	100–106	6 lanes; divided roadway with a median; 3 lanes in each direction
Major Highway	100–106	4 lanes; divided roadway with a median; 2 lanes in each direction
Major Highway	100–106	4 lanes; left turn lane in median; two travel lanes in each direction
Secondary Highway	80–88	4 lanes; left turn lane in median; two travel lanes in each direction
Secondary Highway	80–88	4 lanes; undivided roadway with 2 lanes in each direction
Collector (Industry)	80–82	4 lanes; undivided roadway with 2 lanes in each direction
Collector	60	2 lanes; undivided roadway with 1 travel lane in each direction
Local (Residential Street)	40–60	2 lanes; undivided roadway with 1 travel lane in each direction

Source: City of Compton 2011 (Circulation Element).

Wilmington Avenue is classified as a Major Highway in the City of Compton General Plan Circulation Element. It is a north-south roadway and provides two travel lanes in each direction with a combination of a central left-turn median, raised median and double yellow lines along its stretch in the City of Compton. Wilmington Avenue provides access to State Route 91 via on- and off-ramps, approximately a mile and a half south of the Wilmington Avenue Bridge. The posted speed limit along Wilmington Avenue is 40 miles per hour. Parking is generally allowed along this roadway. The existing average daily traffic count along Wilmington Avenue between W School Street and W Magnolia Street was observed to be 22,607 vehicles during a typical non-holiday week in May 2019. The daily traffic volume, pedestrian counts, and bike counts at this location are included in Appendix G, Traffic Counts.

Compton Boulevard is classified as a Secondary Highway in the City of Compton General Plan Circulation Element. It is an east-west roadway and provides two travel lanes in each direction with a combination of central left-turn median, and double yellow lines along its stretch in the City of Compton. Approximately a mile and a quarter west of the Compton Creek Bridge, Compton Boulevard transitions into Redondo Beach Boulevard and provides access to Interstate 110. The posted speed limit along Compton Boulevard is 35 miles per hour. Parking is generally allowed along this roadway. The existing average daily traffic count along Compton Boulevard between S Matthisen

Avenue and N Paulsen Avenue was observed to be 23,877 vehicles during a typical non-holiday week in May 2019. The daily traffic volume, pedestrian and bike counts at this location are included in Appendix G.

Rosecrans Avenue is classified as a Major Highway in the City of Compton General Plan Circulation Element. It is an east-west roadway and provides two travel lanes in each direction with generally a divided median along most of its stretch in the City of Compton. It provides connections to Interstate 110 to the west and Interstate 710 to the east via on- and off-ramps. The posted speed limit along Rosecrans Avenue is 35 miles per hour and parking is generally allowed along this roadway.

Alameda Street (West) is classified as a Major Highway in the City of Compton General Plan Circulation Element. It is a four-lane north-south roadway bounded on the east by the Alameda Corridor freight rail expressway and on the west by industrial and commercial uses. The roadway segment has a right-of-way width of 65 feet and experiences heavy truck traffic. It provides connections to State Route 91 on the south and Interstate 105 on the north.

Local Residential Streets in Compton constitute the majority of the City's street network. These streets provide access to individual parcels and circulation within a neighborhood block. Per City's General Plan Circulation Element, although the standard for local streets is 60 feet (with a curb-to-curb pavement width of 36 feet, two lanes, and on-street parking on both sides), most local streets are generally 40 to 50 feet wide, with a pavement width between 24 to 30 feet.

In the vicinity of the project site, there are local residential streets such as W Palmer Street, W School Street, W Magnolia Street, N Kemp Avenue, N Paulsen Avenue and N Matthisen Avenue, generally in a grid layout.

Truck Routes

Wilmington Boulevard within the City boundary and Compton Boulevard west of Wilmington Avenue are designated truck routes.

Transit, Bike, and Pedestrian Facilities

Metro Blue Line Light Rail provides mass rail transit service near the project area. Compton Civic Center Station is located along Willowbrook Avenue. Martin Luther King Jr. Transit Center, in the vicinity, is a multi-modal terminal that serves light rail, urban, and intercity buses, local Dial-A-Ride services, taxicabs and Greyhound buses.

The Compton Renaissance Transit System provides daily local transit services throughout the City. Metro Bus Lines operated by Metropolitan Transportation Authority, Long Beach transit and Gardena Municipal Bus Lines also serve the Compton area. Routes 3, 51, and 351 operate along Compton Boulevard and the closest bus stop is located approximately 700 feet east of the Compton Creek Bridge. Routes 3 and 205 operate along Wilmington Boulevard and the closest bus stop is located approximately 1,100 feet north of the Wilmington Avenue Bridge.

Bicycle facilities are categorized per state-wise standards developed by Caltrans summarized below:

- **Class I (Bicycle Path) –** provides a completely separated ROW for the exclusive use of bicycles and pedestrians with cross flow minimized.
- **Class II Bikeway (Bike Lane) –** provides a striped lane for one-way bike travel on a street or highway.
- **Class III Bikeway (Bike Route) –** provides for shared use with pedestrian or motor vehicle traffic.

All bike facilities in the City of Compton are Class I or Class II bicycle routes. The City of Compton has a bikeway on the east side of Compton Creek and an equestrian trail on the west side of the Compton Creek.

Construction Detour Routes

Project construction is anticipated to last for approximately 300 working days. Construction-related traffic would be temporary, but it would require complete road closures over the Wilmington Avenue Bridge. Per County staff, the following planned detour routes would be established via Rosecrans Avenue, Compton Boulevard, and Alameda Street:

- Northbound traffic would be directed to head east on Compton Boulevard, north on Alameda Street, west on Rosecrans Avenue, and north back onto Wilmington Avenue.
- Southbound traffic would be directed to head east on Rosecrans Avenue, south on Alameda Street, west on Compton Boulevard, and south back onto Wilmington Avenue.

The approximately 300-foot approach roadways on either side of the bridge structure would be used as construction staging areas. In addition to the bridge replacement, construction would include private tree removal, relocation of the utilities, existing catch basins, driveways, and street lighting; and the reconstruction of the sidewalk, roadway, and bike paths along the channel. Regarding tree removal, commitments to replace fencing, landscaping and trees impacted during construction would be negotiated during the ROW acquisition process with property owners (including potentially, City of Compton) willing to grant the necessary temporary/permanent rights. The Public Works acquisition team will reach out to property owners during the ROW acquisition process to engage in negotiations.

The proposed project would temporarily decrease adjacent roadway capacities, generate additional traffic to adjacent roadways, and change traffic patterns that could cause an impact to the circulation system consisting of transit, roadway, bicycle, and pedestrian facilities. During construction and due to full closure of the bridge, some of the diverted traffic could potentially cut-through the adjacent neighborhoods. This would temporarily increase traffic along local residential streets and thereby a need for temporary traffic-calming measures on those streets. Traffic-calming measures, such as signage and speed radar warning signs, would be needed to manage cut-through traffic along local residential streets adjacent to Wilmington Avenue Bridge.

Public Works construction projects, such as the proposed project, implement traffic control plans for work within road ROWs (PDF-TRAF-1). Therefore, with implementation of PDF-TRAF-1, construction would not conflict with adopted policies, plans, or programs regarding transit, bicycle, or pedestrian facilities, and impacts would be less than significant.

PDF-TRAF-1 Traffic Control Plans (TCPs) shall be required for all construction work within the road right-of-way that modifies vehicular, bicycle, pedestrian, and/or transit traffic patterns, and are necessary to ensure the safe and efficient movement of traffic through construction work zones. The TCP shall be prepared by the project's contractor, reviewed and approved by the City of Compton and Public Works.

Elements of a TCP shall include, but are not necessarily limited to, the following:

a. Provision of public workshops and/or neighborhood meetings to notify and inform adjacent residents, impacted stakeholders and the general public regarding the schedule and duration of street closures, and implementation of detour routes and temporary traffic calming measures.

b. Develop detour plans to minimize impacts to local or residential streets, especially minimize truck traffic on local roadways to the extent possible and ensure least interference to pedestrians, bicyclists, transit and other vehicle users in the area. Develop traffic calming measures such as signage and speed radar warning signs needed to manage cut-through traffic along local residential streets adjacent to Wilmington Avenue and Compton Creek bridges.

c. Install temporary traffic control devices as specified in Part 6 of Caltrans' Manual of Uniform Traffic Control Devices (CAMUTCD) to maintain safe and effective movement of all road users (including pedestrians and bicyclists) through or around temporary traffic control zones while reasonably protecting from traffic incidents and equipment.
    - Use flaggers, signage, traffic control barricades, channelizing devices, pavement markings and/or work vehicles to safely direct traffic through construction work zones.
    - Use warning signs and plaques as specified in CAMUTCD for detours and temporary traffic control zones.

d. Coordinate with emergency service providers such as police, fire stations, hospitals as well as all stakeholders i.e. abutting property owners, residents and businesses and schools to ensure adequate accessibility to all road users during the construction period. Provide advance notification of the timing, location, and duration of construction activities and detour routes to residents, business or facility owners and administrators.

e. Coordinate with County and City officials, to obtain all necessary encroachment and trip permits.

f. To the extent feasible, schedule truck trips (equipment delivery and haul) outside of AM and PM peak commute hours. Encourage carpooling among workers to reduce worker commute trips.

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

Less-Than-Significant Impact. Construction activities would include demolition, grading, pile drilling, installation of metal beam guardrail system, construction of bridge abutments, bridge pier reconstruction, reconstruction of sidewalks, drainage improvements (catch basins at driveway entrances) bicycle path reconstruction, roadway reconstruction to accommodate and full road closures within project limits.

Project Trip Generation

The Institute of Transportation Engineers' Trip Generation manual does not contain trip rates for construction-related activities associated with the proposed project. Trip generation for construction projects is based on average or peak number of workers and trucks that would be required for the proposed construction activities. Construction traffic includes the number of workers and the amount of delivery (vendor) and haul truck traffic that would be generated to and from the site daily and during the AM and PM peak hours.

Per construction phasing and schedule, approximately 19 workers, 21 delivery (vendor) trucks, and 10 haul trucks would be required per day during peak construction-related activities. The construction activities would occur between 7:00 a.m. to 3:30 p.m. over the weekdays, Monday through Friday. Some nighttime construction work may be needed; however, would be subject to the City approval and permitting process. All workers and trucks were assumed to make two daily trips (one inbound and one outbound) to the project site. Based on the work schedule, workers would not be traveling during the AM or the PM peak periods, therefore approximately 20% workers were assumed to arrive during the AM peak hour and leave the site during the PM peak hour. All truck trips were averaged over the 8-hour workday to estimate peak hour trips with 50% inbound and 50% outbound. Passenger car equivalent (PCE) factors were used to account for the project's truck traffic and provide a more realistic measurement in terms of the impact of project-related truck traffic. All truck trips were converted to PCE trips using a factor of 2.0 or 3.0. Project trip generation estimates are shown in Table 13.

Table 13. Project Trip Generation

Vehicle Type	Daily Quantity	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Trip Generation								
Workers[1]	19 workers	38	4	0	4	0	4	4
Vendor Trucks[2]	21 Trucks	42	3	3	6	3	3	6
Haul Trucks[3]	10 Trucks	20	1	2	3	2	1	3
	Total Trips	**100**	**8**	**5**	**13**	**5**	**8**	**13**
Trip Generation w/PCE								
Workers[1] (1.0 PCE)	19 workers	38	4	0	4	0	4	4
Vendor Trucks[2] (2.0 PCE)	21 Trucks	84	6	6	12	6	6	12
Haul Trucks[3] (3.0 PCE)	10 Trucks	60	3	6	9	6	3	9
Total Trips (w/PCE)		**182**	**13**	**12**	**25**	**12**	**13**	**25**

Notes: PCE = passenger car equivalent.

[1] Workers as assumed to use passenger cars and no carpooling is assumed. Approximately 20% of the workers are anticipated to arrive and depart during the AM and PM peak hour.

[2] Vendor trucks are assumed to be distributed evenly across the 8-hour work shift to estimate AM and PM peak hour trips.

[3] Haul truck trips are distributed evenly over the duration of construction phase to estimate daily haul truck trips and across the 8-hour work shift to estimate AM and PM peak hour trips.

As shown in the Table 13, the project would generate 100 daily trips, 13 AM peak hour trips (8 inbound and 5 outbound), and 13 trips during the PM peak hour (5 inbound and 8 outbound). With the application of PCE factors to truck trips, the project would generate 182 total PCE daily trips, and 25 PCE trips during the AM peak hour (13 inbound and 12 outbound) and 25 PCE trips during the PM peak hour (12 inbound and 13 outbound).

The proposed project would not increase roadway capacity, generate a permanent increase in traffic or induce traffic, or change traffic patterns that could cause an impact to the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, the proposed project would not conflict with adopted policies, plans, or programs addressing the circulation system, and impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less-Than-Significant Impact. CEQA Guidelines Section 15064.3(b), focuses on specific criteria (VMT), for determining the significance of transportation impacts. It is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. The proposed project is a bridge replacement project that would generate temporary construction-related traffic and nominal operations and maintenance traffic. This project would be categorized under subdivision (b)(2), transportation projects. Subdivision (b)(2) recognizes that transportation projects that reduce, or have no impact on, VMT should be presumed to cause a less-than-significant transportation impact. The Los Angeles County Public Works Transportation Impact Analysis Guidelines provide guidance for VMT screening and analysis of transportation projects (Public Works 2020). Transportation projects that increase vehicular capacity can lead to additional travel on the roadway network, which can include induced vehicle travel due to factors such as increased speeds and induced growth. Consistent with California Governor's Office of Planning and Research guidance, the Los Angeles County Public Works Transportation Impact Analysis Guidelines state that transportation projects, including rehabilitation, maintenance, replacement, safety, and repair projects, designed to improve the condition of existing transportation assets (e.g., highways, roadways, bridges, culverts) that are not likely to lead to a substantial or measurable increase in vehicle travel would not be required to prepare an induced travel analysis.

The proposed project would involve replacement of an existing bridge that would address existing bridge deficiencies and enhance vehicular safety on the bridge. However, the proposed project would not cause a permanent increase of traffic, or induce traffic, as it is not increasing the capacity of the roadway segment of Wilmington Avenue or providing an alternative route to the existing traffic.

Potential increases in vehicle trip generation as a result of project construction would be as shown in Table 13. Based on an average one-way trip length of 20 miles per worker, 8 miles for delivery and vendor trucks, and 30 miles for haul trucks, the maximum daily VMT generated by construction of the project was estimated to be 1,384 miles and a total of approximately 199,372 miles (refer to Appendix A). However, once construction is completed, construction-related traffic would cease and VMT levels would return to pre-project conditions. Therefore, vehicle miles generated from construction traffic would be temporary and short term. Since the proposed project would not cause a permanent increase of traffic or induce traffic, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). Impacts would be less than significant.

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

Less-Than-Significant Impact. The proposed replacement of the bridge would remediate an existing hazard and result in increased safety for all road users. At completion of the proposed project, no hazardous geometric design features; no sharp curves or dangerous roadway conditions would be introduced. Construction would occur within the existing ROW; and the travel lanes along Wilmington Avenue would be closed in either direction during construction activities. As such, all road users would not be able to travel along Wilmington Avenue Bridge and would need to follow the detour route. This could cause congestion and increase hazards due to a roadway design feature during the construction period. Further, some of the diverted traffic could potentially cut-through the adjacent neighborhoods and temporarily increase traffic along local residential streets. However, with the implementation of a PDF-TRAF-1, the proposed project impacts during construction would be less than significant.

d) ***Would the project result in inadequate emergency access?***

Less-Than-Significant Impact. As noted in Section 2.5, Project Construction, complete road closures over the existing Wilmington Avenue Bridge would occur during construction activities. Therefore, construction of the project would potentially obstruct access to emergency vehicles. Construction occurring within the ROW would be required to implement appropriate construction traffic management measures to facilitate detour of all road users during the closure of the bridge. With implementation of PDF-TRAF-1, the project would not result in inadequate emergency access and impacts would be less than significant.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

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)?

Less-Than-Significant Impact. As described in Section 3.5, Cultural Resources, of this IS/MND, a CHRIS records search and Sacred Lands File search was conducted for the project site. No tribal cultural resources (TCRs) were identified as a result of the records searches. Therefore, the proposed project would not adversely affect TCRs that are listed or eligible for listing in a state or local register. No mitigation is required.

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 Impact with Mitigation Incorporated. There are no resources in the project site that have been determined by the lead agency to be significant pursuant to the criteria set forth in PRC Section 5024.1. Further, no specific TCRs were identified in the project site by the Native American Heritage Commission, by California Native American tribes, or by Public Works as part of the AB 52 notification and consultation process.

Pursuant to AB 52, Public Works initiated consultation on April 4, 2019, and mailed notification letters to all contacts who have previously requested project notification about Public Works projects. To date, Public Works received one request to consult under AB 52 from the Gabrieleño Band of Mission Indians–Kizh Nation (Tribe).

An AB 52 consultation meeting between Public Works and Kizh-Nation tribal representatives, Chairman Andrew Salas and Tribal biologist Matthew Teutimez, was conducted on June 12, 2019. In summary, the Tribe informed Public Works that the project site is considered potentially sensitive due to its location adjacent to and near traditional trade routes and corridors, as well as Compton Creek's prevalence for movement. Further, the Tribe stated that individuals who perished while traveling on the trade routes were buried along the route or near-by creek. The Tribe referred to a project conducted in 2004 that resulted in the unanticipated discovery of human remains near the concrete-lined Compton Creek. This discovery was made outside of the current project site. Additionally, the Tribe suggested that the Tajauta village was possibly in the project site. Lastly, the Tribe was concerned that the fill used around new abutments may contain cultural resources.

In a follow-up email dated October 28, 2019, Public Works provided the Tribe with a newly acquired as-built engineering drawing for the Wilmington Avenue Bridge to help inform the Tribe on the depth of previous disturbance within the project site. Chairman Salas replied via email on December 5, 2019, indicating that the as-built did not provide information on the type of fill used near the abutments, and that the Tribe was still concerned about the potential for the fill to contain cultural resources. The Tribe also provided mitigation measures in which tribal monitoring was requested for ground-disturbing activities during project construction. Public Works responded via email on December 10, 2019, acknowledging receipt of the mitigation measures and requested clarification on the areas within the project site that the Tribe would like to monitor. Public Works sent an additional email to Chairman Salas on December 10, 2019, that included an excerpt of the geotechnical report summarized from the archaeological survey report prepared for the project (Confidential Appendix C). The geotechnical findings indicated that locations immediately abutting the bridge and creek are likely disturbed up to 75 feet below ground surface. In an email dated January 31, 2020, Chairman Salas reduced the scope of tribal monitoring from all ground-disturbing activities to monitoring within the abutments and in the creek at the center of the piers. No additional responses have been received by Public Works since.

Although the consultation did not result in the identification of any TCRs or other known cultural resources that could be directly impacted by the proposed project, Chairman Salas requested that monitoring be included for specific construction activities and provided mitigation measures to Public Works and requested the mitigation measures be incorporated into the environmental document.

No TCRs have been identified as present within the project site as a result of the NAHC SLF and a review of the California Register of Historical Resources and local register or through tribal consultation under AB 52. However, the AB 52 consultation between Public Works and Chairman Salas suggests that there is some potential for unknown subsurface TCRs to be impacted by the project, which could result in a significant impact. Therefore, mitigation measures have been included to provide for the development of a Construction Monitoring and Treatment Plan (CMTP) (MM-TCR-1) and tribal monitoring of ground-disturbing activities (MM-TCR-2). MM-TCR-1 incorporates requirements for addressing cultural resources that are included in MM-CUL-2 from Section 3.5, Cultural Resources, of this IS/MND. As stipulated within the analysis prepared for Section 3.5(c), appropriate handling of human remains would be completed in compliance with PRC 5097.98 and Health and Safety Code 7050.5. This includes establishing a process of respectful treatment through discussions with the identified most likely descendant. Therefore, implementation of MM-TCR-1 and MM-TCR-2 would ensure that potential construction impacts related to an unknown site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe would be reduced to less than significant.

MM-TCR-1 While no tribal cultural resources (TCRs) impacts have been identified, the following approach to address impacts based on the inadvertent discovery of TCRs has been prepared. Prior to commencement of earthmoving activities, Public Works shall prepare a Construction Monitoring and Treatment Plan (CMTP). This CMTP defines the process to be followed, upon discovery of archaeological resources or TCRs, to ensure the proper treatment, evaluation and management.

1. For purposes of CMTP implementation, the Project area subject to monitoring is defined as the areas of the proposed new abutments and center piers within the creek bed.
2. The CMTP shall include a requirement for all construction personnel to complete a Workers Environmental Awareness Program (WEAP) training prior to commencement of construction activities. The WEAP training shall be conducted by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards and provide the following: (1) explanation of types and characteristics of cultural materials that may be encountered during construction; (2) explanation of the importance of and legal basis for the protection of Tribal Cultural Resources; (3) proper procedures to follow in the event that cultural resources are uncovered during ground-disturbing activities, including procedures for work curtailment or redirection; and (4) protocols for contacting site supervisor and archaeological staff upon discovery of an archaeological or TCR.
3. The following protocols shall be included in the CMTP in addition to the measures provided in MM-CUL-2:
    a. Should a potential TCR be encountered, construction activities near the discovery shall be temporarily halted within 100 feet of the discovery and Public Works shall be notified. If Public Works determines that the potential resource is a TCR (as defined by California Public Resources Code, Section 21074), Tribal representatives from the Gabrieleño Band of Mission Indians - Kizh Nation shall

be provided a reasonable period of time, typically 5 days from the date that a new discovery is made, to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered TCRs. Depending on the nature of the resource and Tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations shall be made based on the determination of Public Works that the approach is reasonable and feasible. All activities shall be conducted in accordance with regulatory requirements. If the potential resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in Mitigation Measure for archaeological resources (see Section 3.5(b) for MM-CUL-2).

b. During construction, all discovered TCRs shall be temporarily curated at the offices of the Project archaeologist. Following the completion of the Project, all TCRs shall be catalogued before being relinquished to the Tribe during and/or at the completion of the Project.

c. Regardless of discovery, at the completion of all ground-disturbing activities, An archaeologist meeting the Secretary of the Interior’s Professional Qualification Standards shall prepare a report, according to California Office of Historic Preservation guidelines, documenting all monitoring efforts, cultural resource discoveries with associated analysis and interpretations, including all necessary site records as well as daily monitoring logs completed by the Tribal monitor. The report shall be completed within 60 days of conclusion of all ground disturbing activities and a copy shall be submitted to Public Works, the Gabrieleño Band of Mission Indians - Kizh Nation Tribal Government, and the South Central Coastal Information Center located at California State University, Fullerton.

MM-TCR-2 A tribal monitor who is culturally affiliated with the Project area and/or otherwise approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government shall be retained by Public Works conduct periodic monitoring of ground-disturbing activities within the areas of the proposed new abutments and center piers within the creek bed. The tribal monitor shall have the authority to temporarily halt work to inspect areas as needed for potential cultural material or deposits. The tribal monitor shall complete daily monitoring logs providing descriptions of the day’s activities, including construction activities, locations, soil, and any cultural materials identified. The on-site tribal monitoring shall end when ground-disturbing activities within the areas of the proposed new abutments and center piers within the creek bed are completed, or when the Tribal Representatives and monitor have indicated that the site has a low potential for impacting TCRs. Should any TCRs be encountered, the tribal monitor(s) will have the authority to request construction to cease within 100 feet of the discovery to assess and document potential finds as outlined in mitigation measure MM-TCR-1(3)(a).

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – 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?	☐	☐	☒	☐

a) ***Would the project 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?***

Less-Than-Significant Impact. While bridge reconstruction would necessitate the relocation of existing water, gas, and telecommunication lines that are attached to the existing bridge, the proposed project would not require or result in the construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects for the following reasons:

Water

The City of Compton Water Utility Division is responsible for implementing the City's utility services and billing programs (City of Compton 2019b). The Water Utility Division constructs, inspects, maintains, and repairs water mains, gate valves, fire hydrants, and water services to provide adequate potable water to the citizens and businesses of Compton. The City’s water system serves water to approximately 80,000 people through 15,000 residential, commercial, and industrial service connections, and 156 miles of pipe in length with includes pipe ranging in size from 2 inches to 24 inches (City of Compton 2019b). According to the City’s Urban Water Management Plan, the City sources its water from groundwater purchased through the Metropolitan Water District of Southern California and from groundwater directly pumped from the Central Basin (City of Compton 2010).

During construction of the proposed project, small amounts of water would be required for activities such as cleaning surfaces, concrete (or other materials’) mixing, and suppressing dust. However, water used during construction would be minimal and would represent a nominal proportion of the City’s total annual water supply, which is projected to be approximately 9,484 acre-feet in 2020 (City of Compton 2010). The proposed project is a bridge reconstruction project and would not include the construction of any water-intensive land uses (e.g., housing, industrial, retail). As such, operation of the proposed project would not result in an increased demand for water at the project site, and, therefore, would not require or result in the relocation or construction of new or expanded water facilities. Impacts would be less than significant.

Wastewater

The City’s wastewater is largely treated by the Joint Water Pollution Control Plant (JWPCP). The JWPCP is located at 24501 S. Figueroa Street in the City of Carson (LACSD 2019). The plant occupies approximately 420 acres to the east of the Harbor Freeway (Interstate 110). The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the Sanitation Districts’ wastewater treatment plants. The facility provides both primary and secondary treatment for approximately 260 million gallons of wastewater per day (mgd) and has a total permitted capacity of 400 mgd (LACSD 2019).

The proposed project would include the reconstruction of an existing bridge and would not entail the construction of any habitable structures that would result in long-term sanitary sewer discharges. Non-stormwater discharges would be added to the local municipal sewer system during construction; however, such discharges would be nominal, temporary, and periodic in nature, and would comingle with wastewater in the municipal sewer collection system prior to being treated at the JWPCP. Upon operation, the proposed project would not require wastewater treatment services. As such, the project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities. Impacts would be less than significant.

Stormwater Drainage

Under existing conditions, stormwater runoff drains, via storm drain inlets on both sides on the existing Wilmington Avenue over Compton Creek Bridge, into the Compton Creek where it enters the Los Angeles River System (City of Compton 2019c).

During construction of the proposed project, activities, such as grading, excavation, and vegetation removal, could result in temporary changes to on-site drainage patterns, as well as increased erosion and sedimentation. Specifically, construction activities could contribute to increased stormwater runoff and stormwater contamination. However, these changes to stormwater drainage patterns during construction would be temporary in nature, and with incorporation of a project-specific SWPPP per the requirements of the Construction General Permit, impacts would be less than significant. Additionally, the proposed project would reconstruct an existing bridge, which, upon operation, would not substantially alter existing drainage patterns, and, as such, would not result in substantial changes to the rate and volume of stormwater runoff that leaves the project site when compared to existing conditions. As such, the proposed project would not require or result in the relocation or construction of new or expanded stormwater infrastructure. Impacts would be less than significant.

Electric Power/Natural Gas

Temporary electric power for as-necessary lighting and electronic equipment would be provided by SCE. The amount of electricity used during construction would be minimal because typical demand would stem from electrically powered hand tools. The electricity used for construction activities would be temporary and minimal; therefore, proposed project construction would not result in significant consumption of electricity such that new electricity generation facilities would be warranted. Natural gas is not anticipated to be required during construction and operation of the proposed project. The proposed project would involve the reconstruction of an existing bridge and would not include any habitable structures that would require new or expanded electric power and/or natural gas facilities. Impacts would be less than significant.

Telecommunications

The proposed project would include the reconstruction of the existing Wilmington Avenue over Compton Creek Bridge and would not involve the construction of any habitable structures that would require new or expanded telecommunications facilities. Furthermore, as explained in Section 3.14, the proposed project would not result in population growth. As such, the project would not require new or expanded telecommunications facilities. Therefore, no impacts related to the need for new or expanded telecommunication facilities would occur.

For the reasons described above, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be less than significant.

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

Less-Than-Significant Impact. As stated above in Section 3.19(a), the City sources its water from water purchased through the Metropolitan Water District of Southern California and from groundwater directly pumped from the Central Basin (City of Compton 2010).

During construction of the proposed project, small amounts of water would be required for activities such as cleaning surfaces, concrete (or other materials') mixing, and suppressing dust. However, water used during construction would be minimal and would represent a nominal proportion of the City's total annual water supply, which is projected to be approximately 9,484 acre-feet in 2020 (City of Compton 2010). The proposed project is a bridge reconstruction project and would not include the construction of any water-intensive land uses (e.g., housing, industrial, retail). As such, long-term operation of the proposed project would not result in an increased demand for water at the project site and would not contribute to the City's water demand during normal, single-dry, and multiple-dry years; the City would have sufficient water supplies available to serve the minor water needs of the project during construction. As such, impacts would be less than significant.

c) ***Would the project 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?***

Less-Than-Significant Impact. As stated in Section 3.19(a), the City's wastewater is largely treated by the JWPCP. The JWPCP is located at 24501 S. Figueroa Street in the City of Carson (LACSD 2019). The plant occupies approximately 420 acres to the east of Interstate 110. The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the Sanitation Districts' wastewater treatment plants. The facility provides both primary and secondary treatment for approximately 260 mgd of wastewater and has a total permitted capacity of 400 mgd (LACSD 2019).

The proposed project would include the reconstruction of an existing bridge and would not entail the construction of any habitable structures that would result in long-term sanitary sewer discharges. Non-stormwater discharges would be added to the local municipal sewer system during construction; however, such discharges would be nominal, temporary, and periodic in nature, and would comingle with wastewater in the municipal sewer collection system prior to being treated at the JWPCP. Upon operation, the proposed project would not require wastewater treatment services. Given the above, the Los Angeles County Sanitation District's JWPCP facility would have adequate capacity to serve the project. Impacts would be less than significant.

d) ***Would the project 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 Impact. Waste that would be generated during construction activities would include pavement removed during demolition of the existing bridge, vegetation cleared under the proposed project, and other construction debris. Project construction would be short-term, and the disposal of solid waste would be minimized through the recycling and reuse of construction materials, as legislated by the Integrated Waste Management Act (SB 1374) and the County Construction and Demolition Debris Recycling and Reuse Program, both of which require that 50% to 75% of construction demolition debris be diverted from landfills (Public Works 2019b). Savage Canyon Landfill, located approximately 14 roadway miles northeast of the project site, would be used to dispose materials. According to CalRecycle, Savage Canyon Landfill has a remaining capacity of 9,510,833 cubic yards and an anticipated closing date of 2055 (CalRecycle 2019). Project operation would not result in the production of waste and would not necessitate long-term solid waste disposal accommodations. Therefore, impacts would be less than significant.

e) ***Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?***

Less-Than-Significant Impact. As discussed above, solid waste that would be generated during construction activities would include pavement removed during demolition of the existing bridge, vegetation cleared under the proposed project, and other construction debris. Project construction would require minimal, short-term solid waste disposal because of construction activities, which would be conducted in compliance with federal, state, and local statutes and regulations including the Integrated Waste Management Act (SB 1374) and the County Construction and Demolition Debris Recycling and Reuse Program, both of which require that 50% to 75% of construction demolition debris be diverted from landfills (Public Works 2019b). Project operation would not generate notable waste. Therefore, impacts would be less than significant.

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

a) ***Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?***

Less-Than-Significant Impact. The proposed project would be located in an urbanized environment with little potential for wildland fires. The City of Compton is not mapped by the California Department of Forestry and Fire Protection as being within a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2007). Compton Boulevard and Wilmington Avenue are both identified in the City's Evacuation Route Map that is provided in the City's General Plan (City of Compton 2011). The project would include demolition and replacement of an existing bridge. During construction, complete road closures over the Wilmington Avenue Bridge would occur for approximately 300 days and planned detour routes would be established via Rosecrans Avenue, Compton Boulevard and Alameda Street. Specifically, northbound traffic would be directed east on Compton Boulevard, north on Alameda Street, west on Rosecrans Avenue, and north back onto Wilmington Avenue. Southbound traffic would be directed east on Rosecrans Avenue, south on Alameda Street, west on Compton Boulevard, and south back onto Wilmington Avenue.

Additionally, a Traffic Control Plan would be developed to identify the duration of road closures, appropriate detour routes, and required signage. As part of the Traffic Control Plan, emergency service providers that serve the area would be notified of the closure and detour route so that service would not be disrupted. Specifically, as explained in Section 3.17, incorporation of a Traffic Control Plan would be required for all construction work within the road ROW that modifies vehicular, bicycle, pedestrian and/or transit traffic patterns and are necessary to ensure the safe and efficient movement of traffic through construction work zones. Implementation of the Traffic Control Plan would reduce impacts to local emergency service providers to less-than-significant levels. As such, with implementation of the Traffic Control Plan, impacts to emergency response plans or emergency evacuation plans would be less than significant. Following construction, the roadway would be restored to existing conditions, and emergency access would not be affected during project operation. Therefore, impacts would be less than significant upon operation.

b) ***Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

No Impact. Project activities would be limited to replacement of an existing bridge and bridge pier, the reconstruction of an existing bicycle pathway, sidewalks, and driveways, and the construction of a new access road and pier nose (see Section 2 for details). The project site is located in a developed, urban area on relatively flat terrain, and is not within a state-designated VHFHSZ (CAL FIRE 2007). Project construction and operation would not include any activities that would significantly exacerbate the risk of fire at the project site, thereby exposing people to pollutant concentrations from wildfire or the uncontrolled spread of wildfire. No impact would occur.

c) ***Would the project 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 proposed project would include the replacement of an existing bridge, bridge pier, the reconstruction of an existing bicycle pathway, sidewalks, and driveways, and the construction of a new access road and pier nose (see Section 2 for details). The project site is located in a developed, urban area on relatively flat terrain, and is not within a state-designated VHFHSZ (CAL FIRE 2007). Project construction and operation would not include the installation or maintenance of associated infrastructure that is likely to exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. No impact would occur.

d) ***Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

Less-Than-Significant Impact. The proposed project would include the replacement of an existing bridge and associated improvements. The proposed project would not involve construction or operation of occupiable structures, nor would it increase population such that the number of occupiable structures in the project area would increase. While additional workers would be temporarily present in the project area during construction, they would not be subject to undue risks associated with flooding or landslides, relative to other areas in the City or region. As explained in Section 3.7(a)(iv), the project is not located within a mapped landslide hazard zone and would not likely increase or exacerbate the potential for landslides to occur (DOC 2015). The nearest landslide area is located in the Whittier Hills approximately 14 miles northeast of the project site. As explained in Section 3.10, Hydrology and Water Quality, the proposed project would not result in permanent drainage changes or significant runoff with the potential to cause or exacerbate flooding or landslides. As explained in Section 3.20(b), the proposed project would not increase the risk of fire in the area. For these reasons, proposed project impacts involving exposure of people or structures to significant risks from flooding or landslides resulting from runoff, post-fire slope instability, and/or drainage changes would be less than significant.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
on human beings, either directly or indirectly?				

a) ***Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?***

Less-Than-Significant Impact With Mitigation Incorporated. As discussed previously in Section 3.4, Biological Resources, the project site is entirely developed and characterized by disturbed areas. No natural vegetation communities are present within the impact footprint. In regard to migratory bird species, the proposed project would implement MM-BIO-1 to ensure potential impacts to nesting birds from construction-related activities would be less than significant.

Regarding impacts related to important examples of the major periods of California history or prehistory, as further discussed in Section 3.5, no impacts to historical resources would occur because of the proposed project. There is the potential for the proposed project to encounter previously undisturbed soils, which could uncover previously undiscovered intact archaeological deposits; thus, mitigation measure MM-CUL-2 is provided to address inadvertent discoveries during construction. Impacts related to archaeological resources would be less than significant with mitigation incorporated. Additionally, in the unexpected event that human remains are unearthed during construction activities, impacts would be potentially significant. However, through compliance with Section 7050.5 of the California Health and Safety Code and California PRC Section 5097.98, impacts would be less than significant.

b) ***Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?***

Less-Than-Significant Impact With Mitigation Incorporated. As analyzed in this IS/MND, project construction and operation could potentially result in individual-level environmental impacts that could be potentially significant without the incorporation of mitigation. Therefore, when coupled with impacts related to the implementation of other related projects throughout the broader geographic area, the project could potentially result in cumulative-level impacts if these significant impacts are left unmitigated. One Public Works project, the Compton Boulevard Bridge over Compton Creek Project, has been identified as a cumulative project located approximately 800 feet southeast of the project site where the Compton Boulevard ROW crosses Compton Creek. Construction of the Compton Boulevard Bridge over Compton Creek would not, however, occur concurrently with the proposed project, and similarly, would not change from existing conditions once completed.

However, with the incorporation of mitigation identified throughout this document, the project's potential impacts would be reduced to less than significant and would not considerably contribute to regional cumulative impacts in the greater project region. Additionally, these other related projects would presumably be required by the applicable lead agency to comply with all applicable federal, state, and local regulatory requirements, and incorporate all feasible mitigation measures to further ensure that their potentially cumulative impacts would be reduced to less than significant. Therefore, the project would not result in individually limited but cumulatively considerable impacts, and impacts would be less than significant with mitigation incorporated.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less-Than-Significant Impact With Mitigation Incorporated. As evaluated throughout this document, with mitigation measures, environmental impacts associated with the proposed project would be reduced to less-than-significant levels. Thus, the proposed project would not directly or indirectly cause substantial adverse effects on human beings.

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4 References and Preparers

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SOURCE: Esri, Digital Globe 2017; Open Street Map 2019

DUDEK

0 200 400 Feet

FIGURE 1

Project Location

Wilmington Avenue Bridge Over Compton Creek

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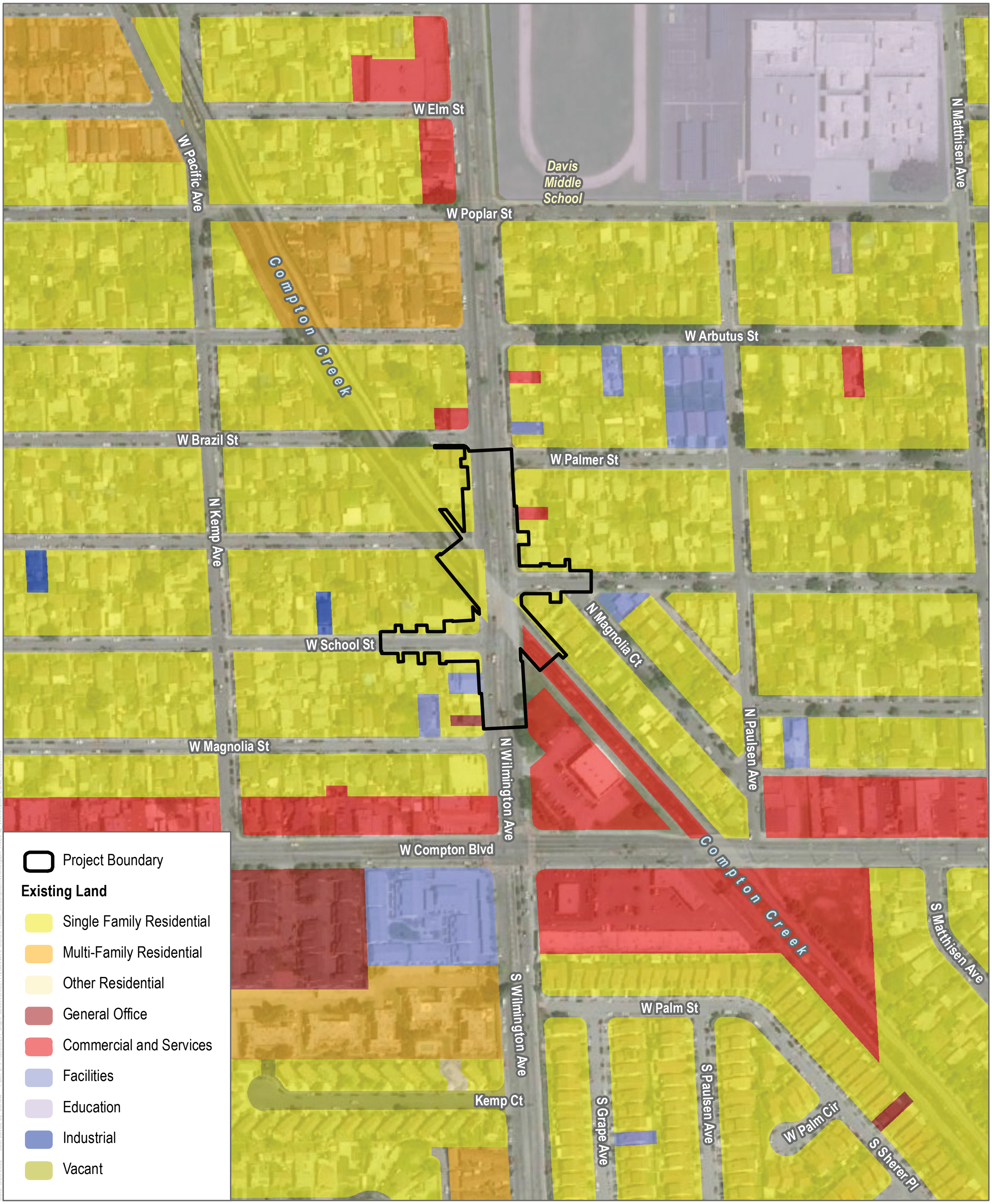

SOURCE: Esri, Digital Globe 2017; Open Street Map 2019

FIGURE 2

Surrounding Land Uses

Wilmington Avenue Bridge Over Compton Creek

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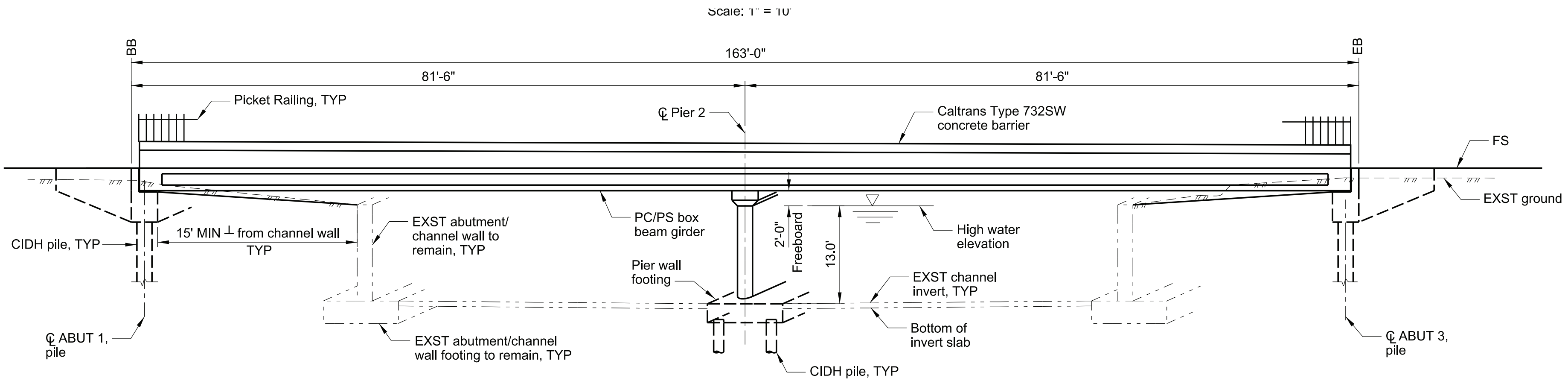

"Z:\Projects\LA_DeptPublicWorks\j1112504MAPDOC\Project_Description\Wilmington_Ave\Fig_elevations.ai"

SOURCE: County of Los Angeles Department of Public Works, Aug. 2020

DUDEK

FIGURE 3

Proposed Project (60% Elevation View)

Wilmington Avenue Bridge Over Compton Creek

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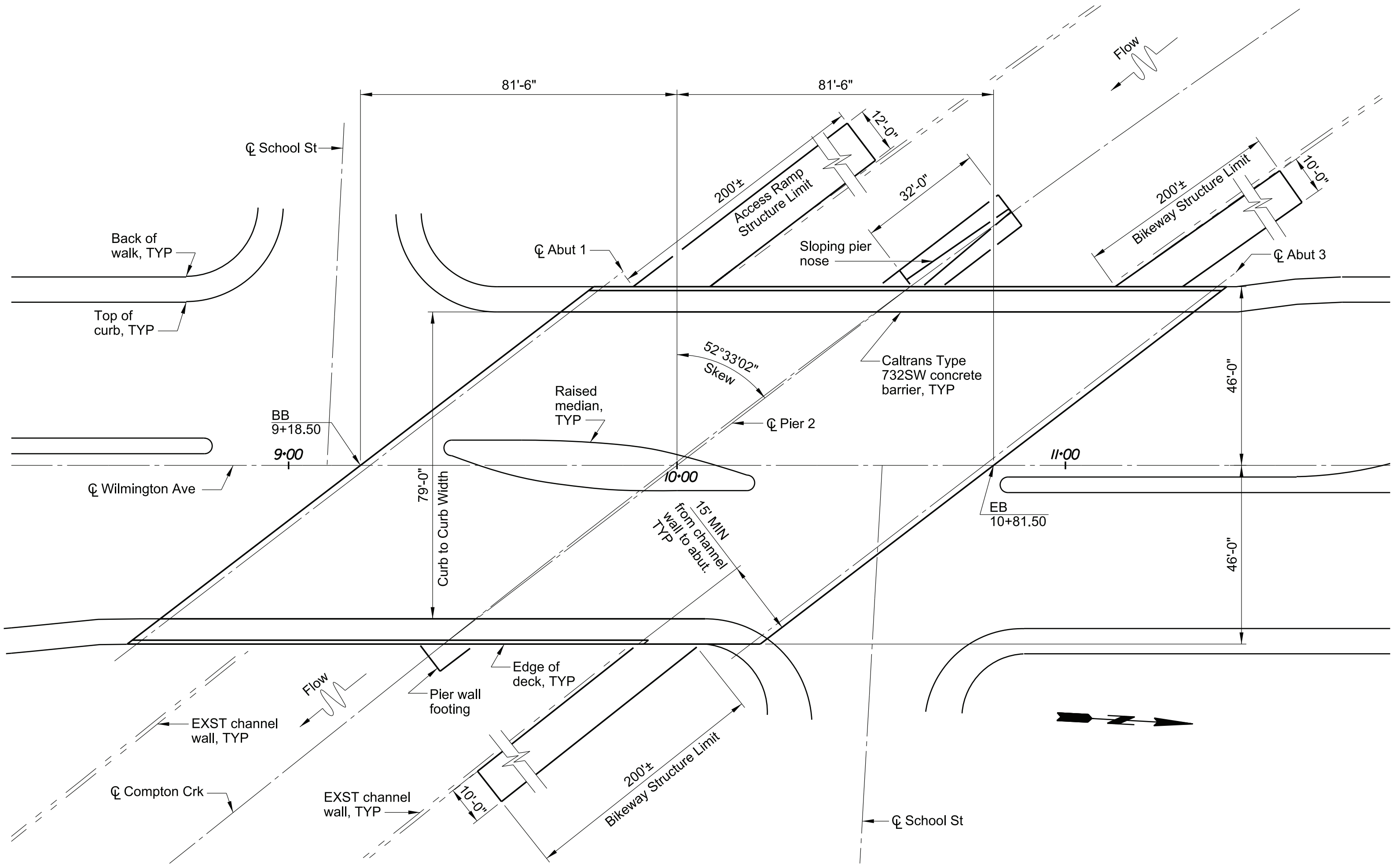

SOURCE: County of Los Angeles Department of Public Works, Aug. 2020

DUDEK

FIGURE 4

Proposed Project (60% Plan View)

Wilmington Avenue Bridge Over Compton Creek

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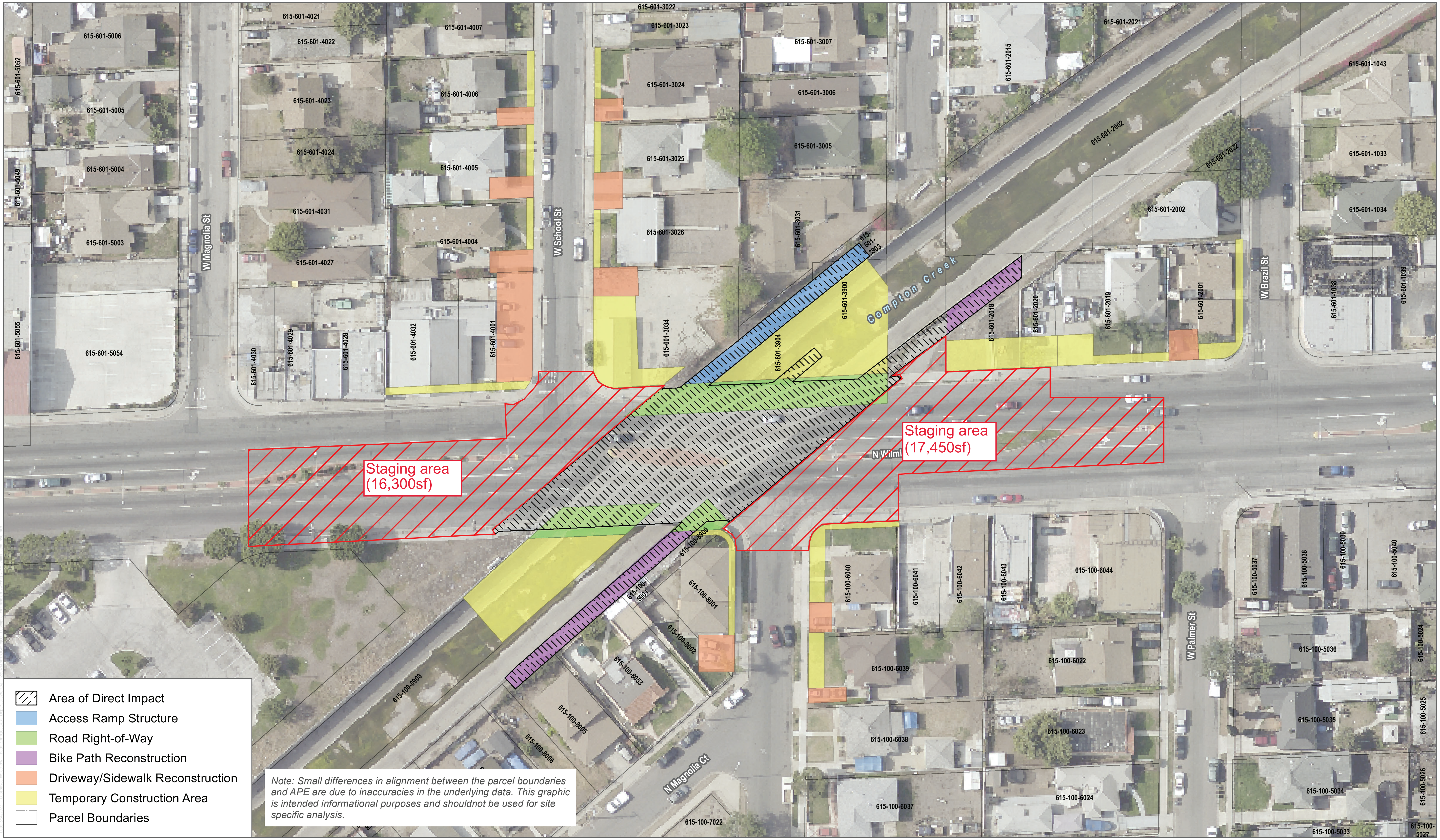

Note: Small differences in alignment between the parcel boundaries and APE are due to inaccuracies in the underlying data. This graphic is intended informational purposes and shouldnot be used for site specific analysis.

SOURCE: LARIAC 2014

DUDEK

FIGURE 5

Proposed Project Details

Wilmington Avenue Bridge Over Compton Creek

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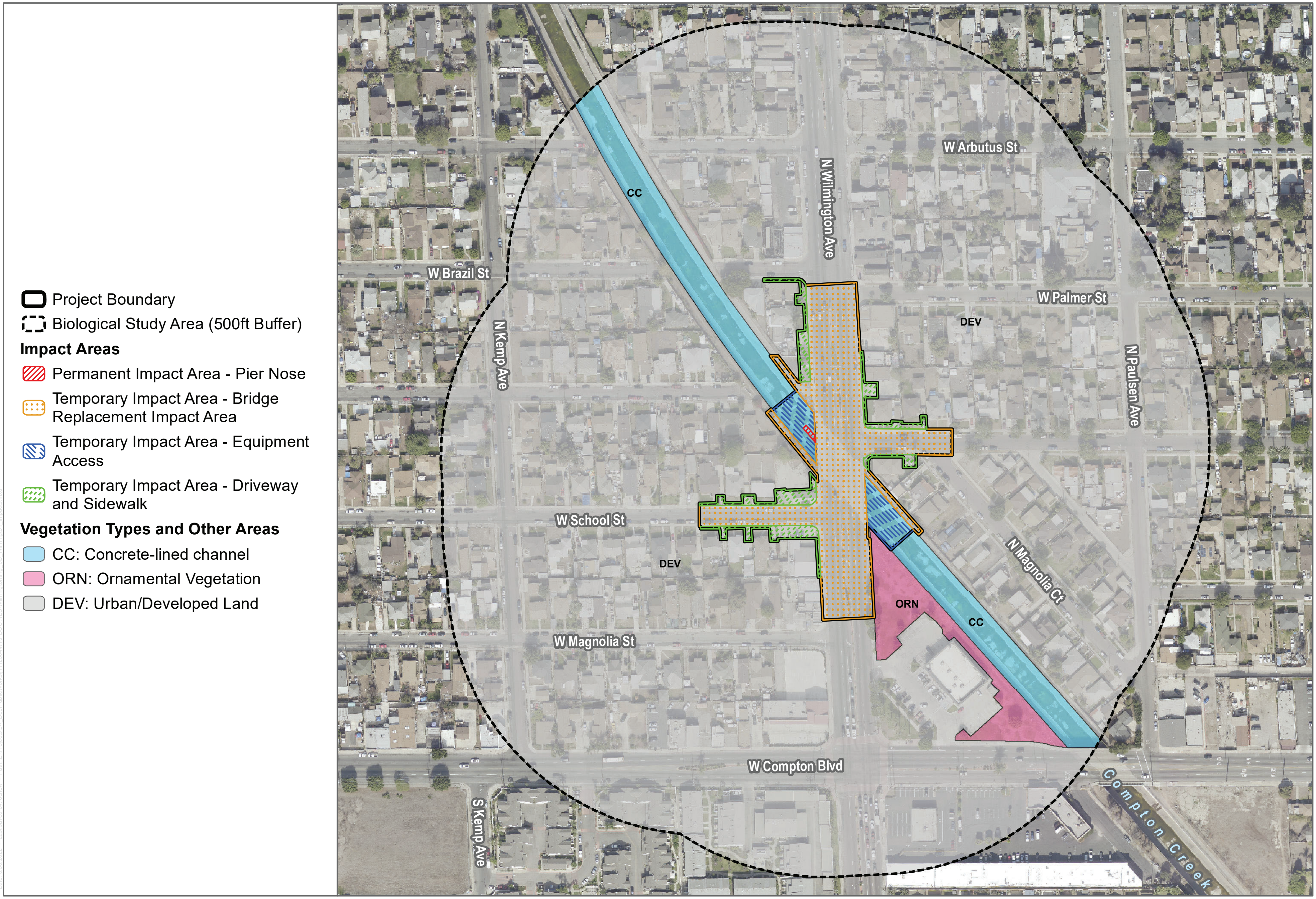

SOURCE: LAR-IAC 2014; Open Street Map 2019

DUDEK

FIGURE 6

Vegetation Types and Impact Areas

Wilmington Avenue Bridge Over Compton Creek

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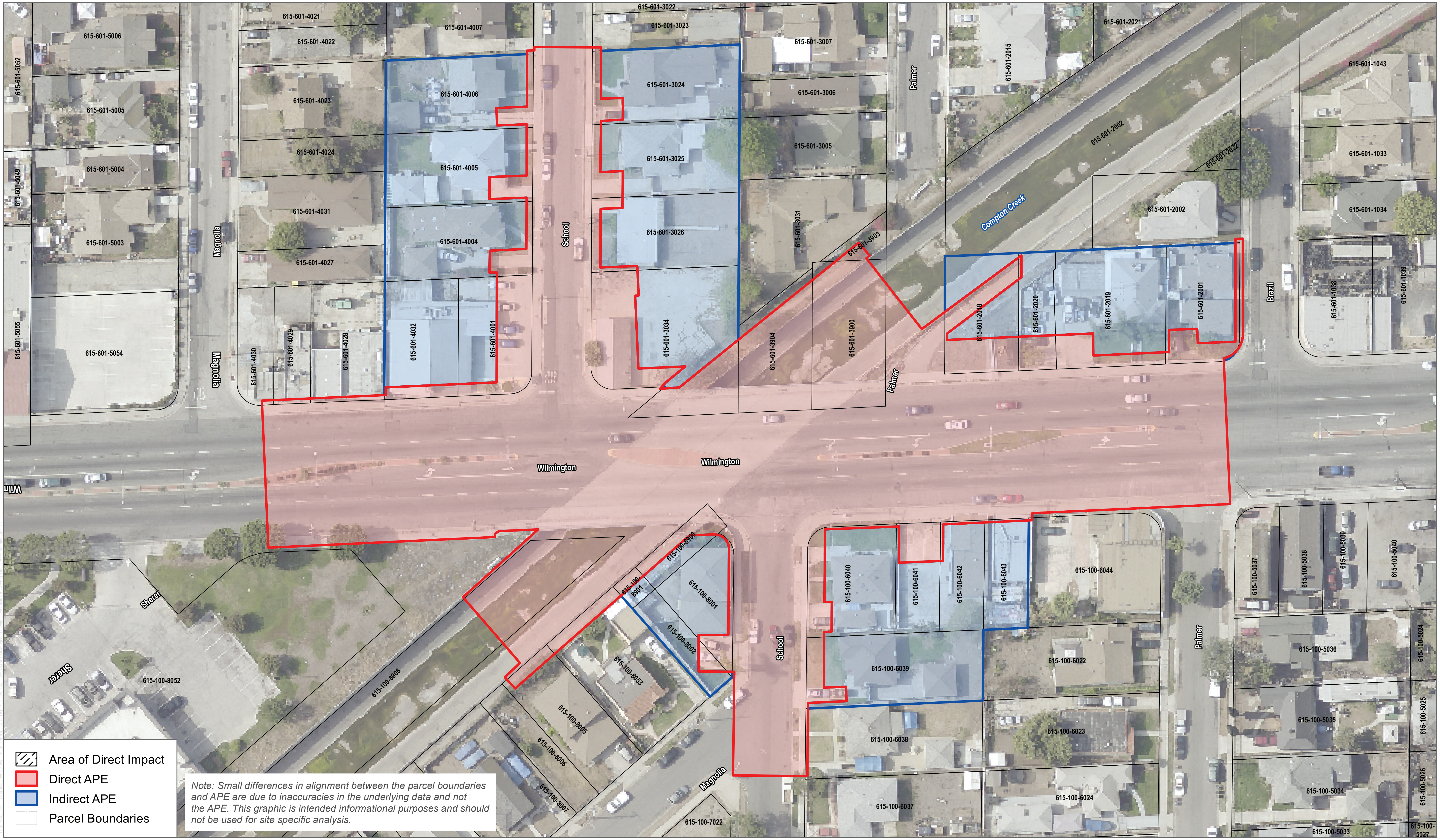

Note: Small differences in alignment between the parcel boundaries and APE are due to inaccuracies in the underlying data and not the APE. This graphic is intended informational purposes and should not be used for site specific analysis.

SOURCE: LARIAC 2014

DUDEK

FIGURE 7

Area of Potential Effects Map

Wilmington Avenue Bridge Over Compton Creek

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SOURCE: LAR-IAC 2014; Open Street Map 2019

DUDEK

FIGURE 8

Noise Measurement Locations

Wilmington Avenue Bridge Over Compton Creek

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Appendix A

CalEEMod Outputs

Wilmington Ave over Compton Creek Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wilmington Ave over Compton Creek
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	17.8
Location	Compton, CA, USA
County	Los Angeles-South Coast
City	Compton
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4266
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Asphalt Surfaces	2.00	Acre	2.00	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.18	1.83	17.4	23.8	0.04	0.64	1.53	1.95	0.58	0.25	0.73	—	5,080	5,080	0.21	0.44	7.07	5,109
Mit.	2.18	1.83	17.4	23.8	0.04	0.64	0.93	1.36	0.58	0.25	0.70	—	5,080	5,080	0.21	0.44	7.07	5,109
% Reduced	—	—	—	—	—	—	40%	31%	—	—	5%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
Mit.	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.62	0.50	5.22	6.67	0.02	0.17	0.34	0.51	0.15	0.08	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
Mit.	0.62	0.50	5.22	6.67	0.02	0.17	0.30	0.47	0.15	0.07	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
% Reduced	—	—	—	—	—	—	13%	9%	—	6%	2%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.09	0.95	1.22	< 0.005	0.03	0.06	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
Mit.	0.11	0.09	0.95	1.22	< 0.005	0.03	0.05	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
% Reduced	—	—	—	—	—	—	13%	9%	—	6%	2%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.18	1.83	17.4	23.8	0.04	0.64	1.53	1.95	0.58	0.25	0.73	—	5,080	5,080	0.21	0.44	7.07	5,109
2027	1.56	1.37	10.7	15.1	0.03	0.42	0.63	0.79	0.38	0.09	0.47	—	2,992	2,992	0.12	0.12	2.33	3,034
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
2027	1.35	1.12	10.9	13.5	0.03	0.35	0.63	0.91	0.32	0.14	0.46	—	3,915	3,915	0.15	0.12	0.07	3,956
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.62	0.50	5.22	6.67	0.02	0.17	0.34	0.51	0.15	0.08	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
2027	0.53	0.46	3.90	5.26	0.01	0.14	0.19	0.33	0.13	0.04	0.17	—	1,225	1,225	0.05	0.04	0.39	1,240
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.95	1.22	< 0.005	0.03	0.06	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
2027	0.10	0.08	0.71	0.96	< 0.005	0.03	0.03	0.06	0.02	0.01	0.03	—	203	203	0.01	0.01	0.06	205

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.18	1.83	17.4	23.8	0.04	0.64	0.93	1.36	0.58	0.25	0.70	—	5,080	5,080	0.21	0.44	7.07	5,109
2027	1.56	1.37	10.7	15.1	0.03	0.42	0.34	0.75	0.38	0.09	0.47	—	2,992	2,992	0.12	0.12	2.33	3,034
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
2027	1.35	1.12	10.9	13.5	0.03	0.35	0.56	0.91	0.32	0.14	0.46	—	3,915	3,915	0.15	0.12	0.07	3,956
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.62	0.50	5.22	6.67	0.02	0.17	0.30	0.47	0.15	0.07	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
2027	0.53	0.46	3.90	5.26	0.01	0.14	0.17	0.31	0.13	0.04	0.17	—	1,225	1,225	0.05	0.04	0.39	1,240
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.95	1.22	< 0.005	0.03	0.05	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
2027	0.10	0.08	0.71	0.96	< 0.005	0.03	0.03	0.06	0.02	0.01	0.03	—	203	203	0.01	0.01	0.06	205

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.2	83.2	< 0.005	0.01	0.08	87.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	0.01	14.5

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.2	83.2	< 0.005	0.01	0.08	87.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	0.01	14.5

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.7	27.7	< 0.005	< 0.005	0.03	29.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.59	4.59	< 0.005	< 0.005	< 0.005	4.82

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.7	27.7	< 0.005	< 0.005	0.03	29.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.59	4.59	< 0.005	< 0.005	< 0.005	4.82

3.5. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Site Preparation (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.42	3.42	< 0.005	< 0.005	< 0.005	3.57
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.59
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.42	3.42	< 0.005	< 0.005	< 0.005	3.57
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.59
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.03	0.01	0.58	0.22	< 0.005	0.01	0.14	0.15	0.01	0.04	0.04	—	506	506	0.03	0.08	1.14	532
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	0.01	14.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.30	2.30	< 0.005	< 0.005	< 0.005	2.41

3.10. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728

Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.03	0.01	0.58	0.22	< 0.005	0.01	0.14	0.15	0.01	0.04	0.04	—	506	506	0.03	0.08	1.14	532

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	0.01	14.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.30	2.30	< 0.005	< 0.005	< 0.005	2.41

3.11. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.14

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.92
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.92
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	0.01	< 0.005	0.46	137
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.4	21.4	< 0.005	< 0.005	0.03	21.7
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.55	3.55	< 0.005	< 0.005	0.01	3.60
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.77
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	0.01	< 0.005	0.46	137
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.4	21.4	< 0.005	< 0.005	0.03	21.7
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.55	3.55	< 0.005	< 0.005	0.01	3.60
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.77
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861

Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.86	2.86	< 0.005	< 0.005	< 0.005	2.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.86	2.86	< 0.005	< 0.005	< 0.005	2.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.05	0.02	0.76	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	1.85	718
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.01	104
Vendor	0.05	0.02	0.79	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	0.05	716
Hauling	0.07	0.01	1.20	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	0.06	1,062

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.03	17.4
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	113	113	< 0.005	0.02	0.13	118
Hauling	0.01	< 0.005	0.20	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.16	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.88
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.02	19.5
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.5	27.5	< 0.005	< 0.005	0.03	28.9

3.18. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386

Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.05	0.02	0.76	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	1.85	718
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.01	104
Vendor	0.05	0.02	0.79	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	0.05	716
Hauling	0.07	0.01	1.20	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	0.06	1,062
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.03	17.4
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	113	113	< 0.005	0.02	0.13	118
Hauling	0.01	< 0.005	0.20	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.16	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.88
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.02	19.5
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.5	27.5	< 0.005	< 0.005	0.03	28.9

3.19. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	75.6	75.6	< 0.005	< 0.005	0.01	76.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.2	61.2	< 0.005	0.01	< 0.005	63.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Grading (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9

Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	75.6	75.6	< 0.005	< 0.005	0.01	76.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.2	61.2	< 0.005	0.01	< 0.005	63.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.13	1.65	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	385	385	0.02	0.01	0.04	390
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	624	624	0.03	0.09	0.04	651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	61.2	61.2	< 0.005	< 0.005	0.09	62.0
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	97.6	97.6	< 0.005	0.01	0.11	102
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.02	10.3
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	0.02	16.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.11	0.13	1.65	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	385	385	0.02	0.01	0.04	390
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	624	624	0.03	0.09	0.04	651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	61.2	61.2	< 0.005	< 0.005	0.09	62.0
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	97.6	97.6	< 0.005	0.01	0.11	102
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.02	10.3
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	0.02	16.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.13	1.53	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	378	378	0.01	0.01	0.03	382
Vendor	0.04	0.02	0.68	0.32	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	612	612	0.03	0.08	0.04	638
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.8	60.8	< 0.005	< 0.005	0.08	61.6
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.9	96.9	< 0.005	0.01	0.11	101
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.1	16.1	< 0.005	< 0.005	0.02	16.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.13	1.53	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	378	378	0.01	0.01	0.03	382
Vendor	0.04	0.02	0.68	0.32	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	612	612	0.03	0.08	0.04	638

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.8	60.8	< 0.005	< 0.005	0.08	61.6
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.9	96.9	< 0.005	0.01	0.11	101
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.1	16.1	< 0.005	< 0.005	0.02	16.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380

Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.60	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	133	133	0.01	< 0.005	0.41	135
Vendor	0.05	0.02	0.79	0.38	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	734	734	0.03	0.10	1.91	767
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.8	22.8	< 0.005	< 0.005	0.03	23.1
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	131	131	0.01	0.02	0.15	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	0.01	3.82
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.6	21.6	< 0.005	< 0.005	0.02	22.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.60	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	133	133	0.01	< 0.005	0.41	135

Vendor	0.05	0.02	0.79	0.38	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	734	734	0.03	0.10	1.91	767
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.8	22.8	< 0.005	< 0.005	0.03	23.1
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	131	131	0.01	0.02	0.15	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	0.01	3.82
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.6	21.6	< 0.005	< 0.005	0.02	22.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	7/21/2026	8/31/2026	5.00	30.0	Bridge Demolition
Site Preparation 1	Site Preparation	4/1/2026	4/14/2026	5.00	10.0	Clear and Grub and AC Removal
Site Preparation 2	Site Preparation	7/20/2027	8/16/2027	5.00	20.0	Electrical/Striping
Grading 1	Grading	4/8/2026	5/5/2026	5.00	20.0	Drainage/Sub-Grade
Grading 2	Grading	5/4/2026	5/15/2026	5.00	10.0	Grading/Excavation
Grading 3	Grading	5/18/2026	7/10/2026	5.00	40.0	Retaining Walls
Grading 4	Grading	6/2/2026	8/24/2026	5.00	60.0	Access Ramp
Grading 5	Grading	7/9/2026	7/22/2026	5.00	10.0	Diversion Structure/Excavation
Grading 6	Grading	8/27/2026	11/18/2026	5.00	60.0	Auger Drilling
Grading 7	Grading	3/23/2027	4/19/2027	5.00	20.0	Subgrade
Building Construction	Building Construction	10/13/2026	3/22/2027	5.00	115	Bridge Construction
Paving	Paving	4/20/2027	7/19/2027	5.00	65.0	Paving

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Site Preparation 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38

Paving	Tractors/Loaders/Backh	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50

Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation 1	—	—	—	—
Site Preparation 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 1	Hauling	10.0	30.0	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	18.5	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	30.0	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT
Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	10.2	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	10.2	HHDT,MHDT

Grading 2	Hauling	5.00	30.0	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	10.2	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	10.2	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	10.2	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—
Grading 6	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	10.2	HHDT,MHDT
Grading 6	Hauling	10.0	30.0	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	10.2	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	30.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	24.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation 1	—	—	—	—
Site Preparation 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 1	Hauling	10.0	30.0	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	18.5	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	30.0	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT

Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	10.2	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	10.2	HHDT,MHDT
Grading 2	Hauling	5.00	30.0	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	10.2	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	10.2	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	10.2	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—

Grading 6	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	10.2	HHDT,MHDT
Grading 6	Hauling	10.0	30.0	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	10.2	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	30.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	24.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation 1	0.00	1,000	5.00	0.00	—
Site Preparation 2	0.00	0.00	18.8	0.00	—
Grading 1	0.00	0.00	10.0	0.00	—
Grading 2	0.00	500	5.00	0.00	—
Grading 3	0.00	0.00	0.00	0.00	—
Grading 4	0.00	0.00	0.00	0.00	—
Grading 5	0.00	0.00	5.00	0.00	—
Grading 6	0.00	0.00	0.00	0.00	—
Grading 7	0.00	0.00	10.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	2.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005

2027	0.00	532	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project construction would occur April 2026 through August 2027.
Construction: Off-Road Equipment	Equipment adjusted based off information from applicant.
Construction: Trips and VMT	Updated worker, vendor, and haul trips, based on information from applicant. Distance disposal facility assumed to be 30 miles from project site (Whitter or Puente Landfills).
Construction: Dust From Material Movement	1,000 CY material exported during clearing and grubbing/AC pavement removal and 500 CY export during grading/excavation.

Wilmington Ave over Compton Creek - LST Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wilmington Ave over Compton Creek - LST
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	17.8
Location	Compton, CA, USA
County	Los Angeles-South Coast
City	Compton
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4266
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Asphalt Surfaces	2.00	Acre	2.00	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.14	1.81	17.1	22.2	0.04	0.63	1.07	1.58	0.58	0.12	0.64	—	4,558	4,558	0.19	0.04	0.07	4,575
Mit.	2.14	1.81	17.1	22.2	0.04	0.63	0.42	0.93	0.58	0.05	0.61	—	4,558	4,558	0.19	0.04	0.07	4,575
% Reduced	—	—	—	—	—	—	61%	41%	—	60%	5%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.49	1.24	12.3	14.9	0.03	0.39	0.53	0.70	0.36	0.06	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
Mit.	1.49	1.24	12.3	14.9	0.03	0.39	0.21	0.40	0.36	0.02	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
% Reduced	—	—	—	—	—	—	61%	42%	—	61%	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.58	0.49	4.68	6.03	0.01	0.16	0.08	0.24	0.15	0.01	0.16	—	1,255	1,255	0.06	0.01	0.01	1,261
Mit.	0.58	0.49	4.68	6.03	0.01	0.16	0.03	0.19	0.15	< 0.005	0.15	—	1,255	1,255	0.06	0.01	0.01	1,261
% Reduced	—	—	—	—	—	—	59%	19%	—	56%	3%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
Mit.	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.03	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
% Reduced	—	—	—	—	—	—	59%	19%	—	56%	3%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.14	1.81	17.1	22.2	0.04	0.63	1.07	1.58	0.58	0.12	0.64	—	4,558	4,558	0.19	0.04	0.07	4,575
2027	1.52	1.36	10.1	14.4	0.02	0.41	0.53	0.70	0.38	0.06	0.38	—	2,166	2,166	0.10	0.02	0.04	2,176
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.49	1.24	12.3	14.9	0.03	0.39	0.01	0.40	0.36	< 0.005	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
2027	1.30	1.09	10.3	12.1	0.03	0.34	0.53	0.70	0.32	0.06	0.32	—	2,966	2,966	0.13	0.03	< 0.005	2,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.58	0.49	4.68	6.03	0.01	0.16	0.08	0.24	0.15	0.01	0.16	—	1,255	1,255	0.06	0.01	0.01	1,261
2027	0.52	0.45	3.68	4.88	0.01	0.14	0.03	0.17	0.13	< 0.005	0.13	—	913	913	0.04	0.01	0.01	917
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
2027	0.09	0.08	0.67	0.89	< 0.005	0.03	0.01	0.03	0.02	< 0.005	0.02	—	151	151	0.01	< 0.005	< 0.005	152

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.14	1.81	17.1	22.2	0.04	0.63	0.42	0.93	0.58	0.05	0.61	—	4,558	4,558	0.19	0.04	0.07	4,575
2027	1.52	1.36	10.1	14.4	0.02	0.41	0.21	0.42	0.38	0.02	0.38	—	2,166	2,166	0.10	0.02	0.04	2,176
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.49	1.24	12.3	14.9	0.03	0.39	0.01	0.40	0.36	< 0.005	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
2027	1.30	1.09	10.3	12.1	0.03	0.34	0.21	0.37	0.32	0.02	0.32	—	2,966	2,966	0.13	0.03	< 0.005	2,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.58	0.49	4.68	6.03	0.01	0.16	0.03	0.19	0.15	< 0.005	0.15	—	1,255	1,255	0.06	0.01	0.01	1,261
2027	0.52	0.45	3.68	4.88	0.01	0.14	0.01	0.15	0.13	< 0.005	0.13	—	913	913	0.04	0.01	0.01	917
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.03	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
2027	0.09	0.08	0.67	0.89	< 0.005	0.03	< 0.005	0.03	0.02	< 0.005	0.02	—	151	151	0.01	< 0.005	< 0.005	152

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.90	1.90	< 0.005	< 0.005	< 0.005	2.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.33

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.90	1.90	< 0.005	< 0.005	< 0.005	2.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.33

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11

3.5. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179

Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Site Preparation (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.01	12.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.34
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.06

3.10. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728

Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.01	12.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.34
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.06

3.11. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.07	3.07	< 0.005	< 0.005	< 0.005	3.32
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.56
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.07	3.07	< 0.005	< 0.005	< 0.005	3.32
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.56
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861

Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	0.02	0.01	0.22	0.17	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.3	35.3	0.01	0.01	0.03	37.3
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.62
Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.7	35.7	0.01	0.01	< 0.005	37.6
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.3	23.3	0.01	< 0.005	< 0.005	24.7

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.43
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.83	5.83	< 0.005	< 0.005	< 0.005	6.14
Hauling	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.81	3.81	< 0.005	< 0.005	< 0.005	4.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	1.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67

3.18. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386

Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	0.02	0.01	0.22	0.17	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.3	35.3	0.01	0.01	0.03	37.3
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.62
Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.7	35.7	0.01	0.01	< 0.005	37.6
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.3	23.3	0.01	< 0.005	< 0.005	24.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.43
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.83	5.83	< 0.005	< 0.005	< 0.005	6.14
Hauling	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.81	3.81	< 0.005	< 0.005	< 0.005	4.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	1.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67

3.19. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.93
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.19	3.19	< 0.005	< 0.005	< 0.005	3.37
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Grading (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96

Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.93
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.19	3.19	< 0.005	< 0.005	< 0.005	3.37
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.02	0.27	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	9.07	9.07	0.01	< 0.005	< 0.005	9.84
Vendor	0.02	0.01	0.21	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	32.4	32.4	0.01	0.01	< 0.005	34.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.55
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.05	5.05	< 0.005	< 0.005	< 0.005	5.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.26
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.09	0.09	0.02	0.27	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	9.07	9.07	0.01	< 0.005	< 0.005	9.84
Vendor	0.02	0.01	0.21	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	32.4	32.4	0.01	0.01	< 0.005	34.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.55
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.05	5.05	< 0.005	< 0.005	< 0.005	5.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.26
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.02	0.26	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	8.88	8.88	0.01	< 0.005	< 0.005	9.64
Vendor	0.02	0.01	0.20	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.9	31.9	0.01	0.01	< 0.005	33.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.54
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.03	5.03	< 0.005	< 0.005	< 0.005	5.31
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.25
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.02	0.26	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	8.88	8.88	0.01	< 0.005	< 0.005	9.64
Vendor	0.02	0.01	0.20	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.9	31.9	0.01	0.01	< 0.005	33.7

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.54
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.03	5.03	< 0.005	< 0.005	< 0.005	5.31
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.25
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380

Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.01	3.01	< 0.005	< 0.005	< 0.005	3.26
Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.9	37.9	0.01	0.01	0.04	40.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.58
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.79	6.79	< 0.005	< 0.005	< 0.005	7.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.01	3.01	< 0.005	< 0.005	< 0.005	3.26

Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.9	37.9	0.01	0.01	0.04	40.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.58
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.79	6.79	< 0.005	< 0.005	< 0.005	7.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	7/21/2026	8/31/2026	5.00	30.0	Bridge Demolition
Site Preparation 1	Site Preparation	4/1/2026	4/14/2026	5.00	10.0	Clear and Grub and AC Removal
Site Preparation 2	Site Preparation	7/20/2027	8/16/2027	5.00	20.0	Electrical/Striping
Grading 1	Grading	4/8/2026	5/5/2026	5.00	20.0	Drainage/Sub-Grade
Grading 2	Grading	5/4/2026	5/15/2026	5.00	10.0	Grading/Excavation
Grading 3	Grading	5/18/2026	7/10/2026	5.00	40.0	Retaining Walls
Grading 4	Grading	6/2/2026	8/24/2026	5.00	60.0	Access Ramp
Grading 5	Grading	7/9/2026	7/22/2026	5.00	10.0	Diversion Structure/Excavation
Grading 6	Grading	8/27/2026	11/18/2026	5.00	60.0	Auger Drilling
Grading 7	Grading	3/23/2027	4/19/2027	5.00	20.0	Subgrade
Building Construction	Building Construction	10/13/2026	3/22/2027	5.00	115	Bridge Construction
Paving	Paving	4/20/2027	7/19/2027	5.00	65.0	Paving

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Site Preparation 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38

Paving	Tractors/Loaders/Backh	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50

Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation 1	—	—	—	—
Site Preparation 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 1	Hauling	10.0	0.19	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	0.19	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	0.19	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT
Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	0.19	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	0.19	HHDT,MHDT

Grading 2	Hauling	5.00	0.19	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	0.19	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	0.19	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	0.19	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	0.19	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—
Grading 6	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	0.19	HHDT,MHDT
Grading 6	Hauling	10.0	0.19	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	0.19	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	30.0	0.19	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	0.19	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	0.19	LDA,LDT1,LDT2
Paving	Vendor	24.0	0.19	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation 1	—	—	—	—
Site Preparation 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 1	Hauling	10.0	0.19	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	0.19	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	0.19	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT

Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	0.19	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	0.19	HHDT,MHDT
Grading 2	Hauling	5.00	0.19	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	0.19	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	0.19	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	0.19	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	0.19	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—

Grading 6	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	0.19	HHDT,MHDT
Grading 6	Hauling	10.0	0.19	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	0.19	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	30.0	0.19	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	0.19	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	0.19	LDA,LDT1,LDT2
Paving	Vendor	24.0	0.19	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation 1	0.00	1,000	5.00	0.00	—
Site Preparation 2	0.00	0.00	18.8	0.00	—
Grading 1	0.00	0.00	10.0	0.00	—
Grading 2	0.00	500	5.00	0.00	—
Grading 3	0.00	0.00	0.00	0.00	—
Grading 4	0.00	0.00	0.00	0.00	—
Grading 5	0.00	0.00	5.00	0.00	—
Grading 6	0.00	0.00	0.00	0.00	—
Grading 7	0.00	0.00	10.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	2.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005

2027	0.00	532	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project construction would occur April 2026 through August 2027.
Construction: Off-Road Equipment	Equipment adjusted based off information from applicant.
Construction: Trips and VMT	Updated worker, vendor, and haul trips, based on information from applicant. Distance disposal facility assumed to be 30 miles from project site (Whitter or Puente Landfills). Assumed trip length of 0.19 miles for LST.
Construction: Dust From Material Movement	1,000 CY material exported during clearing and grubbing/AC pavement removal and 500 CY export during grading/excavation.

Appendix B

Natural Environment Study (Minimal Impacts)

Natural Environment Study

(Minimal Impacts)

Wilmington Avenue Bridge Replacement Over Compton Creek Project

City of Compton, California

District No. 7

Federal Project No.: BRLS-5953(615)

May 2020

STATE OF CALIFORNIA
Department of Transportation

LOS ANGELES COUNTY
Department of Public Works

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Summary

This Natural Environment Study-Minimal Impacts report was prepared for Los Angeles County Department of Public Works for the proposed Wilmington Avenue Bridge over Compton Creek Project (proposed project), located within the City of Compton in southern Los Angeles County. Specifically, the proposed project would be located along the Wilmington Avenue right-of-way (ROW) where it crosses over Compton Creek, 500 feet north of the Compton Boulevard/Wilmington Avenue intersection. Los Angeles County Department of Public Works is proposing to replace an existing two-span steel girder bridge with a new two-span precast, pre-stressed concrete box beam structure bridge to remedy structural deficiencies associated with the existing bridge and to improve vehicular safety and transportation efficiency over Compton Creek. A Biological Study Area (BSA), encompassing 45.08 acres, was established around the impact area for the propose project to document existing conditions and determine the potential for project-related impacts to occur.

The BSA is largely developed or disturbed in nature with existing residential and commercial developments, ROWs, as well as a concrete-lined flood control channel (i.e., Compton Creek). The BSA does not contain suitable habitat for any federal or state listed plant or wildlife species. However, the BSA is centered on Compton Creek, a major tributary to the Los Angeles River, which likely contains jurisdictional waters of the U.S. and State. Although temporary and permanent impacts to waters of the U.S. and State are anticipated to occur as a result of the proposed project, these impacts are considered less than significant.

No special-status plant or wildlife species were detected within the BSA during the biological resource survey conducted on August 1, 2019. Based on the review of current state and federal databases, including the California Natural Diversity Database and U.S. Fish and Wildlife Service (USFWS) Information Planning and Conservation System, no special-status plant or wildlife species have a moderate or higher potential to occur in the BSA. In addition, the BSA is not located within any USFWS-designated critical habitat or a designated wildlife movement corridor. The BSA also does not reside within any approved or proposed Habitat Conservation Plans or Natural Community Conservation Plans.

The BSA does contain the underside of the bridge and ornamental vegetation that could provide suitable nesting habitat for resident and migratory bird species protected under the Migratory Bird Treaty Act and California Fish and Game Code. As such, avoidance and minimization measures would be required to minimize impacts to migratory birds if construction activities take place during the general avian nesting season from February 1st through September 1st.

1. Introduction

This Natural Environment Study-Minimal Impacts (NES-MI) report has been prepared for the Wilmington Avenue Bridge over Compton Creek Project (proposed project). The Los Angeles County Department of Public Works (LADPW) is proposing to replace an existing two-span steel girder bridge with a new two-span precast, pre-stressed concrete box beam structure bridge to remedy structural deficiencies associated with the existing bridge and to improve vehicular safety and transportation efficiency over Compton Creek.

1.1 History

The existing two-span steel girder bridge was built in 1938 and is currently supported by abutments and a middle pier. The existing bridge includes two 11-foot wide travel lanes, one 11-foot wide shoulder, and a 13-foot wide raised median.

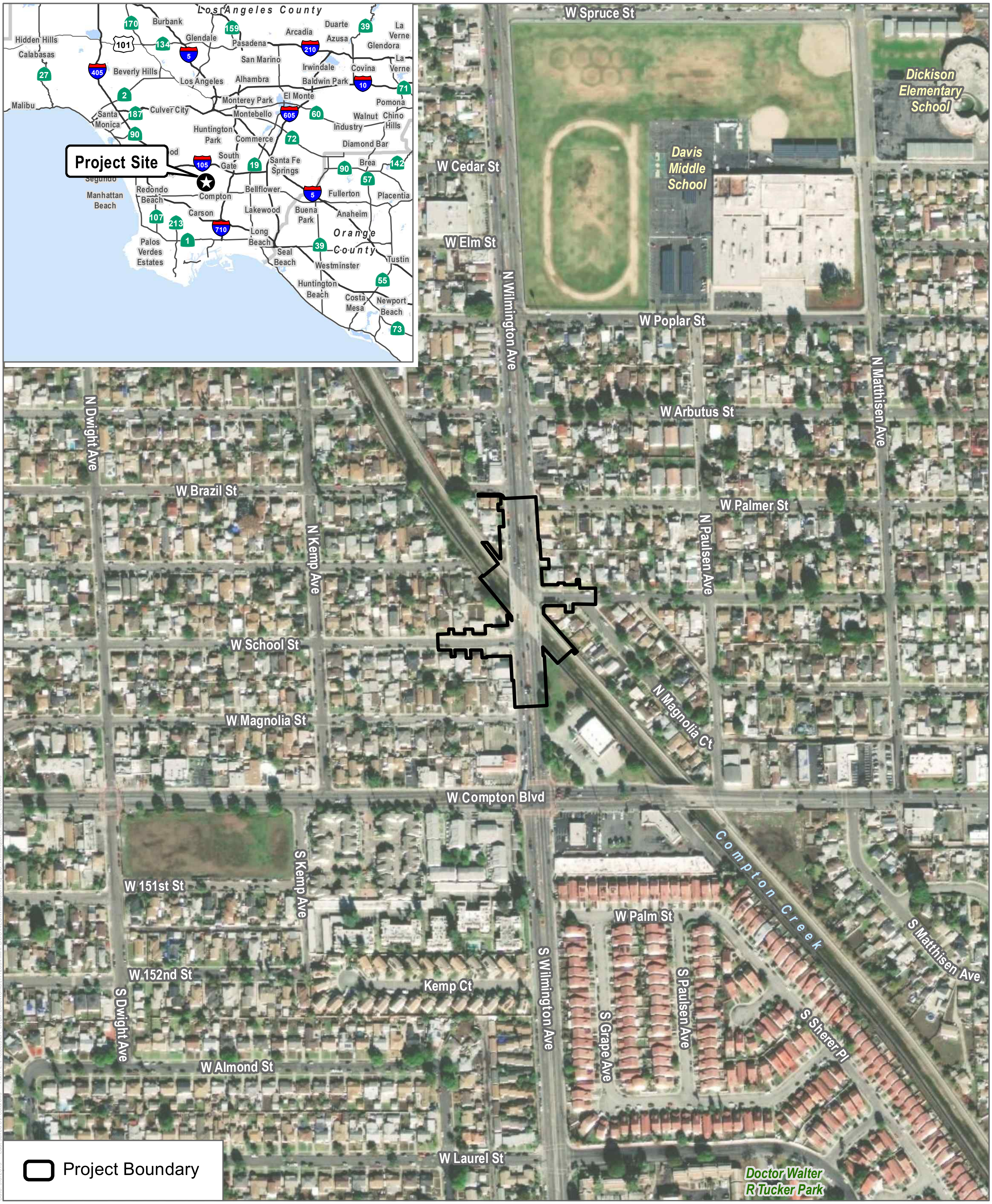
1.2 Project Purpose and Need

The proposed project would correct existing bridge deficiencies, enhance vehicular safety on the bridge and improve transportation efficiency by enabling larger trucks to utilize the bridge. The project is being proposed because the existing steel girder bridge and middle pier have been determined to be structurally deficient due to extensive cracking and delamination of the bridge deck. The proposed project would include replacing the existing, steel girder bridge and pier with a new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, a new pier and new abutments.

1.3 Project Description

The proposed project would be located at Wilmington Avenue where it crosses over Compton Creek within the City of Compton (City) in southern Los Angeles County (County) (Figure 1). The bridge replacement would be located within the South Gate U.S. Geological Survey (USGS) 7.5-minute quadrangle in Section 22, Township 3 South, Range 13 West. The area surrounding the existing bridge is largely developed with existing land uses comprised of residential and commercial development, existing right-of-ways (ROWs), as well as a concrete-lined flood control channel.

The proposed project would include demolition and construction activities. Generally, construction activities would include demolition, grading, pile drilling, installation of metal beam guardrail system, construction of bridge abutments, bridge pier reconstruction, reconstruction of sidewalks, drainage improvements (catch basins at driveway entrances) bicycle path reconstruction, roadway reconstruction to accommodate the raise in bridge elevation, and full road closures within project limits.



Date: 9/5/2019 - Last saved by: cstarbird - Path: Z:\Projects\LA_DeptPublicWorks\j1112504\MAPDOC\NES\Wilmington\Fig_bio_Wilmington_Project_Location.mxd

SOURCE: Esri, Digital Globe 2017; Open Street Map 2019

FIGURE 1

Project Location

The Wilmington Avenue Bridge Over Compton Creek

Under the proposed project, the existing two-span Wilmington Avenue Bridge over Compton Creek would be demolished. Specifically, the existing pier timber piles would be removed three feet below the finished grade of the channel, followed by the removal of the existing steel girders, cross brace members, reinforced concrete, asphalt pavement (bridge deck), and any excavated soil within the project limits of work. Specifically, the concrete bridge deck would be demolished by saw cutting and the steel girders would be removed by torch cutting before the transporting the fragmented pieces to the dump trucks using a crane. Once the bridge deck has been removed, all existing bridge bearing components would also be removed, including the concrete pier nose and abutments, which would be demolished using hoe rams and jackhammers,

The new concrete bridge pier would be constructed in the Compton Creek channel, at the same location as the existing pier. A new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. Bridge pier construction would involve the installation of cast-in-drilled-hole (CIDH) concrete piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations), construction of concrete pier footings and the stem wall. Specifically, a hydraulic crane and drill rig would be utilized to drill the holes and install the rebar cages, while a concrete truck, concrete pump, fork lifts and loaders would be needed to fill the drilled holes and construct the footings and stem wall. Cast-in-drilled-hole (CIDH) piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations) would support the new box beam structure. This stage would require pile driving, grading, construction of the bridge abutments and bridge pier construction.

The new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place to accommodate clearance for the new bridge structure. The new bridge soffit (underside) would be raised approximately two feet higher than the existing bridge in order to meet the freeboard requirement. Similar to the construction of the bridge pier, the construction of the bridge abutments would involve the installation of CIDH concrete piles, pile caps, and backwalls, which would utilize a drill rig and hydraulic crane, while an excavator and crane would be utilized to install the formwork and the reinforcement for the pile caps. Additional equipment needed to install the pile caps and backwall includes forklifts, loaders, concrete pumps, and a concrete truck.

The construction of the bridge superstructure would involve the installation of precast/pre-stressed adjacent concrete box beams, a cast-in-place reinforced concrete deck, sidewalks, and bridge barriers. Installation of these superstructure components would utilize a hydraulic crane, concrete slipform machine, concrete truck, and concrete pump. After the superstructure has been constructed, the bike paths, and access ramp would be reconstructed and the roadway would be paved and restriped.

Project construction would also include the reconstruction of the sidewalks adjacent to the project limits. Furthermore, drainage improvements, such as catch basins, would occur on several private property driveways.

Project construction would also include the replacement of the bike paths along the Compton Creek channel. Specifically, reconstruction of the bike paths would include 400 feet of bike path along the north side of the channel along Wilmington Avenue, where the bike path would be supported on a concrete slab structure with CIDH piles. An access road, approximately 150 feet long, would be reconstructed along the channel at the southwest corner to accommodate the two-foot change in bridge elevation.

Construction Schedule

Project construction is anticipated to occur between January 2021 and May 2022, and would last for approximately 300 working days. Construction would occur Monday through Friday from 7:00am to 3:30pm.

2. Study Methods

2.1 Regulatory Requirements

The following federal, state, and local regulations provide legal coverage for biological resources that could potentially occur in the BSA.

2.1.1 Federal

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 U.S.C. 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and animal species and by the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) for certain marine species. FESA is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and to provide programs for the conservation of those species, preventing extinction of plants and wildlife. FESA defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range” (16 U.S.C. 1531 et seq.). A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range” (16 U.S.C. 1531 et seq.). Under FESA, it is unlawful to take any listed species; “take” is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16 U.S.C. 1531 et seq.). FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement. Upon development of a habitat conservation plan, USFWS can issue incidental take permits for listed species.

Clean Water Act

Pursuant to Section 404 of the Clean Water Act, Army Corps of Engineers (ACOE) regulates the discharge of dredged and/or fill material into waters of the United States. The term “wetlands” (a subset of waters) is defined in Title 33, Section 328.3(b), of the Code of Federal Regulations as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” In the absence of wetlands, the limits of ACOE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark, as defined in Title 33, Section 328.3(e), of the Code of Federal Regulations. Pursuant to Section 10 of the Rivers and Harbors Act of 1899, ACOE regulates any potential obstruction or alteration of any navigable water of the United States.

Migratory Bird Treaty Act

The MBTA was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others (16 U.S.C. 703–712). Each of the treaties protects selected species of birds and provides for closed and open seasons for hunting game birds. The MBTA protects more than 800 species. Two species of eagles that are native to the United States—bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*)—were granted additional protection within the United States under the Bald and Golden Eagle Protection Act (16 U.S.C. 668–668d) to prevent these species from becoming extinct.

2.1.2 State

California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA), which prohibits the take of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (California Fish and Game [CFG] Code, Section 86). CESA Section 2053 stipulates that state agencies may not approve projects that will "jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy" (CFG Code, Section 2053).

CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease" (CFG Code, Section 2050 et seq.). CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the [California Fish and Game] Commission as rare on or before January 1, 1985, is a threatened species" (California Fish and Game Code, Section 2050 et seq.). A candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the Commission has published a notice of proposed regulation to add the species to either list" (CFG Code, Section 2050 et seq.). CESA does not list invertebrate species.

California Fish and Game Code, Sections 3503, 3511, 3513, 4700, 5050, and 5515

Section 2081(b) and (c) of the CFG Code authorizes take of endangered, threatened, or candidate species if take is incidental to otherwise lawful activity and if specific criteria are met. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, Section 2080.1 of CESA allows CDFW to adopt a federal incidental take statement or a 10(a) permit as its own, based on its findings that the federal permit adequately protects the species and is consistent with state law. A Section 2081(b) permit may not authorize the take of "fully protected" species, nest and eggs of birds, any birds in the orders Falconiformes or Strigiformes, migratory nongame bird as designated in the federal Migratory Bird Treaty Act (CFG Code, Sections 3505, 3511, 4700, 5050, and 5515). If a project is planned in an area where a fully protected species or a specified bird occurs, an applicant must design the project to avoid take.

California Fish and Game Code, Sections 1600–1602

Pursuant to Section 1602 of the CFG Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. A streambed alteration agreement is required for impacts to jurisdictional wetlands in accordance with Section 1602 of the CFG Code.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires identification of a project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

Special-Status Plants and Wildlife

The CEQA Guidelines define endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" (14 CCR 15380(b)(1)). A rare animal or plant is defined in CEQA Guidelines, Section 15380(b)(2), as a species that, although not currently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or . . . [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act" (14 CCR 15380(b)(2)). Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing as defined further in CEQA Guidelines, Section 15380(c).

Endangered, rare, or threatened plant species as defined in Section 15380(b) of the CEQA Guidelines (14 CCR 15000 et seq.) are referred to as "special-status plant species" in this report and include endangered or threatened plant species recognized in the context of CESA and

FESA (CDFW 2019ba) and plant species with a CRPR 1 through 4 (CNPS 2019). Species with CRPR 3 or 4 may, but generally do not, qualify for protection under this provision. Species with CRPR 3 and 4 are those that require more information to determine status and plants of limited distribution. Thus, CRPR 3 and 4 plant species are not analyzed further.

Endangered, rare, or threatened wildlife species as defined in CEQA Guidelines, Section 15380(b) (14 CCR 15000 et seq.), are referred to as “special-status wildlife species” and, as used in this report, include (1) endangered or threatened wildlife species recognized in the context of CESA and FESA (CDFW 2019b); (2) California Species of Special Concern (SSC) and Watch List species as designated by CDFW (2019c); (3) mammals and birds that are fully protected species as described in the CFG Code, Sections 4700 and 3511; and (4) Birds of Conservation Concern as designated by USFWS (2008).

Natural Communities of Special Concern

Sensitive natural communities, as defined in Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines (14 CCR 15000 et seq.), are referred to as “natural communities of special concern” and, as used in this report, include communities identified as high priority for inventory in the California Natural Community List (CDFW 2018b) by a state rarity ranking of S1, S2, or S3.

2.2 Studies Required

A Biological Study Area (BSA) consisting of the proposed project impact area and a 500-foot buffer (Figure 2) was created to determine the biological resources within and near the proposed project that could potentially be affected by project implementation. Data regarding biological and jurisdictional resources present within the BSA was obtained through a review of pertinent literature and field reconnaissance, and impacts to these resources were analyzed pursuant to relevant regulatory requirements, described in detail below.

A literature search was conducted to determine what biological resources have previously been mapped in the project vicinity and provided a focus for the field effort. The biological resources observed during the field survey were mapped and noted to establish the baseline conditions of the BSA.

2.2.1 Literature Search

The following data sources were reviewed to assist with biological assessment efforts:

- USFWS Critical Habitat Mapper (USFWS 2019a);
- USFWS Information Planning and Conservation (IPaC) System (USFWS 2019b);
- National Marine Fisheries Service (NMFS) Species List (NMFS 2016);
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB; CDFW 2019d); and

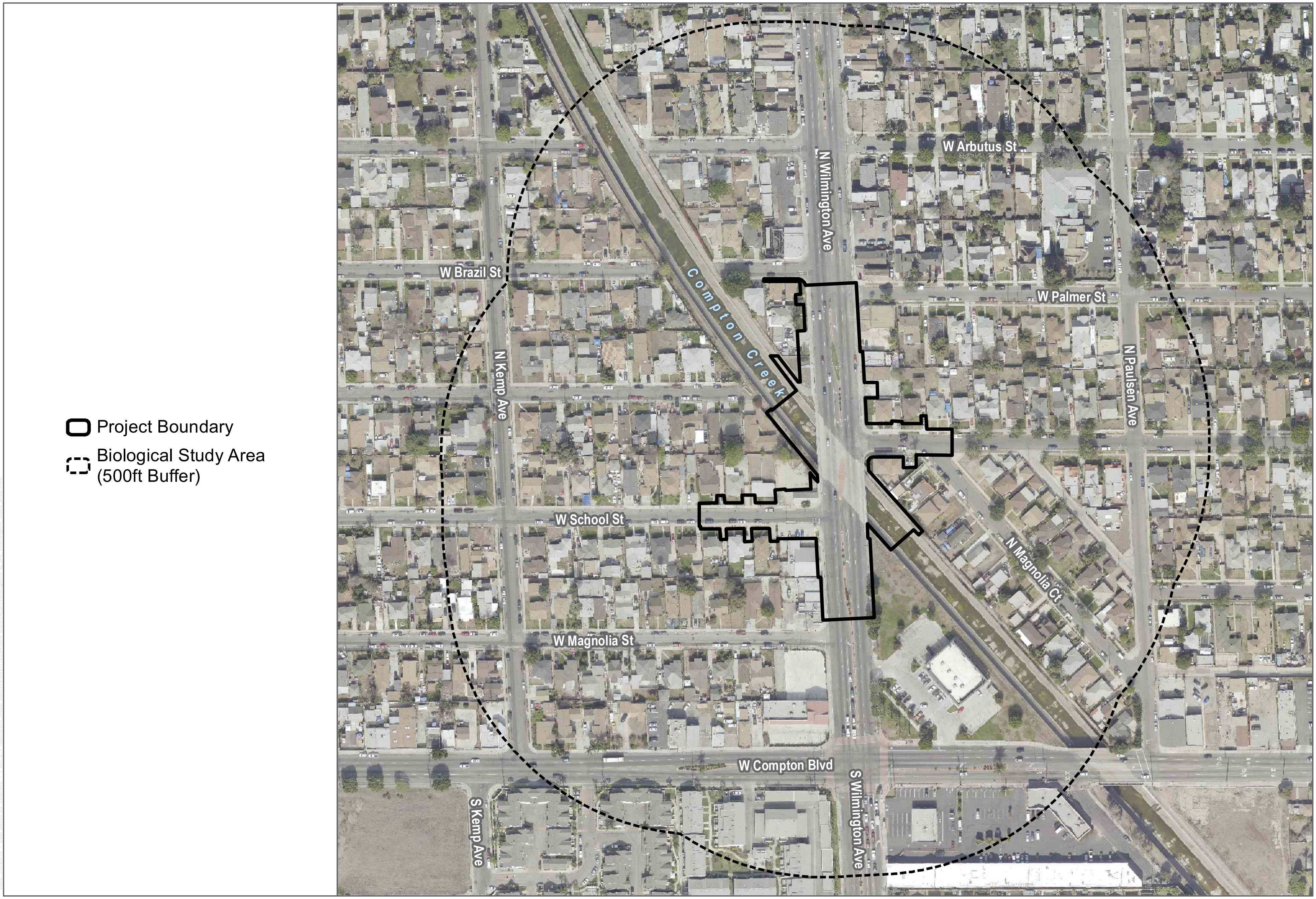
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2019).

2.2.2 Field Review

Dudek biologist Tracy Park conducted a field survey of the project site and surrounding BSA under the supervision of senior biologist Michael Cady. The biological reconnaissance-level survey included the mapping of the vegetation communities and land covers present within the BSA, mapping of potential jurisdictional wetlands or waters, identification of invasive plants, and an evaluation of the potential for special-status species to occur in the BSA.

Survey Methods

All plant and wildlife species observed during the field survey by sight, calls, tracks, scat, or other signs were recorded. Binoculars (10x42 magnification) were used to aid in the identification of wildlife. Typically, vegetation communities are mapped following *A Manual of California Vegetation, 2nd Edition* (Sawyer et al. 2009). However due to the heavy urban development occurring throughout the BSA, no natural vegetation communities were observed, so communities and land cover types were mapped according to their dominant characteristics. Plant species were identified to species, including invasive plants. The California Invasive Plant Council (Cal-IPC) maintains the Cal-IPC Inventory, which presents the best available knowledge of invasive plant experts in California and species categorization is based on an assessment of ecological impacts (Cal-IPC 2019).



SOURCE: Esri, Digital Globe 2017; Open Street Map 2019

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FIGURE 2

Biological Study Area

The Wilmington Avenue Bridge Over Compton Creek

The potential for special-status plant and wildlife species to occur with the BSA was evaluated based on the vegetation communities and soils available, if present. Where applicable, Dudek used the CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018a).

Personnel Survey Dates

Dudek biologist Tracy Park conducted a biological reconnaissance-level field survey of the BSA for Wilmington Avenue Bridge over Compton Creek on August 1, 2019 (Table 1).

Table 1: Biological Reconnaissance-Level Survey

Date	Hours	Personnel	Focus	Conditions
8/1/2019	1205-1235	TP	General biological reconnaissance level survey, vegetation mapping, resources mapping, habitat assessment	80-81°F, 0% cc, 2-5 mph wind

TP = Tracy Park; °F = degrees Fahrenheit; cc = cloud cover; mph = miles per hour

Ms. Park has over three years' experience as a field technician and biologist conducting biological surveys throughout Southern California. Her experience includes conducting various wildlife and botanical surveys, habitat assessments, vegetation mapping, and wetland delineations, as well as reporting for projects requiring CEQA compliance. She has conducted focused protocol surveys for a variety sensitive plant and wildlife species.

Michael Cady is the supervising biologist for this project. He has over 15 years' professional experience as a biologist specializing in technical surveys and reporting in support of projects requiring CEQA/NEPA compliance. His field experience includes conducting rare plant surveys, general flora and fauna surveys, oak and general tree surveys, vegetation mapping, and nesting bird surveys. Additionally, he has conducted protocol surveys and habitat assessments for a variety of special-status wildlife species. He holds a current California Department of Fish and Wildlife (CDFW) Scientific Collecting Permit, as well as a CDFW State-Listed Plant Voucher Collection Permit.

Agency Coordination and Professional Contacts

No agency coordination has occurred to date.

Limitations That May Influence Results

Limitations of the survey include seasonal constraints, a diurnal bias, the absence of focused protocol surveys, and the biologist was not able to go within the Compton Creek channel to check the underside of the bridge. The survey was completed to assess habitat and the potential for special-status species to occur within the BSA. Focused rare plant surveys were not conducted for the proposed project. In addition, the list of plant species observed within the BSA includes those species observed during general biological reconnaissance survey conducted in August, when many botanical resources would have been limited. Therefore, this list is not comprehensive and does not include plant species that may have been present but were not blooming at the time of the survey. No wildlife trapping was conducted for small mammals, reptiles, and amphibians. Based on the diurnal nature of the survey, most wildlife species observed were birds. Most urban-adapted mammals are nocturnal and would not be observed during the survey.

3. Results: Environmental Setting

3.1 Description of the Existing Biological and Physical Conditions

The proposed project involves the replacement of the existing Wilmington Avenue Bridge over Compton Creek in the City of Compton, Los Angeles County (Figure 1). The impact area for the replacement project would include the existing bridge deck, abutment walls, and concrete channel bottom, as well as the roadway approach to the north and south (Figure 1). Appendix A contains representative photographs of the BSA.

3.1.1 Physical Conditions

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), the BSA supports two soil types/mapping units which are described below: Urban land-Biscailuz-Hueneme, drained complex, 0 to 2 percent slopes; and Urban land-Windfetch-Centinela complex, 0 to 5 percent slopes (USDA NRCS 2019).

The project site and surrounding BSA occurs within the Urban land-Biscailuz-Hueneme, drained complex, 0 to 2 percent slopes, soil-mapping unit. This mapping unit is primarily composed of urban land covered by roads, parking lots, and buildings, under which extensive cutting and filling has occurred during urban development. This mapping unit also supports the Biscailuz and Hueneme soil series, both of which are somewhat poorly drained fine to coarse loams or loam sands formed from discontinuous human-transported materials over mixed alluvium (USDA NRCS 2017). The bridge site and much of the surrounding BSA occurs within this soil-mapping unit.

The Urban land-Windfetch-Centinela complex, 0 to 5 percent slopes, soil-mapping unit is primarily composed of urban land covered by roads, parking lots, and buildings, under which extensive cutting and filling has occurred during urban development. This mapping unit also supports the Windfetch and Centinela soil series, both of which are well drained loams formed in human-transported material overlying alluvium from marine or mixed rock sources (USDA NRCS 2017). This soil-mapping unit occurs along the southwestern extent of the BSA.

Topography within the BSA is generally flat with elevations on site ranging from 59 to 81 feet above mean sea level, gently sloping in the southerly direction (Google 2019), and vegetation is limited to ornamental or ruderal vegetation associated with surrounding urban development.

The area surrounding the existing bridge is largely developed or disturbed in nature with existing land uses comprised of residential and commercial, the existing ROWs, as well as a concrete-lined flood control channel.

The project site occurs within the Los Angeles River Watershed (USGS HUC 8: 18070105) and crosses over Compton Creek (USGS HUC 12: 180701050402) (USGS 2019).

3.1.2 Biological Conditions in the Study Area

Vegetation communities and land covers found within the BSA are entirely non-native and non-natural land covers comprised of urban/developed land, ornamental vegetation, and concrete-lined channels associated with Compton Creek (Figure 3). The vegetation communities and land covers identified within the BSA are discussed in further detail below. The BSA is generally situated in a heavily urbanized setting with vegetation limited to ornamental plantings or ruderal vegetation. One plant species was found in the BSA that is rated as “Moderate” by Cal-IPC (2019): shortpod mustard (*Hirschfeldia incana*). Species rated as “Moderate” have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure (Cal-IPC 2019).

Prominent features within the BSA include major thoroughfares such as Compton Boulevard and Wilmington Avenue; Compton Creek, a north-south trending channelized watercourse; and the Compton Creek bike path, which runs adjacent to the Compton Creek channel. The Los Angeles River is located approximately 2.82 miles east of the BSA.

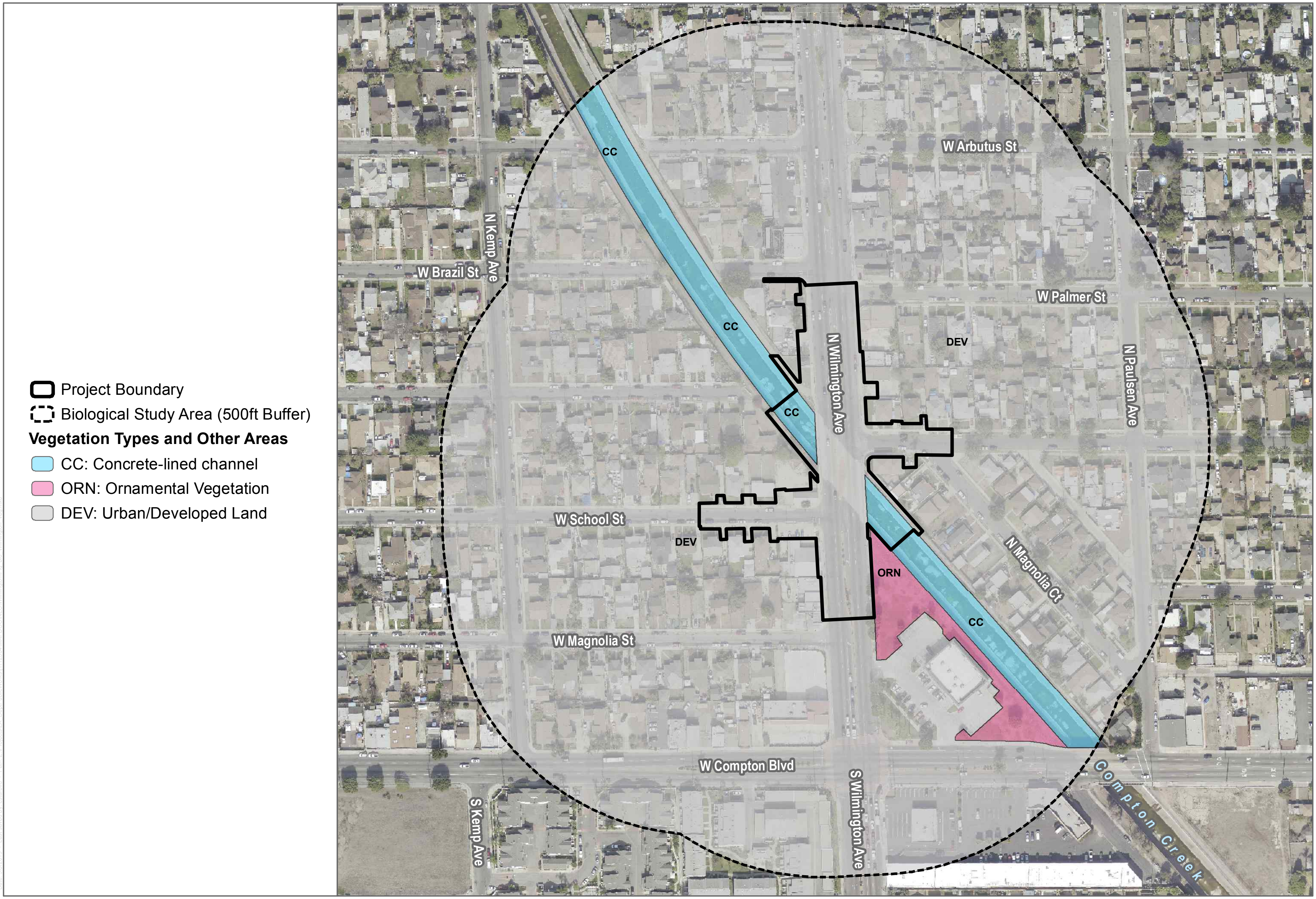
3.1.3 Habitat Connectivity

The BSA is surrounded by urban, developed land uses, and does not contain any greenbelts for wildlife movement, or native vegetation and undeveloped land capable of facilitating the movement of species between large tracts of native habitat. The Compton Creek watershed is entirely urban, so the channel does not connect any large natural areas upstream with the Los Angeles River and Pacific Ocean downstream. On a local level, urban-adapted wildlife, such as coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*), may use the below grade Compton Creek Channel to move within the urban environment and as a source of water.

3.1.4 Regional Species and Habitats and Natural Communities of Concern

Special-Status Plants

Thirty-eight special-status plant species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, Los Alamitos) (CDFW 2019d; CNPS 2019) or included within the USFWS IPaC Trust Resource List for the proposed project (USFWS 2019b) (Appendix B). Eleven of these species are federal- and/or State-listed as endangered or threatened species; however, none of these species are listed in the USFWS IPaC Trust Resource List for the proposed project (USFWS 2019b). Potential habitat was determined to be absent for all of the thirty-eight species due to the heavily urbanized nature of the BSA. Additionally, these species are not expected to occur within the BSA due to extirpation of nearby occurrences, lack of known populations within five miles of the BSA, or absence during the field survey. All thirty-eight special-status plant species, their habitat requirements, regulatory status, presence of habitat within the BSA, and their potential to occur are discussed in Table 2.



SOURCE: LAR-IAC 2014; Open Street Map 2019

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FIGURE 3

Biological Resources

The Wilmington Avenue Bridge Over Compton Creek

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
aphanisma	*Aphanisma blitoides*	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub; sandy or gravelly/annual herb/Feb–June/0–1000	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
marsh sandwort	*Arenaria paludicola*	FE/SE/1B.1	Marshes and swamps (freshwater or brackish); sandy, openings/perennial stoloniferous herb/May–Aug/5–560	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Braunton's milk-vetch	*Astragalus brauntonii*	FE/None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland; recent burns or disturbed areas, usually sandstone with carbonate layers/perennial herb/Jan–Aug/10–2100	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Ventura marsh milk-vetch	*Astragalus pycnostachyus* var. *lanosissimus*	FE/SE/1B.1	Coastal dunes, Coastal scrub, Marshes and swamps (edges, coastal salt or brackish)/perennial herb/(June)Aug–Oct/0–115	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
coastal dunes milk-vetch	*Astragalus tener* var. *titi*	FE/SE/1B.1	Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie (mesic); often vernally mesic areas/annual herb/Mar–May/0–165	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Coulter's saltbush	*Atriplex coulteri*	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; alkaline or clay/perennial herb/Mar–Oct/5–1510	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
South Coast saltscale	*Atriplex pacifica*	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/Mar–Oct/0–460	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
Parish's brittlescale	*Atriplex parishii*	None/None/ 1B.1	Chenopod scrub, Playas, Vernal pools; alkaline/annual herb/June–Oct/80–6235	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Davidson's saltscale	*Atriplex serenana* var. *davidsonii*	None/None/ 1B.2	Coastal bluff scrub, Coastal scrub; alkaline/annual herb/Apr–Oct/30–655	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Nevin's barberry	*Berberis nevinii*	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; sandy or gravelly/perennial evergreen shrub/(Feb)Mar–June/225–2705	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
intermediate mariposa lily	*Calochortus weedii* var. *intermedius*	None/None/ 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; rocky, calcareous/perennial bulbiferous herb/May–July/340–2805	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
lucky morning-glory	*Calystegia felix*	None/None/ 1B.1	Meadows and seeps (sometimes alkaline), Riparian scrub (alluvial); Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline/annual rhizomatous herb/Mar–Sep/95–705	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
southern tarplant	*Centromadia parryi* ssp. *australis*	None/None/ 1B.1	Marshes and swamps (margins), Valley and foothill grassland (vernally mesic), Vernal pools/annual herb/May–Nov/0–1575	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
smooth tarplant	*Centromadia pungens* ssp. *laevis*	None/None/ 1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; alkaline/annual herb/Apr–Sep/0–2100	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
salt marsh bird's-beak	*Chloropyron maritimum* ssp. *maritimum*	FE/SE/1B.2	Coastal dunes, Marshes and swamps (coastal salt)/annual herb (hemiparasitic)/May–Oct(Nov)/0–100	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Peruvian dodder	*Cuscuta obtusiflora* var. *glandulosa*	None/None/ 2B.2	Marshes and swamps (freshwater)/annual vine (parasitic)/July–Oct/45–920	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
many-stemmed dudleya	*Dudleya multicaulis*	None/None/ 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; often clay/perennial herb/Apr–July/45–2590	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
San Diego button-celery	*Eryngium aristulatum* var. *parishii*	FE/SE/1B.1	Coastal scrub, Valley and foothill grassland, Vernal pools; mesic/annual / perennial herb/Apr–June/65–2035	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Los Angeles sunflower	*Helianthus nuttallii* ssp. *parishii*	None/None/ 1A	Marshes and swamps (coastal salt and freshwater)/perennial rhizomatous herb/Aug–Oct/30–5005	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
mesa horkelia	*Horkelia cuneata* var. *puberula*	None/None/ 1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub; sandy or gravelly/perennial herb/Feb–July(Sep)/225–2655	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
decumbent goldenbush	*Isocoma menziesii* var. *decumbens*	None/None/ 1B.2	Chaparral, Coastal scrub (sandy, often in disturbed areas)/perennial shrub/Apr–Nov/30–445	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
Coulter's goldfields	*Lasthenia glabrata* ssp. *coulteri*	None/None/ 1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/Feb–June/0–4005	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
mud nama	*Nama stenocarpa*	None/None/ 2B.2	Marshes and swamps (lake margins, riverbanks)/annual / perennial herb/Jan–July/15–1640	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Gambel's water cress	*Nasturtium gambelii*	FE/ST/1B.1	Marshes and swamps (freshwater or brackish)/perennial rhizomatous herb/Apr–Oct/15–1085	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
spreading navarretia	*Navarretia fossalis*	FT/None/1B.1	Chenopod scrub, Marshes and swamps (assorted shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/95–2150	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
prostrate vernal pool navarretia	*Navarretia prostrata*	None/None/ 1B.1	Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools; Mesic/annual herb/Apr–July/5–3970	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
coast woolly-heads	*Nemacaulis denudata* var. *denudata*	None/None/ 1B.2	Coastal dunes/annual herb/Apr–Sep/0–330	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
California Orcutt grass	*Orcuttia californica*	FE/SE/1B.1	Vernal pools/annual herb/Apr–Aug/45–2165	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Lyon's pentachaeta	*Pentachaeta lyonii*	FE/SE/1B.1	Chaparral (openings), Coastal scrub, Valley and foothill grassland; rocky, clay/annual herb/(Feb)Mar–Aug/95–2265	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
Brand's star phacelia	*Phacelia stellaris*	None/None/ 1B.1	Coastal dunes, Coastal scrub/annual herb/Mar–June/0–1310	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
white rabbit-tobacco	*Pseudognaphalium leucocephalum*	None/None/ 2B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland; sandy, gravelly/perennial herb/(July)Aug–Nov(Dec)/0–6890	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Nuttall's scrub oak	*Quercus dumosa*	None/None/ 1B.1	Closed-cone coniferous forest, Chaparral, Coastal scrub; sandy, clay loam/perennial evergreen shrub/Feb–Apr(May–Aug)/45–1310	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Parish's gooseberry	*Ribes divaricatum* var. *parishii*	None/None/ 1A	Riparian woodland/perennial deciduous shrub/Feb–Apr/210–985	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
southern mountains skullcap	*Scutellaria bolanderi* ssp. *austromontana*	None/None/ 1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest; mesic/perennial rhizomatous herb/June–Aug/1390–6560	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
salt spring checkerbloom	*Sidalcea neomexicana*	None/None/ 2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar–June/45–5020	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
estuary seablite	*Suaeda esteroa*	None/None/ 1B.2	Marshes and swamps (coastal salt)/perennial herb/(May)July–Oct(Jan)/0–15	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
San Bernardino aster	*Symphyotrichum defoliatum*	None/None/ 1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland (vernally mesic); near ditches, streams, springs/perennial rhizomatous herb/July–Nov(Dec)/5–6695	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Greata's aster	*Symphyotrichum greatae*	None/None/ 1B.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland; mesic/perennial rhizomatous herb/June–Oct/980–6595	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2 Key:

Status: Federal Endangered (FE); Federal Threatened (FT); State Endangered (SE); State Threatened (ST)

California Rare Plant Rank (CRPR):
- 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
- 1B: Plants rare, threatened, or endangered in California and elsewhere
- 2B: Plants rare, threatened, or endangered in California, but more common elsewhere

Threat Ranks:
- 1 Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- 2 Moderately threatened in California (20% to 80% of occurrences threatened/moderate degree and immediacy of threat)
- 3 Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Habitat Present / Absent: Absent [A] - no habitat present and no further work needed.

Special-Status Wildlife

Forty-seven special-status wildlife species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, Los Alamitos) (CDFW 2019d; USFWS 2019a, NMFS 2016). Thirteen of these species are federally- and/or State-listed (or proposed for listing) as endangered or threatened species, including one species from the USFWS IPaC Trust Resource List (USFWS 2019b): federally threatened coastal California gnatcatcher (*Polioptila californica californica*). Potential habitat was determined to be absent for forty-four species. Of the three species determined to have potential habitat present, none were determined to have a moderate or higher potential to occur. All forty-seven special-status wildlife species, their habitat requirements, regulatory status, presence of habitat within the BSA, and their potential to occur are discussed in Table 3.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Invertebrates					
Busck's gallmoth	*Carolella busckana*	None/None	Coastal scrub dunes	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
western tidal-flat tiger beetle	*Cicindela gabbii*	None/None	Inhabits estuaries and mudflats along the coast of Southern California	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
sandy beach tiger beetle	*Cicindela hirticollis gravida*	None/None	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
western beach tiger beetle	*Cicindela latesignata latesignata*	None/None	Mudflats and beaches in coastal Southern California	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
senile tiger beetle	*Cicindela senilis frosti*	None/None	Inhabits marine shoreline, from Central California coast south to saltmarshes of San Diego; also found at Lake Elsinore	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Oblivious tiger beetle	*Cicindela latesignata obliviosa*	None/None	Inhabited the Southern California coastline, from La Jolla north to the Orange County line. Occupied saline mudflats and moist sandy spots in estuaries of small streams in the lower zone. Has not been observed in 20 years. The oblivious tiger beetle (*C. l. obliviosa*) is no longer the accepted name for this species (ITIS 2016).	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Palos Verdes blue butterfly	*Glaucopsyche lygdamus palosverdesensis*	FE/None	Cool, fog-shrouded, seaward side of Palos Verdes Hills, Los Angeles County	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Riverside fairy shrimp	*Streptocephalus woottoni*	FE/None	Vernal pools, non-vegetated ephemeral pools	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
mimic tryonia (=California brackishwater snail)	*Tryonia imitator*	None/None	Inhabits coastal lagoons, estuaries, and saltmarshes, from Sonoma County south to San Diego County	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Fish					
Mohave tui chub	Siphateles bicolor mohavensis	FE/FP, SE	Lacustrine ponds or pools; 4 feet min water depth; freshwater flow; mineralized and alkaline environment; habitat for aquatic invertebrate prey and egg attachment substrate; Ruppia maritima preferred for egg attachment and thermal refuge in summer months	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Amphibians					
western spadefoot	*Spea hammondii*	None/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Reptiles					
western pond turtle	*Actinemys marmorata*	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
southern California legless lizard	*Anniella stebbinsi*	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
California glossy snake	*Arizona elegans occidentalis*	None/SSC	Commonly occurs in desert regions throughout southern California. Prefers open sandy areas with scattered brush. Also found in rocky areas.	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
San Diegan tiger whiptail	*Aspidoscelis tigris stejnegeri*	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
green sea turtle	*Chelonia mydas*	FT/None	Shallow waters of lagoons, bays, estuaries, mangroves, eelgrass, and seaweed beds	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Blainville's horned lizard	*Phrynosoma blainvillii*	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Birds					
tricolored blackbird	*Agelaius tricolor* (nesting colony)	BCC/SSC, SCE	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	None/WL	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
burrowing owl	*Athene cunicularia* (burrow sites & some wintering sites)	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
ferruginous hawk	*Buteo regalis* (wintering)	BCC/WL	Winters and forages in open, dry country, grasslands, open fields, agriculture	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
Swainson's hawk	*Buteo swainsoni* (nesting)	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
wrentit	*Chamaea fasciata*	BCC/None	A common, characteristic resident of California chaparral habitat. Also frequents shrub understory of coniferous habitats from the coast to lower regions of mountains throughout cismontane California	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
western yellow-billed cuckoo	*Coccyzus americanus occidentalis* (nesting)	FT, BCC/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
yellow rail	*Coturnicops noveboracensis*	BCC/SSC	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
southwestern willow flycatcher	*Empidonax traillii extimus* (nesting)	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
saltmarsh common yellowthroat	*Geothlypis trichas sinuosa*	BCC/SSC	Nests in woody swamp, brackish marsh, and freshwater marsh.	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA
song sparrow	*Melospiza melodia*	BCC/None	Breeds in riparian thickets of willows, other shrubs, vines, tall herbs, and in fresh or saline emergent vegetation	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA
Belding's savannah sparrow	*Passerculus sandwichensis beldingi*	None/SE	Nests and forages in coastal saltmarsh dominated by pickleweed (*Salicornia* spp.)	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
California brown pelican	*Pelecanus occidentalis californicus* (nesting colonies & communal roosts)	FDL/FP, SDL	Forages in warm coastal marine and estuarine environments; in California, nests on dry, rocky offshore islands	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
Nuttall's woodpecker	*Picoides nuttallii*	BCC/None	Nest located mostly in riparian habitat in dead (occasionally live) trunk or limb of willow, sycamore, cottonwood, or alder; rarely in oak. Forages mostly in oak and riparian deciduous habitats.	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
coastal California gnatcatcher	*Polioptila californica californica*	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
			at less than 1,000 feet above mean sea level		
bank swallow	*Riparia riparia* (nesting)	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
rufous hummingbird	*Selasphorus rufus*	BCC/None	A common migrant and uncommon summer resident of California. Breeding areas north of California in coniferous forests.	A	Not expected to occur. Suitable associated nesting, habitat is not present in the BSA. The species may forage in the area as a transient.
Allen's hummingbird	*Selasphorus sasin*	BCC/None	Often attaches nest to more than one lateral support on eucalyptus, juniper, willow, other trees, vines, shrubs, or ferns.	HP	Low potential to occur. Marginal nesting habitat within ornamental vegetation is present in the BSA.
California least tern	*Sternula antillarum browni* (nesting colony)	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
least Bell's vireo	*Vireo bellii pusillus* (nesting)	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
Mammals					
pallid bat	*Antrozous pallidus*	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	HP	Low potential to occur. The species is commonly found on bridges (Erickson et al. 2002); however, the BSA lacks the habitat that the species is associated with and there are few modern records

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
					from the Los Angeles Basin. Additionally, the project is within a highly urbanized area, which is a deterrent to roosting (Erickson et al. 2002).
western mastiff bat	*Eumops perotis californicus*	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA. The species may forage over the area during the night.
silver-haired bat	*Lasionycteris noctivagans*	None/None	Old-growth forest, maternity roosts in trees, large snags 50 feet aboveground; hibernates in hollow trees, rock crevices, buildings, mines, caves, and under sloughing bark; forages in or near coniferous or mixed deciduous forest, stream or river drainages	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA. The species may forage over the area during the night.
hoary bat	*Lasiurus cinereus*	None/None	Forest, woodland riparian, and wetland habitats; also juniper scrub, riparian forest, and desert scrub in arid areas; roosts in tree foliage and sometimes cavities, such as woodpecker holes	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA and the species is not known to use bridges (Erickson et al. 2002). The species may forage over the area during the night.
western yellow bat	*Lasiurus xanthinus*	None/SSC	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA and the species is not known to use bridges

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
					(Erickson et al. 2002). The species may forage over the area during the night.
south coast marsh vole	*Microtus californicus stephensi*	None/SSC	Tidal marshes	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
pocketed free-tailed bat	*Nyctinomops femorosaccus*	None/SSC	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	HP	Not expected to occur. The species has not been recorded using bridges for roosting in California and the project is within a highly urbanized area, which is a deterrent to roosting (Erickson et al. 2002).
big free-tailed bat	*Nyctinomops macrotis*	None/SSC	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA. The species may forage over the area during the night.
Pacific pocket mouse	*Perognathus longimembris pacificus*	FE/SSC	fine-grained sandy substrates in open coastal strand, coastal dunes, and river alluvium	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
American badger	*Taxidea taxus*	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 3 Key:

Status:

Federal Endangered (FE), Federal Threatened (FT), Federal Delisted (FDL), Birds of Conservation Concern (BCC) (USFWS 2008) / State Endangered (SE), State Threatened (ST), State Candidate Endangered (SCE), State Delisted (SDL), State Fully Protected (FP), CDFW Species of Special Concern (SSC), CDFW Watch List

Habitat Present / Absent:

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present.

Natural Communities of Special Concern

Sensitive natural communities, as defined in Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines (14 CCR 15000 et seq.), are referred to as “natural communities of special concern” and, as used in this report, include communities identified as high priority for inventory in the *California Natural Community List* (CDFW 2019e) by a state rarity ranking of S1, S2, or S3.

Four natural communities of special concern are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, Los Alamitos): California walnut woodland, southern coastal salt marsh, southern sycamore alder riparian woodland, and walnut forest (CDFW 2019a; Table 4). None of these natural communities of special concern overlap with the BSA for the project.

Table 4: Natural Communities of Special Concern Known to Occur surrounding the BSA.

Natural Community Name	Status Global/State Rank	Habitat Present/Absent
California Walnut Woodland	G2/S2.1	Absent
Southern Coastal Salt Marsh	G2/S2.1	Absent
Southern Sycamore Alder Riparian Woodland	G4/S4	Absent
Walnut Forest	G1/S1.1	Absent

Table 4 Key:

Status:

Global/State Rank –

G1 or S1: Critically Imperiled, at very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
G2 or S2: Imperiled, at high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, sever threats, or other factors.
G4 or S4: Apparently Secure, at fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats or other factors.

0.1: Very threatened

Habitat Present / Absent: Absent [A] - no habitat present and no further work needed.

Critical Habitat

Based on a review of the USFWS Critical Habitat viewer, there is no USFWS-designated critical habitat for listed wildlife species within the BSA (USFWS 2019a).

Regulatory Waters

The proposed project is centered on Compton Creek (USGS HUC12: 180701050402), a north-south trending, USGS intermittent watercourse, and tributary to the Los Angeles River (USGS HUC8: 18070105) (USGS 2019). Compton Creek within the project conveys flow from upstream headwaters, through a heavily urbanized portion of the southern Los Angeles Basin, and eventually converges with the Los Angeles River approximately four miles southeast of the BSA. Within the BSA, Compton Creek is a rectangular concrete-lined flood control channel devoid of vegetation in the channel bottom with a clear demarcation of the potential limits of regulatory agency jurisdiction. The limits of jurisdiction for channelized rectangular channels are typically defined as the channel bottom for ACOE and Regional Water Quality Control Board (RWQCB), and the top of the channel bank or vertical wall for CDFW. Channels with vertical concrete walls have the same limit of jurisdiction for all three regulatory agencies. Therefore, the BSA contains a clearly defined regulated non-wetland Waters of the U.S. and State.

4. Results: Biological Resources, Discussion of Impacts & Mitigation

4.1 Habitats and Natural Communities of Special Concern

4.1.1 Mapped Vegetation Communities and Land Covers

Three vegetation communities and land covers were identified and mapped within the BSA for the project: ornamental vegetation, concrete-lined channel, and urban/developed. The vegetation communities and land covers within the BSA are listed below in Table 5 along with their acreages, and their spatial coverage depicted on Figure 3. Each individual vegetation community and land cover is described further detail below.

Table 5: Vegetation Communities and Land Cover Types in the BSA.

Vegetation Community/Land Cover	Status Global/State Rank	Acreage within the BSA
Urban/Developed (DEV)	GNR/SNR	42.34
Concrete Channel (CC)	GNR/SNR	2.00
Ornamental (ORN)	GNR/SNR	0.74
	TOTAL	**45.08**

Table 5 Key:
Status:
GNR or SNR: Unranked, global or state rank not yet assessed.

Urban/Developed Land

The urban/developed land mapping unit is not recognized by the Natural Communities List (CDFW 2018b), but is described by Holland (1986). Urban/developed land refers to areas that have been constructed upon or disturbed so severely that native vegetation is no longer supported (Holland 1986). Developed land includes areas with permanent or semi-permanent structures, pavement or hardscape, landscaped areas, and areas with a large amount of debris or other materials (Holland 1986). Developed areas are generally graded and compacted, sometimes covered with gravel road base or built structures, and have little to no vegetation present. Developed land dominates the majority of the BSA and refers to those areas supporting manmade structures or features including paved/compacted roadways, driveways, parking lots, residences, and commercial or industrial buildings. These areas support limited natural ecological processes, native vegetation, or habitat for wildlife species and thus are not considered sensitive by local, State, and/or federal agencies.

Concrete Channel

The concrete channel mapping unit is not recognized by the Natural Communities List (CDFW 2018b), but is described by Oberbauer et al. (2008). Concrete channels are characterized by barren or sparsely vegetated concrete-lined channels. Within the BSA, Compton Creek is mapped as a concrete-lined rectangular channel devoid of vegetation, which extends northwest-southeast across the BSA.

Ornamental Vegetation

The ornamental vegetation mapping unit is not recognized by the Natural Communities List (CDFW 2018b), but is described by Jones & Stokes (1993). Ornamental vegetation consists of introduced plantings of exotic species as landscaping elements within features such as greenbelts, parks, and horticultural nurseries (Jones and Stokes 1993). Ornamental vegetation within the BSA includes landscaping within commercial development located to the southeast of the proposed project. Ornamental vegetation is scattered throughout urban development within the BSA; however, these units did not meet the minimum mapping threshold and are therefore included within the urban/developed land mapping unit. Ornamental vegetation is not considered sensitive by local, state, and/or federal agencies.

4.1.2 Survey Results

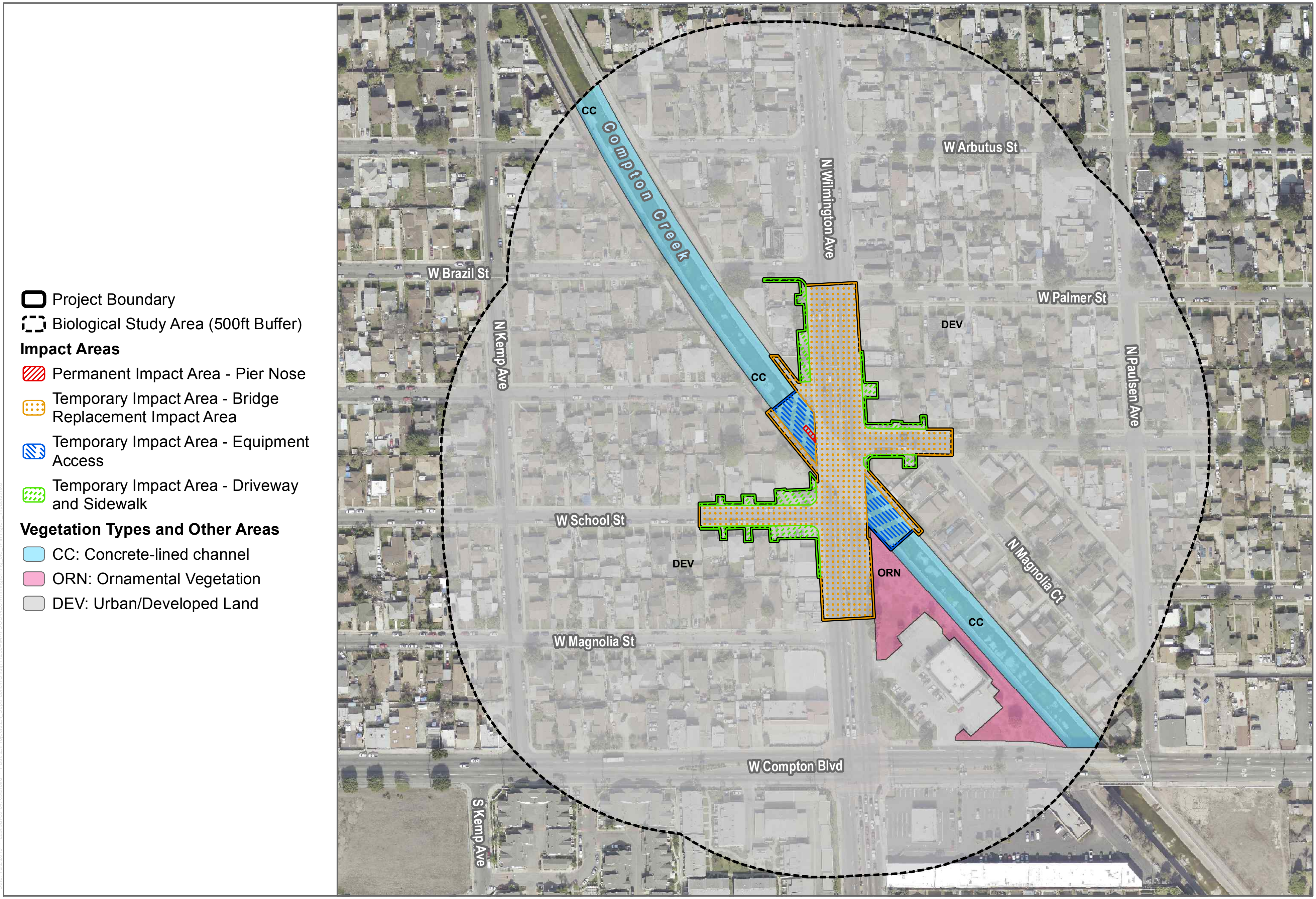
The BSA for the project does not contain any natural communities of special concern.

4.1.3 Project Impacts

Impacts to mapped vegetation communities and land covers associated with the proposed project were quantified by overlaying the proposed impact area with mapped biological resources (Figure 4). Vegetation community/land cover types impacted by the proposed project are urban/developed, concrete channel, and ornamental (Table 6). Urban/developed and ornamental are not habitats and natural communities of special concern. The concrete channel contains the waters of Compton Creek that are likely to be determined Waters of the U.S., Waters of the State, and a CDFW regulated-stream. A formal jurisdictional waters delineation was not conducted; however, the limits of jurisdiction are expected to be delineated along the channel bottom for ACOE and RWQCB, and along the top of the vertical wall of the channel for CDFW, with the horizontal demarcation for each of these jurisdictions being concurrent. The channel is devoid of vegetation within the BSA.

Table 6: Impacts to Vegetation Communities and Land Cover by the Proposed Project

Vegetation Community/Land Cover	Permanent Impacts (acres)	Temporary Impacts (acres)
Urban/Developed (DEV)	0	2.36
Concrete Channel (CC)	0.01	0.48
Ornamental (ORN)	0	0
TOTAL	**0.01**	**2.84**



SOURCE: LAR-IAC 2014; Open Street Map 2019

DUDEK

FIGURE 4

Project Impacts

The Wilmington Avenue Bridge Over Compton Creek

The new abutments for the proposed bridge would be constructed approximately 15 feet behind the existing abutments, which are outside of the potential jurisdictional limits of Compton Creek. The existing concrete channel wall would be protected in place. The proposed new pier in the middle of the channel would be constructed where the existing bridge pier is located and the proposed footing (including the sloping pier nose) would result in very small increase over the existing footing (0.01 acres). The proposed bridge deck would be constructed where the existing deck is located and would not increase shading of the waters within Compton Creek.

Potential temporary impacts to jurisdictional waters within the concrete channel would result from proposed construction activities. Temporary impacts would include vehicles and equipment within the channel, the generation of concrete debris and sediment due to the demolition of the existing bridge, and the potential introduction of chemical pollutants (fuel, oil, lubricants, paints, release agents, and other construction materials). The release of chemical pollutants can reduce the water quality downstream, especially if water is actively flowing through a project site. Work would be conducted during the dry season (April 15 to October 15); however, based on historical imagery (Google 2019), urban runoff is present in the Compton Creek channel throughout the year.

4.1.4 Avoidance and Minimization Efforts

Work areas would be reduced to the maximum extent feasible, and staging areas would be along the roadways and outside of Compton Creek. During construction, erosion-control measures would be implemented by the contractor as part of their County-certified Storm Water Pollution Prevention Plan (SWPPP) for the proposed project. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include best management practices (BMPs) to control the pollutants. All work shall conform to the site specific surface water diversion plan prepared for the project that will comply with the conditions included in the Water Quality Certification from the RWQCB and also include pertinent BMPs from the *Construction Site Best Management Practices (BMPs) Manual* (LADPW 2010). These include, but are not limited to, temporary sediment control, temporary soil stabilization, waste management and materials pollution control, wind erosion control, and other non-storm water BMPs.

4.1.5 Compensatory Mitigation

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

4.2 Special Status Plant Species

4.2.1 Survey Results

A total of seventeen plant species were recorded during the field survey. A full list of plant species observed within the proposed project area is provided in Appendix C.

No special-status plant species were detected during the biological reconnaissance survey. Due to the extent of developed lands and disturbed vegetation within the BSA, there is limited potential for special-status plant species to occur. Table 2 includes special-status plants that are known to occur in the USGS 7.5-minute South Gate quadrangle and surrounding eight topographic quadrangles (CDFW 2019d; CNPS 2019), as well as species included in the USFWS IPaC Trust Resource List (2019b) (Appendix B). Table 2 also analyzes each of these special-status species' potential to occur based on known range, habitat associations, preferred soil substrate, life form, elevation, and blooming period. There are no special-status plant species with a moderate or high potential to occur within the BSA.

4.2.2 Project Impacts

No special-status plant species were identified within the BSA and no special-status plants, including those referenced in the USFWS IPaC Trust Resources List (2019b), are expected to have a moderate or high potential to occur due to the extent of developed land and disturbed vegetation within the BSA. Additionally, proposed project activities will primarily occur within existing paved areas (i.e., roadways, bridge decks, concrete channel bottom); therefore, no impacts to potentially occurring special-status plant species are anticipated to occur.

4.2.3 Avoidance and Minimization Efforts/Compensatory Mitigation

No avoidance or minimization measures or compensatory mitigation are required for special-status plant species because impacts to special-status plant species are not expected to occur.

4.3 Special Status Wildlife Species

4.3.1 Survey Results

A total of eight wildlife species were recorded during the field survey. A full list of wildlife species observed within the proposed project area is provided in Appendix D.

No special-status wildlife species were observed during the biological reconnaissance survey. Due to the extent of developed lands and disturbed vegetation within the BSA, there is limited suitable habitat for special-status wildlife species. Table 3 includes occurrences of special-status wildlife species that have been recorded in the USGS 7.5-minute South Gate quadrangle and surrounding eight quadrangles (CDFW 2019d) as well as species included in the USFWS IPaC Trust Resource List (2019b) (Appendix B). Table 3 also analyzes each of these special-status species' potential to occur based on known range and habitat requirements. There are no special-status wildlife species with a moderate or high potential to occur within the BSA.

No bats or signs of bats (i.e., urine staining and guano droppings) were visually observed at the time of the site visit; however, it should be noted that specific focused surveys for bats were not conducted. Seven special-status bat species have recorded occurrences in the project vicinity (CDFW 2019d): pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), silver-haired bat (*Lasionycteris noctivagans*), hoary bat (*Lasiurus cinereus*), western yellow bat

(*Lasiurus xanthinus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and big free-tailed bat (*Nyctinomops macrotis*). All of the species have potential to forage over the project site, but only pallid bat has a potential to roost within the bridge due to the lack of suitable roosting habitat for the other six species. Pallid bat is commonly found on bridges (Erickson et al. 2002); however, the BSA lacks the habitat that the species is associated with and there are few modern records from the Los Angeles Basin (CDFW 2019d, GBIF 2019). Additionally, the project is within a highly urbanized area, which is a deterrent to roosting (Erickson et al. 2002).

Ornamental vegetation within the BSA and the underside of the bridge deck may provide suitable nesting habitat for a number of common resident and migratory bird species protected under the MBTA and CFG Code Section 3500. Suitable nesting habitat for common, urban-adapted species such as house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), and lesser goldfinch (*Spinus psaltria*) occurs within the BSA.

4.3.2 Project Impacts

No special-status wildlife species were identified within the BSA and no special-status wildlife, including those referenced in the USFWS IPaC Trust Resources List (2019b), are expected to have a moderate or high potential to occur due to the lack of suitable habitat and the extent of developed land and disturbed vegetation within the BSA. Therefore, no impacts to potentially occurring special-status wildlife species are anticipated to occur.

Common bat species that could roost in the bridge Mexican free-tailed bat (*Tadarida brasiliensis*) and California myotis (*Myotis californicus*). Therefore, there may be a potential direct impact to roosting non-special-status bats if project activities commence during the bat maternity roosting period of March through August. However, this potential impact to non-special-status bats would not be considered significant because the bridge and potential roost would not be permanently removed, and therefore would not result in an impact that would cause the greater population of bat species to drop below self-sustaining levels.

Although the proposed project is not expected to impact special-status wildlife species, ornamental vegetation scattered throughout the BSA and the underside of the bridge deck could provide suitable habitat for nesting birds protected under MBTA and CFG Code. Nesting birds could be directly impacted by the removal of the existing bridge deck. Nesting birds could also be indirectly impacted from short-term construction-related noise, resulting in decreased reproductive success or nest abandonment. Therefore, if project activities were to occur during the general avian breeding season of February 1 through September 30, the project may directly and indirectly impact nesting birds protected under MBTA and CFG Code.

4.3.3 Avoidance and Minimization Efforts/Compensatory Mitigation

No avoidance or minimization measures or compensatory mitigation are required for special-status wildlife species because impacts to special-status wildlife species are not expected to occur.

To avoid potential direct and indirect impacts to nesting birds protected by the MBTA and CFG Code, project activities should avoid the general nesting season of February 1 through September 30. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species under the bridge deck and in vegetation within 300 feet (for non-raptor bird species) and 500 feet (for raptor species) of the proposed work area. If an active bird nest is found within the bridge deck, work would not be able to proceed until the nest is determined to be inactive (fledged or failed) by a qualified biologist. If an active bird nest is found within portions of the survey area adjacent to the bridge, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.

5. Conclusions & Regulatory Determination

5.1 Federal Endangered Species Act Consultation Summary

The project is primarily located within developed portions of urban areas in southern Los Angeles County (i.e. City of Compton) and will not result in the removal or degradation of any natural communities. The proposed project area is primarily developed with the bridge site spanning over an existing concrete-lined flood control channel (i.e., Compton Creek), reducing the potential for special-status plant and wildlife species to occur. No designated Critical Habitat is mapped within the BSA. Additionally, no primary constituent elements for Critical Habitat in the region occur within the BSA.

No direct consultation with NMFS was conducted for this project. However, an official species list was obtained through email from NMFS, and the species listed were considered for their potential to occur within the BSA. The NMFS species list is provided in Appendix B.

5.2 Wetlands and Other Waters Coordination Summary

No coordination with any wetland or waters regulatory agencies have been conducted for the proposed project.

A formal jurisdictional waters delineation was not conducted; however, the project would occur over and within the Compton Creek flood control channel that are likely to be Waters of the U.S. and Waters of the State. Approximately 0.49 acres of temporary impacts and approximately 0.01 acres of permanent impacts to waters of the U.S. and State are anticipated to occur as a result of the proposed project. Therefore, the proposed project would likely require a Section 404 Permit from ACOE, a Section 401 Water Quality Certification from the RWQCB, and a 1600 Streambed Alteration Agreement from CDFW.

5.3 Invasive Species

BMPS that would be implemented as part of the project design would include the cleaning of construction equipment prior to entering the site to reduce the spread of invasive plant seeds. No compensatory mitigation is proposed.

5.4 Other

Nesting bird species protected by the MBTA and CFG Code may be directly and indirectly impacted by the project should activities commence during the general nesting season of February 1 through September 30. Nesting season avoidance is proposed in Section 4.3 to reduce any potential impact to nesting birds, and a pre-construction clearance survey should the project occur during the nesting season. Consultation would occur with the appropriate wildlife resource agencies in the event that nesting birds are encountered. Active nests found during the pre-construction clearance survey will be flagged for avoidance and an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur without the consent of the on-site monitor, as long as a nest is still active.

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APPENDIX A
Site Photographs

APPENDIX A
Site Photographs

Facing west toward eastern side of Wilmington Avenue bridge over Compton Creek.

Facing southeast toward the western side of Wilmington Avenue bridge over Compton Creek.

Facing southeast toward ornamental and disturbed vegetation associated with commercial property located immediately southeast of the proposed project.

Facing northwest toward the Wilmington Avenue bridge deck.

APPENDIX A
Site Photographs

Facing northwest toward bike lane that runs adjacent to Compton Creek.

Facing northwest toward concrete-lined portion of Compton Creek
as viewed from the Wilmington Avenue Bridge.

APPENDIX B

IPaC/NMFS/CNDDB/CNPS/NMFS Species Lists

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
http://www.fws.gov/carlsbad/

In Reply Refer To:
Consultation Code: 08ECAR00-2019-SLI-0929
Event Code: 08ECAR00-2020-E-01087
Project Name: Wilmington Over Compton Creek Project

January 14, 2020

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2019-SLI-0929

Event Code: 08ECAR00-2020-E-01087

Project Name: Wilmington Over Compton Creek Project

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: Compton, CA

Project Location:

> Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.89748758694574N118.23773432372053W

Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

NMFS Species List - Intersection of USGS Topographic Quadrangles with NOAA Fisheries ESA Listed Species, Critical Habitat, Essential Fish Habitat, and MMPA Species Data November 2016

X = Present on the Quadrangle		ESA ANADROMOUS FISH (E) = Endangered, (T) = Threatened												ESA ANADROMOUS FISH CRITICAL HABITAT												ESA MARINE INVERTEBRATES		ESA MARINE INVERT. CRITICAL HABITAT	ESA SEA TURTLES				ESA WHALES	ESA PINNIPEDS	ESA PINNIPEDS CRITICAL HABITAT	ESSENTIAL FISH HABITAT					MMPA SPECIES	
		COHO		CHINOOK			STEELHEAD							COHO		CHINOOK			STEELHEAD																	SALMON						
Quad Name	Quad Number	SONCC (T)	CCC (E)	CC (T)	CVSR (T)	SRWR (E)	NC (T)	CCC (T)	SCCC (T)	SC (E)	CCV (T)	Eulachon (T)	Southern DPS Green Sturgeon (T)	SONCC	CCC	CC	CVSR	SRWR	NC	CCC	SCCC	SC	CCV	Eulachon	Southern DPS Green Sturgeon	Black Abalone (E)	White Abalone (E)	Black Abalone	East Pacific Green Sea Turtle (T)	Olive Ridley Sea Turtle (T/E)	Leatherback Sea Turtle (E)	North Pacific Loggerhead Sea Turtle (E)	Whales (see list below)	Guadalupe Fur Seal (T)	Steller Sea Lion	Coho	Chinook	Groundfish	Coastal Pelagic	Highly Migratory Species	MMPA Cetaceans (see "MMPA Species" tab for list)	MMPA Pinnipeds (see "MMPA Species" tab for list)
South Gate	33118-H2									X																																

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Hollywood (3411813) OR Los Angeles (3411812) OR El Monte (3411811) OR Inglewood (3311883) OR South Gate (3311882) OR Whittier (3311881) OR Torrance (3311873) OR Long Beach (3311872) OR Los Alamitos (3311871))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
Anniella stebbinsi southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Aphanisma blitoides aphanisma	PDCHE02010	None	None	G3G4	S2	1B.2
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Astragalus tener var. titi coastal dunes milk-vetch	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex coulteri Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2
Atriplex pacifica south coast saltscale	PDCHE041C0	None	None	G4	S2	1B.2
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T2	S2	1B.2
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Carolella busckana Busck's gallmoth	IILEM2X090	None	None	G1G3	SH	
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Centromadia pungens ssp. laevis smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
Chelonia mydas green turtle	ARAAA02010	Threatened	None	G3	S1	
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Cicindela gabbii western tidal-flat tiger beetle	IICOL02080	None	None	G2G4	S1	
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela latesignata latesignata western beach tiger beetle	IICOL02113	None	None	G2G4T1T2	S1	
Cicindela senilis frosti senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Cuscuta obtusiflora var. glandulosa Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
Danaus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eryngium aristulatum var. parishii San Diego button-celery	PDAPI0Z042	Endangered	Endangered	G5T1	S1	1B.1

Species	**Element Code**	**Federal Status**	**State Status**	**Global Rank**	**State Rank**	**Rare Plant Rank/CDFW SSC or FP**
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
Glaucopsyche lygdamus palosverdesensis Palos Verdes blue butterfly	IILEPG402A	Endangered	None	G5T1	S1	
Helianthus nuttallii ssp. parishii Los Angeles sunflower	PDAST4N102	None	None	G5TH	SH	1A
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
Isocoma menziesii var. decumbens decumbent goldenbush	PDAST57091	None	None	G3G5T2T3	S2	1B.2
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G5	S3S4	
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
Microtus californicus stephensi south coast marsh vole	AMAFF11035	None	None	G5T1T2	S1S2	SSC
Nama stenocarpa mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
Nasturtium gambelii Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Navarretia fossalis spreading navarretia	PDPLM0C080	Threatened	None	G2	S2	1B.1
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.1
Nemacaulis denudata var. denudata coast woolly-heads	PDPGN0G011	None	None	G3G4T2	S2	1B.2
Nyctinomops femorosaccus pocketed free-tailed bat	AMACD04010	None	None	G4	S3	SSC
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Passerculus sandwichensis beldingi Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Pelecanus occidentalis californicus California brown pelican	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
Pentachaeta lyonii Lyon's pentachaeta	PDAST6X060	Endangered	Endangered	G1	S1	1B.1
Perognathus longimembris pacificus Pacific pocket mouse	AMAFD01042	Endangered	None	G5T1	S1	SSC
Phacelia stellaris Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Quercus dumosa Nuttall's scrub oak	PDFAG050D0	None	None	G3	S3	1B.1
Ribes divaricatum var. parishii Parish's gooseberry	PDGRO020F3	None	None	G5TX	SX	1A
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Scutellaria bolanderi ssp. austromontana southern mountains skullcap	PDLAM1U0A1	None	None	G4T3	S3	1B.2
Sidalcea neomexicana salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
Siphateles bicolor mohavensis Mohave tui chub	AFCJB1303H	Endangered	Endangered	G4T1	S1	FP
Southern Coastal Salt Marsh Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Spea hammondii western spadefoot	AAABF02020	None	None	G3	S3	SSC
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Streptocephalus woottoni Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S1S2	
Suaeda esteroa estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Symphyotrichum greatae Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Tryonia imitator mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Walnut Forest Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 86

CNPS California Native Plant Society

Inventory of Rare and Endangered Plants

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

34 matches found. *Click on scientific name for details*

Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2A, 2B], Found in Quads 3411813, 3411812, 3411811, 3311883, 3311882, 3311881, 3311873 3311872 and 3311871;

Modify Search Criteria Export to Excel Modify Columns Modify Sort Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	1B.1	S1	G1
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	1B.1	S2	G2
Astragalus pycnostachyus var. lanosissimus	Ventura marsh milk-vetch	Fabaceae	perennial herb	(Jun)Aug-Oct	1B.1	S1	G2T1
Astragalus tener var. titi	coastal dunes milk-vetch	Fabaceae	annual herb	Mar-May	1B.1	S1	G2T1
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct	1B.2	S1S2	G3
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	1B.1	S1	G1G2
Atriplex serenana var. davidsonii	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S1	G5T1
Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar-Jun	1B.1	S1	G1
Calochortus weedii var. intermedius	intermediate mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul	1B.2	S2	G3G4T2
Calystegia felix	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	Mar-Sep	1B.1	S1	G1Q
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	annual herb	May-Nov	1B.1	S2	G3T2
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	1B.2	S1	G4?T1
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2	SH	G5T4?
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	1B.2	S2	G2
	Los Angeles sunflower	Asteraceae	perennial rhizomatous	Aug-Oct	1A	SH	G5TH

Helianthus nuttallii ssp. parishii			herb				
Horkelia cuneata var. puberula	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	1B.1	S1	G4T1
Isocoma menziesii var. decumbens	decumbent goldenbush	Asteraceae	perennial shrub	Apr-Nov	1B.2	S2	G3G5T2T3
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2
Nama stenocarpa	mud nama	Namaceae	annual / perennial herb	Jan-Jul	2B.2	S1S2	G4G5
Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	1B.1	S1	G1
Navarretia fossalis	spreading navarretia	Polemoniaceae	annual herb	Apr-Jun	1B.1	S2	G2
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G2
Nemacaulis denudata var. denudata	coast woolly-heads	Polygonaceae	annual herb	Apr-Sep	1B.2	S2	G3G4T2
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	1B.1	S1	G1
Pentachaeta lyonii	Lyon's pentachaeta	Asteraceae	annual herb	(Feb)Mar-Aug	1B.1	S1	G1
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	1B.1	S1	G1
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	2B.2	S2	G4
Quercus dumosa	Nuttall's scrub oak	Fagaceae	perennial evergreen shrub	Feb-Apr(May-Aug)	1B.1	S3	G3
Ribes divaricatum var. parishii	Parish's gooseberry	Grossulariaceae	perennial deciduous shrub	Feb-Apr	1A	SX	G5TX
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Aug	1B.2	S3	G4T3
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	2B.2	S2	G4
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(May)Jul-Oct(Jan)	1B.2	S2	G3
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov(Dec)	1B.2	S2	G2
Symphyotrichum greatae	Greata's aster	Asteraceae	perennial rhizomatous herb	Jun-Oct	1B.3	S2	G2

Suggested Citation

California Native Plant Society, Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 19 September 2019].

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Questions and Comments

rareplants@cnps.org

APPENDIX C

Plant Compendium

APPENDIX C
Plant Compendium

EUDICOTS

VASCULAR SPECIES

ASTERACEAE—SUNFLOWER FAMILY

Ambrosia psilostachya—western ragweed
* *Erigeron bonariensis*—asthmaweed
Heterotheca grandiflora—telegraphweed
* *Lactuca serriola* – prickly lettuce
* *Taraxacum officinale* – common dandelion

BRASSICACEAE—MUSTARD FAMILY

* *Hirschfeldia incana*—shortpod mustard

CHENOPODIACEAE - GOOSEFOOT FAMILY

* *Chenopodium album* - lambsquarters

EUPHORBIACEAE—SPURGE FAMILY

* *Euphorbia prostrata* – prostrate sandmat

MALVACEAE - MALLOW FAMILY

* *Malva parviflora* - cheeseweed mallow
* *Malvella leprosa* - alkali mallow

MORACEAE - MULBERRY FAMILY

* *Ficus microcarpa* – Chinese banyan

PASSIFLORACEAE—PASSION FLOWER FAMILY

* *Passiflora caerulea*—bluecrown passionflower

SIMAROUBACEAE—QUASSIA/SIMAROUBA FAMILY

* *Ailanthus alitissima*—tree of heaven

SOLANACEAE—NIGHTSHADE FAMILY

Solanum douglasii—greenspot nightshade

ZYGOPHYLLACEAE - CALTROP FAMILY

* *Tribulus terrestris* – puncturevine

MONOCOTS

VASCULAR SPECIES

POACEAE—GRASS FAMILY

* *Bromus madritensis*—compact brome
* *Cynodon dactylon*—Bermudagrass

* signifies introduced (non-native) species

APPENDIX D
Wildlife Compendium

APPENDIX D
Wildlife Compendium

BIRD

BUSHTITS

AEGITHALIDAE—LONG-TAILED TITS & BUSHTITS
Psaltriparus minimus—bushtit

FINCHES

FRINGILLIDAE—FRINGILLINE & CARDUELINE FINCHES & ALLIES
Haemorhous mexicanus—house finch

FLYCATCHERS

TYRANNIDAE—TYRANT FLYCATCHERS
Sayornis nigricans—black phoebe

JAYS, MAGPIES & CROWS

CORVIDAE—CROWS & JAYS
Corvus brachyrhynchos—American crow

PIGEONS & DOVES

COLUMBIDAE—PIGEONS & DOVES
* *Columba livia*—rock pigeon (rock dove)
* *Streptopelia decaocto*—Eurasian collared-dove
Zenaida macroura—mourning dove

TERNS & GULLS

LARIDAE—GULLS, TERNS, & SKIMMERS
Larus occidentalis—western gull

* signifies introduced (non-native) species

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Appendix C

Confidential Records Search Map and Finding of No Adverse Effect

Appendix D

Geotechnical Memorandum

April 29, 2012

TO: Sree Kumar
Design Division

Attention Scott Gregowski

FROM: Greg Kelley RGD for GK
Geotechnical and Materials Engineering Division

WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK 53C-0907
COUNTY BRIDGE NO. 2668
GEOTECHNICAL SUBSURFACE EXPLORATION
PROJECT ID RDC0015755 (PCA NO. X220000462)

On November 26, 2012, we were requested to perform a limited geotechnical investigation for Wilmington Avenue Bridge over Compton Creek in the City of Compton. The approximate site location is provided in Figure 1. Our scope of work was to perform subsurface explorations and provide soil testing to determine subsurface conditions.

Subsurface Exploration

To evaluate subsurface conditions at this site, two exploratory borings were drilled on January 28, 2013 and January 31, 2013, and two Cone Penetration Test (CPT) soundings were advanced on January 29, 2013. One boring and one CPT were performed on each side of the bridge. The two borings were drilled with a CME 75 drill rig, using a 6.5-inch-diameter hollow stem auger to depths of 75 feet, each below ground surface (bgs). The two CPT soundings were advanced using a 25-ton truck-mounted CPT rig. The CPT on the south side of the bridge included a seismic shear wave velocity test (SCPT-01) and was advanced to a depth of 74.2 feet bgs. The CPT on the north side of the bridge (CPT-02) was advanced to 67.7 feet bgs. The approximate locations of the borings and CPTs are provided in Figure 2. The logs of borings and soundings are provided in Appendix A.

In-situ Testing

In-situ testing was conducted with the CPT soundings performed by Fugro Consultants. Pore pressure dissipation tests were conducted to determine the approximate depth to ground water. Seismic shear wave velocity measurements were taken to determine the site specific shear wave velocity for the upper 100 feet. The test results for the seismic shear wave velocity measurements are provided in Appendix B.

Laboratory Testing

Selected samples were collected for laboratory analysis to confirm soil classifications made in the field and to provide engineering properties of the existing soils. Soil tests were performed by the Geotechnical and Materials Engineering Division's Materials Laboratory. A summary of laboratory test results is provided in Appendix C.

Subsurface Information

- The soil types encountered during drilling consist predominantly of lean clay and silts in medium stiff to very stiff condition. A layer of very dense well-graded sand was encountered in both borings from depths of 65 feet to 75 feet. Hard silt was found below the layer of well-graded sand in both borings.

- Bedrock was not encountered in the borings or CPTs conducted at the subject site.

- Perched water was encountered at 45 feet bgs in both borings. Two different perched groundwater levels were recorded in the CPTs. CPTs indicated perched water at a depth of 53 in SCPT-01 and 45 feet deep in CPT-02.

The boring logs and soundings provided herein contain observations and interpretations that are valid only for the specific date and location of the borings and soundings. Subsurface conditions may vary between borings and with time.

If you have any questions regarding the reported information or if additional analyses or recommendations are needed, please contact Yonah Halpern or Yoshiya Morisaku at Extension 4925. To provide feedback on our services, please access http://dpw.lacounty.gov/go/gmedsurvey to complete a Customer Service Survey.

Prepared by:

for Yoshiya Morisaku
Yonah Halpern
Principal Civil Engineering Assistant

Prepared by:

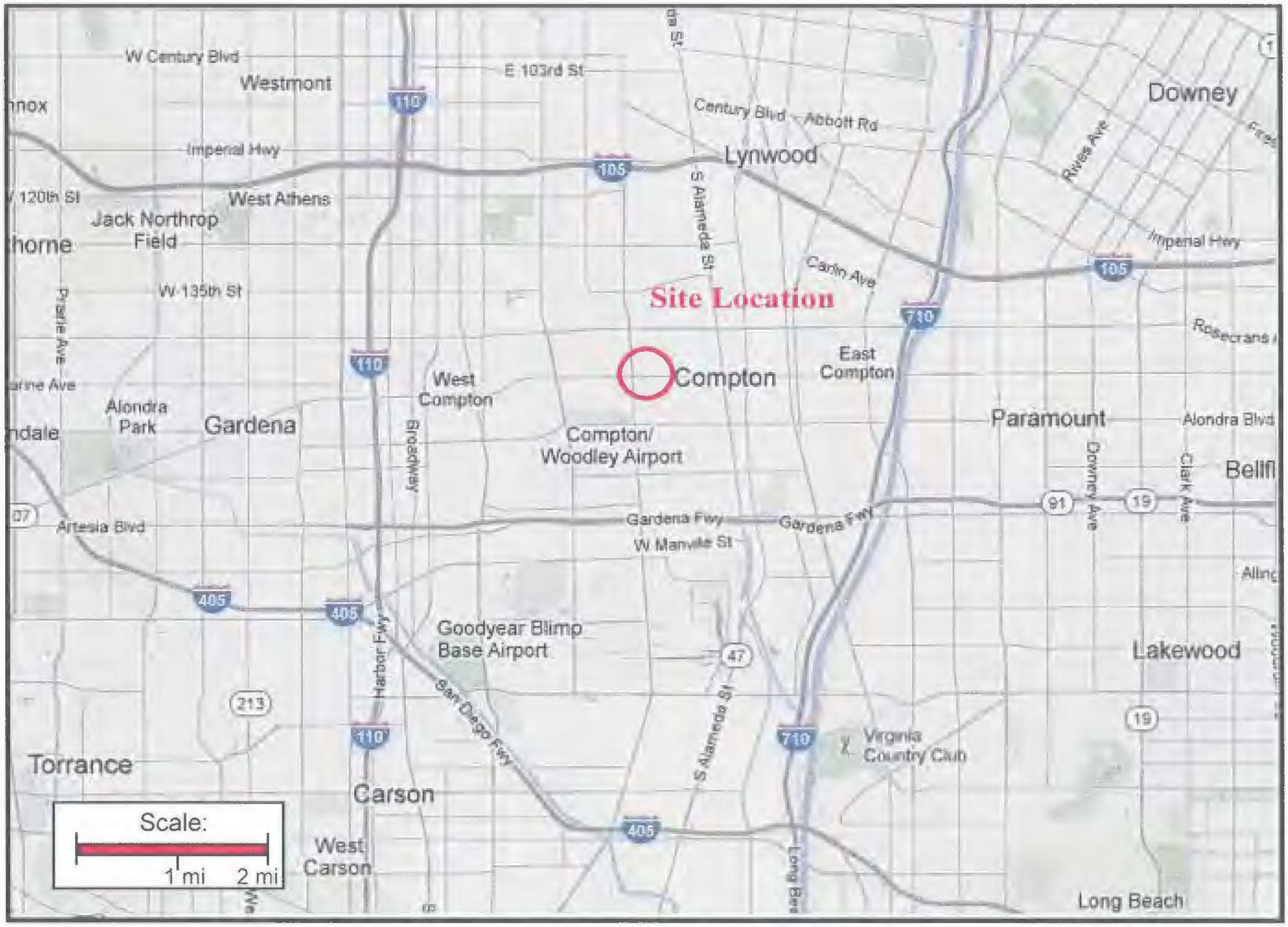
Yoshiya Morisaku
Yoshiya Morisaku
Associated Civil Engineer

REGISTERED PROFESSIONAL ENGINEER
YOSHIYA MORISAKU
No. 67587
Exp. 6/30/13
CIVIL
STATE OF CALIFORNIA

YH YM:kw
P:\gmepub\Secretarial\soilsrvw\REPORTS\Wilmington Ave over Compton Creek 53C-0907- Report.docx

Attach.

NORTH



Thomas Guide Page 734 Grid H4

	WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK SITE LOCATION MAP	COUNTY OF LOS ANGELES DEPARTMENT OF PUBLIC WORKS Geotechnical and Materials Engineering Division
		DATE: March 2013 | PREPARED BY: Megan Yanez | Figure 1

NORTH

Legend:

⊕ Approximate boring locations

▲ Approximate SCPT and CPT locations

WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK BORING LOCATION MAP

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
Geotechnical and Materials Engineering Division

DATE:	PREPARED BY:	
March 2013	Megan Yanez	Figure 2

Attachment A

Boring Logs and Soundings

Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes [✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-1	Date(s) Drilled: 1/28/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 1 of 3
Boring Location: 20' E of Wilmington Ave Median & 20' S of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/Lat: N 33° 53' 51.3" W 118° 14' 15.2"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA					DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)	Graphic Log		USCS	In-situ γ_d (pcf)	In-situ MC (%)	Sieve % Passing No. 4	Sieve % Passing No. 200	LL	PI	Type of Tests
0					■	4" AC / 12" CMB								
	2B		▨		▨	Sandy Lean Clay medium stiff, moist, brown, trace gravel	CL			95.4	58.4	31	12	CR MD SA
5	1R	⧄		3/3/5	▨	Lean Clay medium stiff to stiff, very moist, brown, trace silt and sand	CL							
10	3T	▯		3/2/3	▨	@10', moist		108.5	16.8					
15	4R	⧄		3/3/4	▨	@15', Lean Clay with Sand, moist		99.5	23.8	95.1	74.0	38	17	DS SA
20	5T	▯		7/12/15	░	Silty Sand medium dense, moist, brown	SM							
25														

LEGEND

⧄	California Ring (2.5 in. OD) Sample
⊠	California Ring (3 in. OD) Sample
▯	SPT (2 in. OD) Sample
▨	Bulk Sample
➡	Depth to invert
▽	Seepage Encountered During Drilling
▼	Groundwater Encountered During Drilling
———	Distinct Contact
- - -	Gradational or Uncertain Contact
γ_d	Dry Density
MC	Moisture Content

Types of Tests

CO - Consolidation	MD - Maximum Density
CR - Corrosion	PE - Permeability
DS - Direct Shear	SA - Sieve Analysis
EI - Expansion Index	SE - Sand Equivalence
HY - Hydrometer	TR - Triaxial

Note: This log contains observations and interpretations that are valid only for the specific date and location of the boring. Subsurface conditions vary between borings and with time. Material descriptions are derived using visual classification methods and may vary from descriptions/classifications based on laboratory testing.

Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes [✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-1	Date(s) Drilled: 1/28/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 2 of 3
Boring Location: 20' E of Wilmington Ave Median & 20' S of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/Lat: N33° 53' 51.3" W118° 14' 15.2"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA					DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)	Graphic Log		USCS	In-situ γ_d (pcf)	In-situ MC (%)	Sieve % Passing No. 4	Sieve % Passing No. 200	LL	PI	Type of Tests
25	6R			11/19/24	▨	Lean Clay hard, very moist, brown	CL	101.7	24.1	100	95.1	45	19	DS SA
30	7T			6/10/11	▨	@ 30', very stiff		99.4	26.6					
35	8R			9/15/19	▨									
40	9T			5/8/10	▨									
∇ 45	10R			13/26/50 (for 5")	▥	Silt with Sand hard, wet, brown perched water observed	ML	102.5	23.8	99.5	74.8			SA
50														

LEGEND

- California Ring (2.5 in. OD) Sample
- California Ring (3 in. OD) Sample
- SPT (2 in. OD) Sample
- ▨ Bulk Sample
- ➡ Depth to invert
- ∇ Seepage Encountered During Drilling
- ▼ Groundwater Encountered During Drilling
- ——— Distinct Contact
- – – – Gradational or Uncertain Contact
- γ_d - Dry Density
- MC - Moisture Content

Types of Tests

CO - Consolidation	MD - Maximum Density
CR - Corrosion	PE - Permeability
DS - Direct Shear	SA - Sieve Analysis
EI - Expansion Index	SE - Sand Equivalence
HY - Hydrometer	TR - Triaxial

Note: This log contains observations and interpretations that are valid only for the specific date and location of the boring. Subsurface conditions vary between borings and with time. Material descriptions are derived using visual classification methods and may vary from descriptions/classifications based on laboratory testing.

Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes [✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-1	Date(s) Drilled: 1/28/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 3 of 3
Boring Location: 20' E of Wilmington Ave Median & 20' S of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/Lat: N 33° 53' 51.3" W 118° 14' 15.2"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA				Graphic Log	DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)			USCS	In-situ γ_d (pcf)	In-situ MC (%)	Sieve % Passing No. 4	Sieve % Passing No. 200	LL	PI	Type of Tests
50	11T	▯		4/5/11		Silt very stiff, wet, brown	ML	95.8	28.3					
55	12R	⧄		15/29/41		Silty Sand dense, wet, grey	SM							
60	13T	▯		7/13/21										
65	14R	⧄		11/37/50 (for 3")		Well-Graded Sand very dense, wet, grey	SW							
70	15T	▯		12/9/22		@ 70', w/traces of silt		114.0	15.0					
75	16R	⧄		13/17/26		Silt hard, moist, dark grey (End of Boring @ 75')	ML							

LEGEND

⧄ California Ring (2.5 in. OD) Sample
▯ SPT (2 in. OD) Sample
➡ Depth to invert
——— Distinct Contact
⊠ California Ring (3 in. OD) Sample
▨ Bulk Sample
▽ Seepage Encountered During Drilling
▼ Groundwater Encountered During Drilling
– – – Gradational or Uncertain Contact
γ_d - Dry Density
MC - Moisture Content

Types of Tests
CO - Consolidation
CR - Corrosion
DS - Direct Shear
EI - Expansion Index
HY - Hydrometer
MD - Maximum Density
PE - Permeability
SA - Sieve Analysis
SE - Sand Equivalence
TR - Triaxial

Note: This log contains observations and interpretations that are valid only for the specific date and location of the boring. Subsurface conditions vary between borings and with time. Material descriptions are derived using visual classification methods and may vary from descriptions/classifications based on laboratory testing.

Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes [✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-2	Date(s) Drilled: 1/30/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 1 of 3
Boring Location: 25' W of Wilmington Ave Median & 50' N of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/Lat: N33° 53' 50.5" W118° 14' 15.9"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA					DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)	Graphic Log		USCS	In-situ γ_d (pcf)	In-situ MC (%)	Sieve % Passing No. 4	Sieve % Passing No. 200	LL	PI	Type of Tests
0					■	4” AC / 8” CMB								
	1B		▨		▨	Sandy Lean Clay very stiff, moist, dark brown, trace gravel (fill)	CL			97.4	51.3	33	13	CR SA
5	2T	▯		3/5/9	▨			115.4	15.4	98.0	61.0	35	19	SA
10	3R	⧅		8/9/12	▥	Silt very stiff, moist, brown and grey, trace fine-grained sand and clay	ML							
15	4T	▯		5/10/14	▥									
20	5R	⧅		9/18/23	▨	Sandy Lean Clay hard, moist, brown and grey, fine-grained sand	CL	112.9	18.0	91.7	65.1	34	12	DS SA
25														

LEGEND

- ⧅ California Ring (2.5 in. OD) Sample
- ☒ California Ring (3 in. OD) Sample
- ▯ SPT (2 in. OD) Sample
- ▨ Bulk Sample
- ➡ Depth to invert
- ▽ Seepage Encountered During Drilling
- ▼ Groundwater Encountered During Drilling
- —— Distinct Contact
- – – – Gradational or Uncertain Contact
- γ_d - Dry Density
- MC - Moisture Content

Types of Tests

CO - Consolidation	MD - Maximum Density
CR - Corrosion	PE - Permeability
DS - Direct Shear	SA - Sieve Analysis
EI - Expansion Index	SE - Sand Equivalence
HY - Hydrometer	TR - Triaxial

Note: This log contains observations and interpretations that are valid only for the specific date and location of the boring. Subsurface conditions vary between borings and with time. Material descriptions are derived using visual classification methods and may vary from descriptions/classifications based on laboratory testing.

Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462

Monitoring Well Installed: Yes [✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-2	Date(s) Drilled: 1/30/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 2 of 3
Boring Location: 25' W of Wilmington Ave Median & 50' N of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/Lat: N33° 53' 50.5" W118° 14' 15.9"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA					DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)	Graphic Log		USCS	In-situ γ_d (pcf)	In-situ MC (%)	Sieve % Passing No. 4	Sieve % Passing No. 200	LL	PI	Type of Tests
25	6T	▯		8/10/14	▨	Sandy Lean Clay very stiff, moist, brown and grey, trace fine-grained sand	CL							
30	7R	⧅		7/10/17	▨	@ 30' increased clay content								
35	8T	▯		8/8/13	▨	@ 35' clay, trace fine-grained sand								
40	9R	⧅		8/18/27	⁞	Sandy Silt dense, very moist, brown, fine-grained sand	ML	106.5	21.8	100.0	50.2			DS SA
▽ 45	10T	▯		6/14/18	⁞	@ 45' perched water observed								
50														

LEGEND

⧅ California Ring (2.5 in. OD) Sample	▯ SPT (2 in. OD) Sample
⧅ California Ring (3 in. OD) Sample	▨ Bulk Sample

➡ Depth to invert
▽ Seepage Encountered During Drilling
▼ Groundwater Encountered During Drilling
——— Distinct Contact
– – – Gradational or Uncertain Contact
γ_d - Dry Density
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Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
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SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works

Geotechnical and Materials Engineering Division

Boring No.: B-2	Date(s) Drilled: 1/30/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 3 of 3
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Long/Lat: N 33° 53' 50.5" W118° 14' 15.9"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA				Graphic Log	DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)			USCS	In-situ		Sieve % Passing		LL	PI	Type of Tests
								γ_d (pcf)	MC (%)	No. 4	No. 200			
50	11R	⧅		10/19/24		Silt hard, wet, grey, trace fine-grained sand	ML	90.4	32.3	100.0	97.6	49	19	
55	12T	▯		7/14/16		Silty Sand dense, wet, grey	SM							
60	13R	⧅		14/50 (for 5")		@ 60', increased silt content		96.9 102.1	28.4 24.4					
65	14T	▯		3/5/15		Well-Graded Sand medium dense, wet, grey, coarse sand	SW							
70	15R	⧅		19/38/50 (for 2')		@ 70', very dense								
75	16T	▯		13/17/26		Silty hard, moist, dark grey (End of Boring @ 75')	ML							

LEGEND

⧅ California Ring (2.5 in. OD) Sample
☒ California Ring (3 in. OD) Sample
▯ SPT (2 in. OD) Sample
▨ Bulk Sample
➡ Depth to invert
▽ Seepage Encountered During Drilling
▼ Groundwater Encountered During Drilling
—— Distinct Contact
– – – Gradational or Uncertain Contact
γ_d - Dry Density
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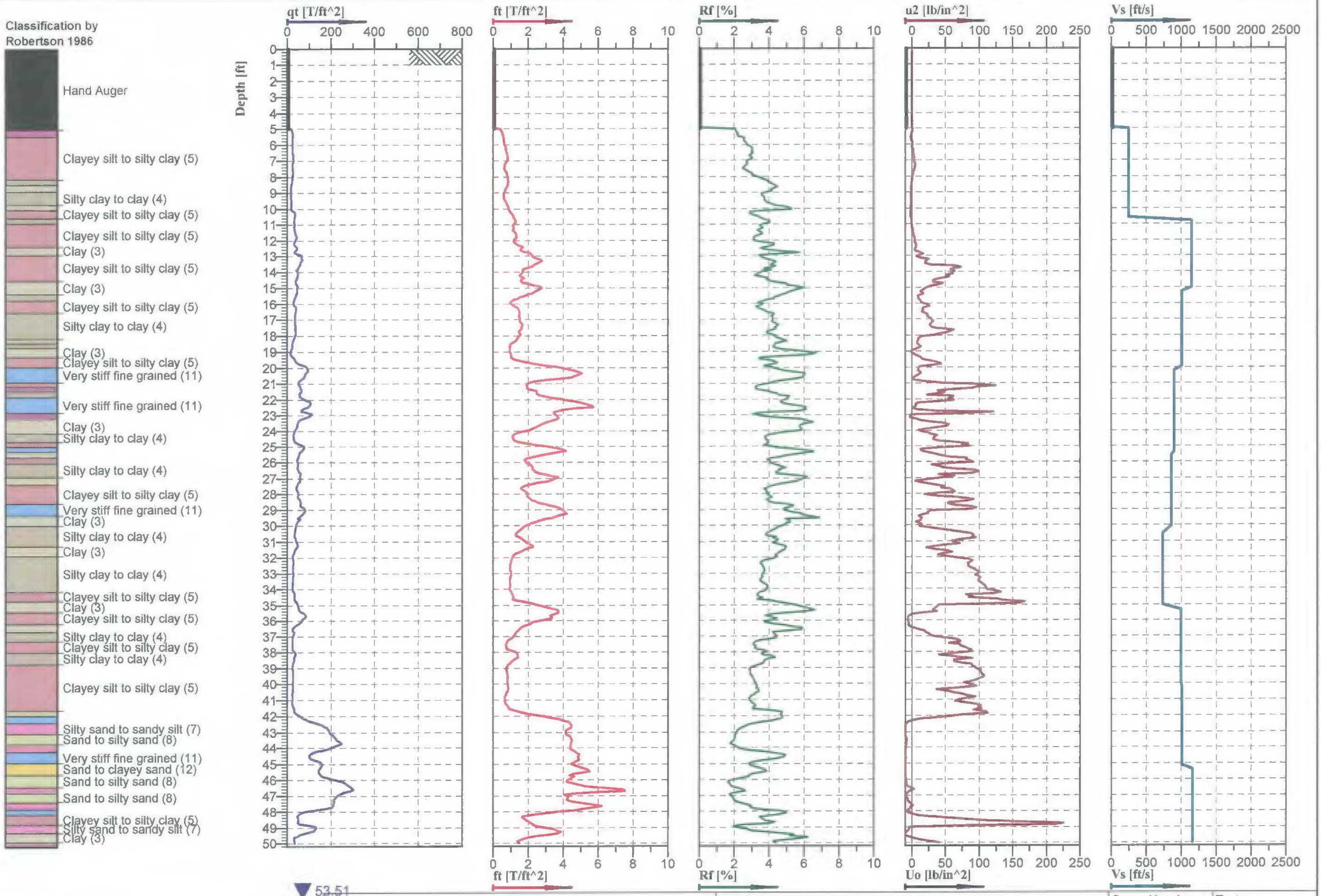
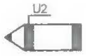
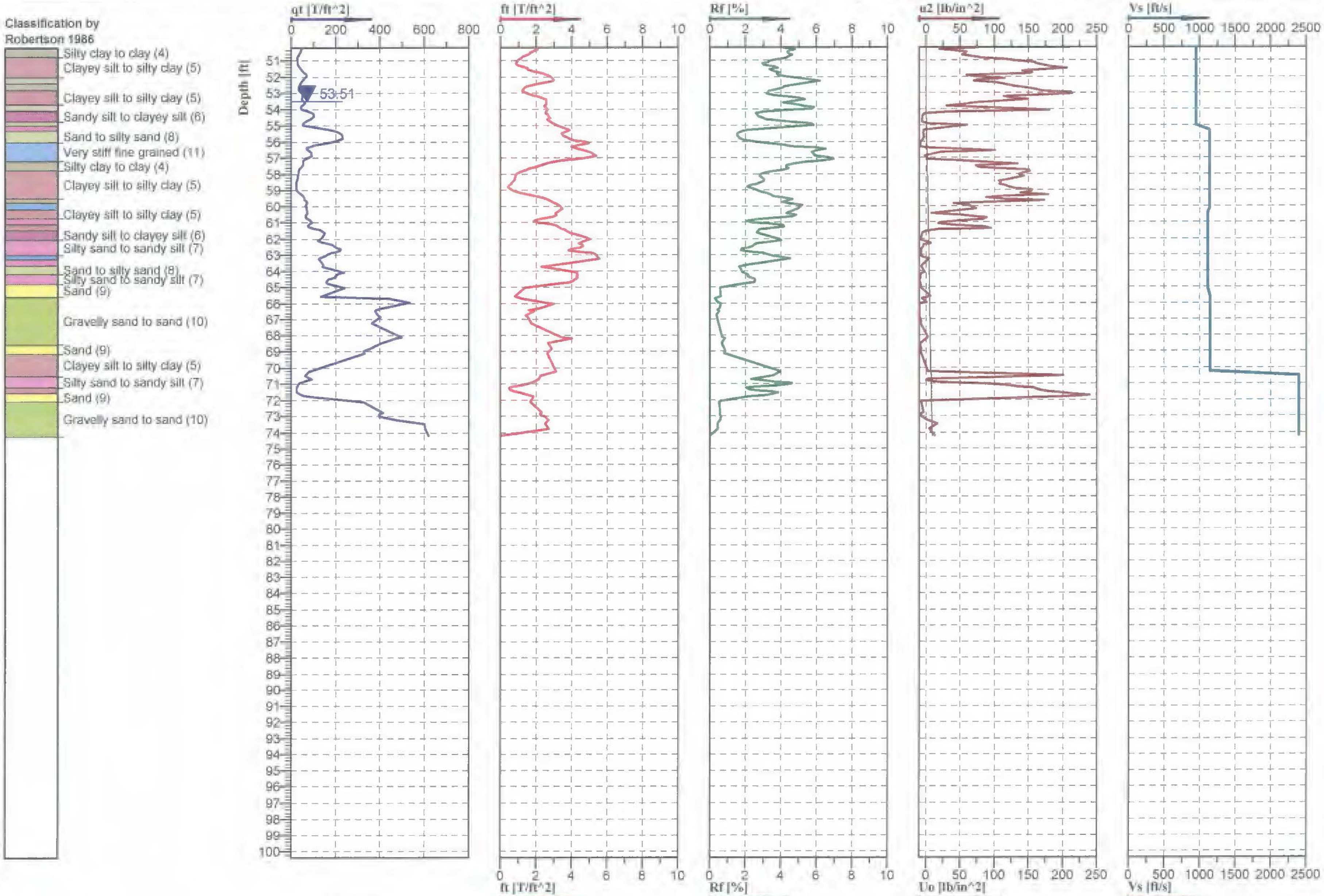
Note: This log contains observations and interpretations that are valid only for the specific date and location of the boring. Subsurface conditions vary between borings and with time. Material descriptions are derived using visual classification methods and may vary from descriptions/classifications based on laboratory testing.

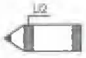




Cone No. 5583.101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

Location: Wilmington Bridge
Position:
Ground level:
Test no: SCPT-01
Project ID: XX220000462
Client: LADPW
Date: 29/Jan/2013
Scale: 1 : 100
Project: Wilmington Bridge SCPT
Page: 1/2
Fig:
File: CA29J1301C.csv





Cone No: 5583.101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

Location: Wilmington Bridge

Position:

Ground level:

Test no: SCPT-01

Project ID: XX220000462

Client: LADPW

Date: 29/Jan/2013

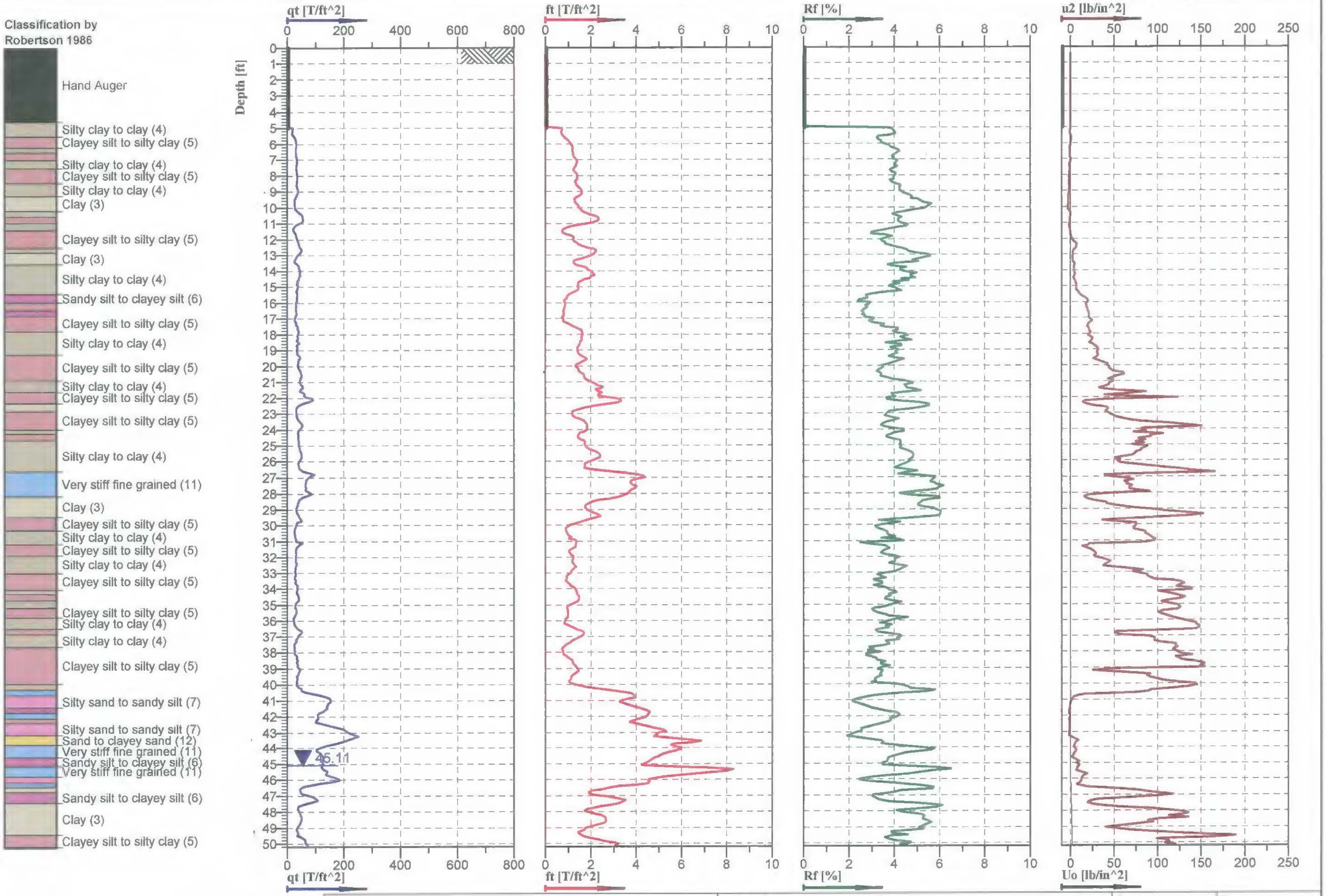
Scale: 1 : 100

Project: Wilmington Bridge SCPT

Page: 2/2

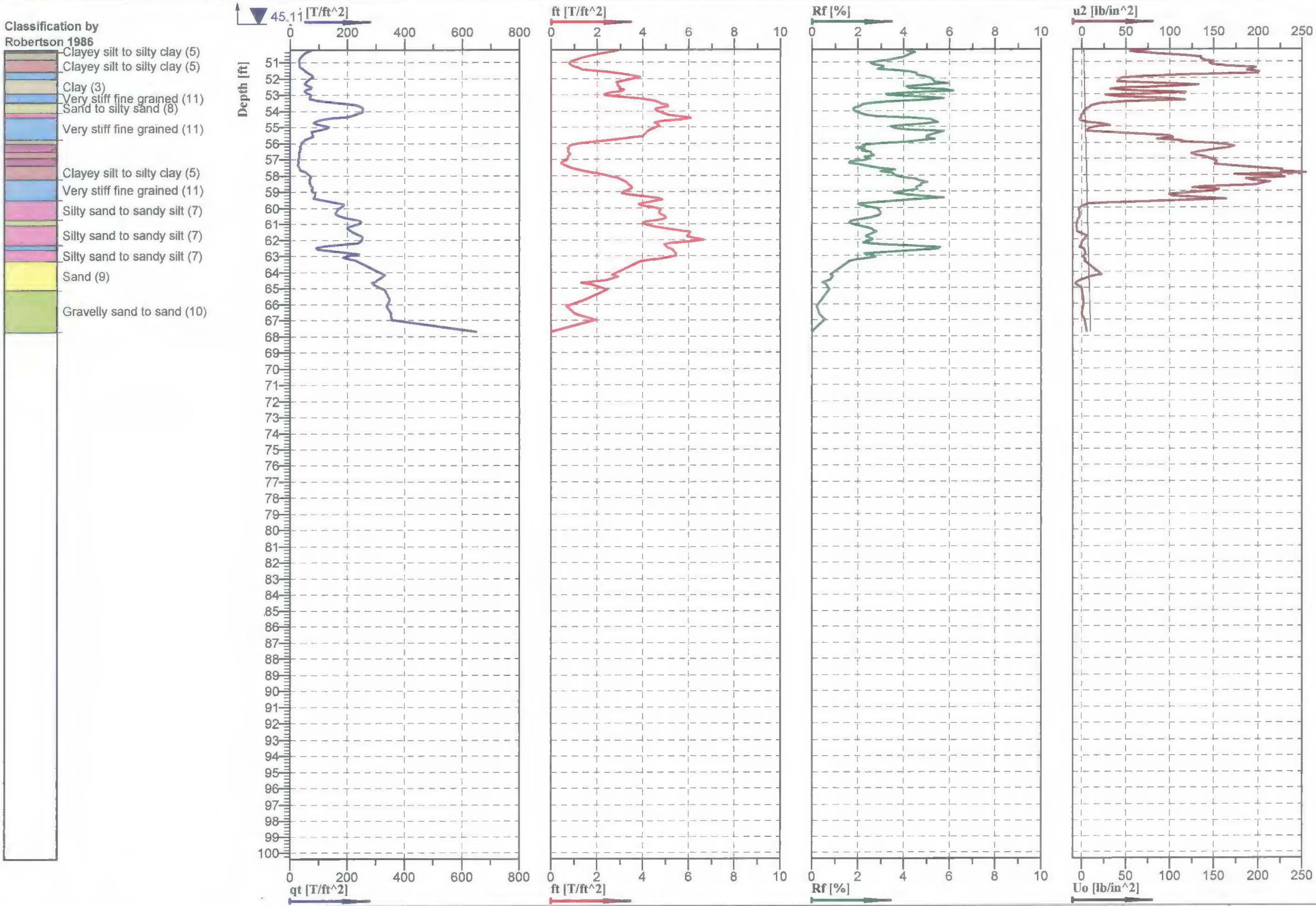
Fig:

File: CA29J1301C.csv



Cone No: 5583.101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

Location: Wilmington Bridge	Position:	Ground level:	Test no: CPT-02
Project ID: XX220000462	Client: LADPW	Date: 29/Jan/2013	Scale: 1 : 100
Project: Wilmington Bridge		Page: 1/2	Fig:
		File: CA29J1302C.cpd	



U2

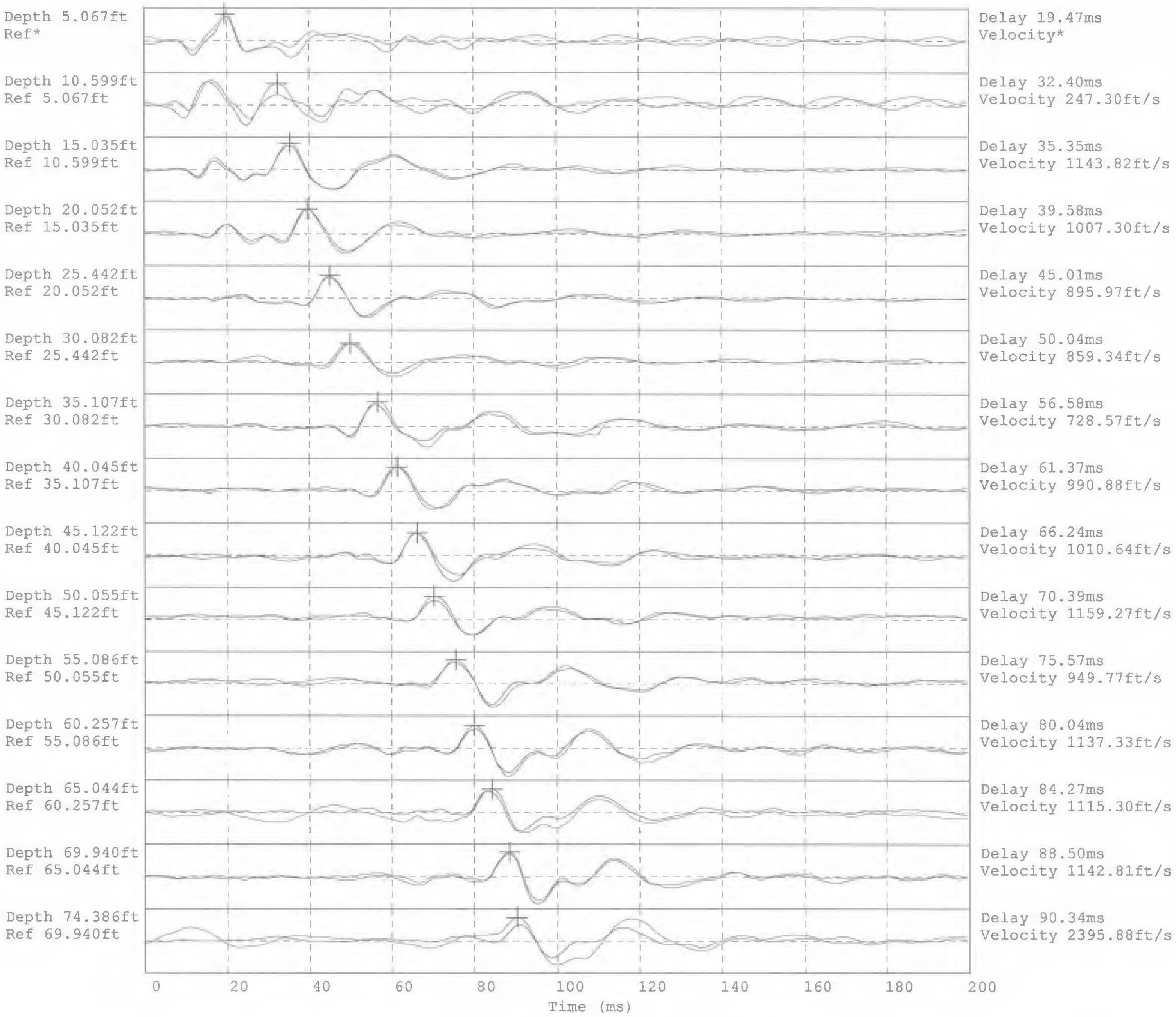
Cone No: 5583.101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

Location: Wilmington Bridge
Position:
Ground level:
Test no: CPT-02
Project ID: XX220000462
Client: LADPW
Date: 29/Jan/2013
Scale: 1 : 100
Project: Wilmington Bridge
Page: 2/2
Fig:
File: CA29J1302C.cpd

Attachment B

Seismic Shear Wave Velocity

SCPT-01 S-Wave Form
Pr. No. XX220000462



Hammer to Rod String Distance 3.3 (m)
* = Not Determined

Attachment C

Summary of Laboratory Testing

SUMMARY OF LABORATORY TEST RESULTS

Geotechnical Laboratory

PROJECT NAME: Wilmington Ave. Over Compton Creek
TECHNICIAN: JA-HA-EH
PCA: X220000462

ENGINEER: Yonah Halpern
DATE: 03/07/2013
PAGE: 1 OF 1

BORING/ SAMPLE	DEPTH (ft)	UNIFIED SOIL CLASSIFICATION					MOISTURE AND DRY DENSITY				DIRECT SHEAR				CHEMICAL				Permeability (ft/day)
B - S		Class.	ATTERBERG LIMITS		#4 % Pass	#200 % Pass	$\Upsilon\ d_{field}$ pcf	m.c.$_{field}$ %	$\Upsilon\ d_{maximum}$ pcf	m.c.$_{optimum}$ %	$\phi_{ultimate}$ Degree	$c_{ultimate}$ psf	$\phi_{maximum}$ Degree	$c_{maximum}$ psf	pH	Min. Resistivity (K ohm-cm)	Cl (ppm)	SO_4 (ppm)	
			LL	PI															
B1-2B	2-5	CL	31	12	95.4	58.4			127.0	11.3					7.35	1.6	2	0	
B1-3T	10-11.5						108.5	16.8											
B1-4R	15-16.5	CL	38	17	95.1	74.0	99.5	23.8			25	183	26	183					
B1-6R	25-26.5	CL	45	19	100.0	95.1	101.7	24.1			22	0	27	300					
B1-7T	30-31.5						99.4	26.6											
B1-10R	45-46.5	ML			99.5	74.8	102.5	23.8											
B1-11T	50-51.5						95.8	28.3											
B1-15-T	70-71.5						114.0	15.0											
B2-1B	5-10	CL	33	13	97.4	51.3									7.80	1.8	3	45	
B2-2T	5-6.5	CL	35	19	98.0	61.0	115.4	15.4											
B2-5R	20-21.5	CL	34	12	91.7	65.1	112.9	18.0			23	300	28	776					
B2-9R	40-41.5	ML			100.0	50.2	106.5	21.8			31	10	35	167					
B2-11R	50-51.5	ML	49	19	100.0	97.6	90.4	32.3											
B2-13R	60-61.5	Top rings					96.9	28.4											
B2-13R	60-61.5	Bott.rings					102.1	24.4											

Appendix E

Water Quality Assessment Report

Water Quality Assessment Report

Wilmington Avenue Bridge over Compton Creek

Wilmington Avenue Bridge over Compton Creek
Los Angeles County, California
Wilmington Avenue and West School Street
District 7-LA-0-City of Compton
Bridge No. 53C0907 BRLS-5953(615)

February 2020

For individuals with sensory disabilities, this document is available in Braille, large print, on audiocassette, or computer disk. To obtain a copy in one of these alternate formats, please call or write to Caltrans, Attn: Shabnam Sheikh, Caltrans District 7, 100 S. Main Street, Los Angeles, California; (213) 897-0665 Voice, or use the California Relay Service TTY number, 1 (800) 735-2929.

Water Quality Assessment Report

Wilmington Avenue Bridge over Compton Creek Project
Los Angeles County, California
Wilmington Avenue and West School Street
District 7-LA-0-City of Compton
Bridge No. 53C0907 BRLS-5953(615)

February 2020

STATE OF CALIFORNIA
Department of Transportation

Prepared By: ______________________________ Date: 2/3/20

Danielle Thayer, Associate Environmental Planner
(310) 792-2690
El Segundo Office
GPA Consulting

Approved By: ______________________________ Date: ____________

Professional Content Reviewer, Title
Phone Number
Office Name
Partner Agency Name

Approved By: ______________________________ Date: ____________

Management Content Reviewer, Title
Phone Number
Office Name
Partner Agency Name

1.1 Executive Summary

The primary purpose of the Water Quality Assessment Report (WQAR) is to fulfill the requirements of the National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA), and provide information, to the extent possible, for the National Pollutant Discharge Elimination System (NPDES) permitting. This WQAR includes a discussion of the project, the physical setting of the project study area, and the regulatory framework with respect to water quality. It also provides data on existing water quality, surface water and groundwater resources within the project study area, describes water quality impairments and beneficial uses, identifies potential water quality impacts/benefits associated with the project, and recommends avoidance and/or minimization measures.

The County of Los Angeles, in coordination with the City of Compton, are proposing removal and replacement of the Wilmington Avenue Bridge over Compton Creek. The existing bridge includes two 11-foot-wide travel lanes and has been classified as structurally deficient due to extensive cracking and delamination of the bridge deck. The proposed bridge would be a 163-foot-long, 92-foot-wide, two-span precast pre-stressed concrete box beam structure supported by pile foundation. New bridge abutments would be constructed at approximately 15 feet behind the existing abutments/channel walls, which would be left in place with modifications to provide clearance to accommodate the new bridge superstructure. Pile drilling would be utilized at the abutment and pier locations. Full road closure would be required during project construction.

Compton Creek is a tributary of the Los Angeles River. The Compton Creek channel begins in the City of Los Angeles near Main Street and 107th Street, and flows south approximately 8.5 miles to the Los Angeles River in Rancho Dominguez. Beneficial uses of Compton Creek include groundwater recharge, municipal and domestic water supply, water contact recreation, noncontact water recreation, warm freshwater habitat, wetlands, and wildlife habitat. The creek has been listed for several pollutants on the Clean Water Act (CWA) 303(d) list; pollutants include benthic community effects, copper, indicator bacteria, lead, pH, trash, and zinc.

Project construction would last approximately 300 working days. Construction activities would include grading, demolition, pile drilling, excavation, bridge construction, and pavement installation. Project construction could result in temporary increases of pollutant loads due to construction activities. Avoidance and minimization measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, would be implemented as part of the project. Additionally, a Storm Water Pollution Prevention Plan (SWPPP) would be prepared to outline appropriate construction Best Management Practices (BMP) that would be implemented to prevent any pollutants from entering the creek within the project area.

The project would not result in substantial permanent changes to the line and grade of surface hydraulic conditions. The existing channel is completely lined with concrete and would remain channelized following project completion. The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions.

Proposed activities within Compton Creek would require coordination with, and permits from, several regulatory agencies, which include:

- Clean Water Act (CWA) Section 401 Water Quality Certification (Los Angeles Regional Water Quality Control Board (RWQCB))
- CWA Section 402 NPDES Permit (Los Angeles RWQCB, Order No. R4-2012-0175, NPDES Permit No. CAS004001) and Construction General Permit (State Water Resources Control Board (SWRCB), 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ)
- CWA Section 404 Pre-Construction Notification (U.S. Army Corps of Engineers (USACE), Nationwide Permit 14 for Multiple Crossings and Nationwide Permit 33 for Temporary Construction, Access, and Dewatering)
- California Fish and Game Code Section 1602 Streambed Alteration Agreement (California Department of Fish and Wildlife (CDFW))

Table of Contents

List of Figures

1 INTRODUCTION

1.1 Approach to Water Quality Assessment

The purpose of the Water Quality Assessment Report (WQAR) is to fulfill the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and to provide information for National Pollutant Discharge Elimination System (NPDES) permitting. The document includes a discussion of the proposed project, the general environmental setting of the project area, and the regulatory framework with respect to water quality; it also provides data on surface water and groundwater resources within the project area and the water quality of these waters, describes water quality impairments and beneficial uses, and identifies potential water quality impacts/benefits associated with the proposed project, and recommends avoidance and/or minimization measures for potentially adverse impacts.

As part of this analysis, reviews were conducted of the Water Quality Control Plan for the Los Angeles Region (Basin Plan), the FEMA Flood Insurance Rate Maps for Los Angeles County, Geotechnical Subsurface Exploration data, and hydraulic analysis modeling data. To determine the impacts on water quality, the increase in impervious surface area was calculated, and impacts of the construction activities were also considered.

1.2 No Build Alternative

The No Build Alternative would maintain the existing configuration of the Wilmington Avenue Bridge and would not result in improvements. The proposed project purpose and need would not be met, and operational and safety conditions (structural deficiency) would continue to worsen.

1.3 Build Alternative

1.3.1 History

The existing two-span steel girder bridge was built in 1938 and is currently supported by abutments and a middle pier. The existing bridge includes two 11-foot wide travel lanes, one 11-foot wide shoulder, and a 13-foot wide raised median.

1.3.2 Project Purpose and Need

The proposed project would correct existing bridge deficiencies, enhance vehicular safety on the bridge and improve transportation efficiency by enabling larger trucks to utilize the bridge. The project is being proposed because the existing steel girder bridge and middle pier have been determined to be structurally deficient due to extensive cracking and delamination of the bridge deck. The proposed project would include replacing the existing, steel girder bridge and pier with a new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, a new pier and new abutments.

1.3.3 Project Description

The proposed project would be located at Wilmington Avenue where it crosses over Compton Creek within the City of Compton (City) in southern Los Angeles County (County) (see **Figure 1**, Regional Location Map, and **Figure 2**, Project Location Map). The bridge replacement would be located within the South Gate U.S. Geological Survey (USGS) 7.5-minute quadrangle in Section 22, Township 3 South, Range 13 West. The area surrounding the existing bridge is largely developed with existing land uses comprised of residential and commercial development, existing right-of-way (ROW), as well as a concrete-lined flood control channel.

The proposed project would include demolition and construction activities. Generally, construction activities would include demolition, grading, pile drilling, installation of metal beam guardrail system, construction of bridge abutments, bridge pier reconstruction, reconstruction of sidewalks, drainage improvements (catch basins at driveway entrances) bicycle path reconstruction, roadway reconstruction to accommodate the raise in bridge elevation, and full road closures within project limits.

Under the proposed project, the existing two-span Wilmington Avenue Bridge over Compton Creek would be demolished. Specifically, the existing pier timber piles would be removed three feet below the finished grade, followed by the removal of the existing steel girders, cross brace members, reinforced concrete, asphalt pavement (bridge deck), and any excavated soil within the project limits of work. Specifically, the concrete bridge deck would be demolished by saw cutting and the steel girders would be removed by torch cutting before the transporting the fragmented pieces to the dump trucks using a crane. Once the bridge deck has been removed, all existing bridge bearing components would also be removed, including the concrete pier nose and abutments, which would be demolished using hoe rams and jackhammers.

The new concrete bridge pier would be constructed in the Compton Creek channel, at the same location as the existing pier. A new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. Bridge pier construction would involve the installation of cast-in-drilled-hole (CIDH) concrete piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations), construction of concrete pier footings and the stem wall. Specifically, a hydraulic crane and drill rig would be utilized to drill the holes and install the rebar cages, while a concrete truck, concrete pump, fork lifts and loaders would be needed to fill the drilled holes and construct the footings and stem wall. Cast-in-drilled-hole (CIDH) piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations) would support the new box beam structure. This stage would require pile driving, grading, construction of the bridge abutments and bridge pier reconstruction.

The new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place to accommodate clearance for the new bridge structure. The new bridge soffit (underside) would be raised approximately two feet higher than the existing bridge in order to meet the freeboard requirement. Similar to the construction of the bridge pier, the construction of the bridge abutments would involve the installation of CIDH concrete piles, pile caps, and backwalls, which would utilize a drill rig and hydraulic crane, while an excavator and crane would be utilized to install the formwork and the reinforcement for the pile caps. Additional equipment needed to install the pile caps and backwall includes forklifts, loaders, concrete pumps, and a concrete truck.

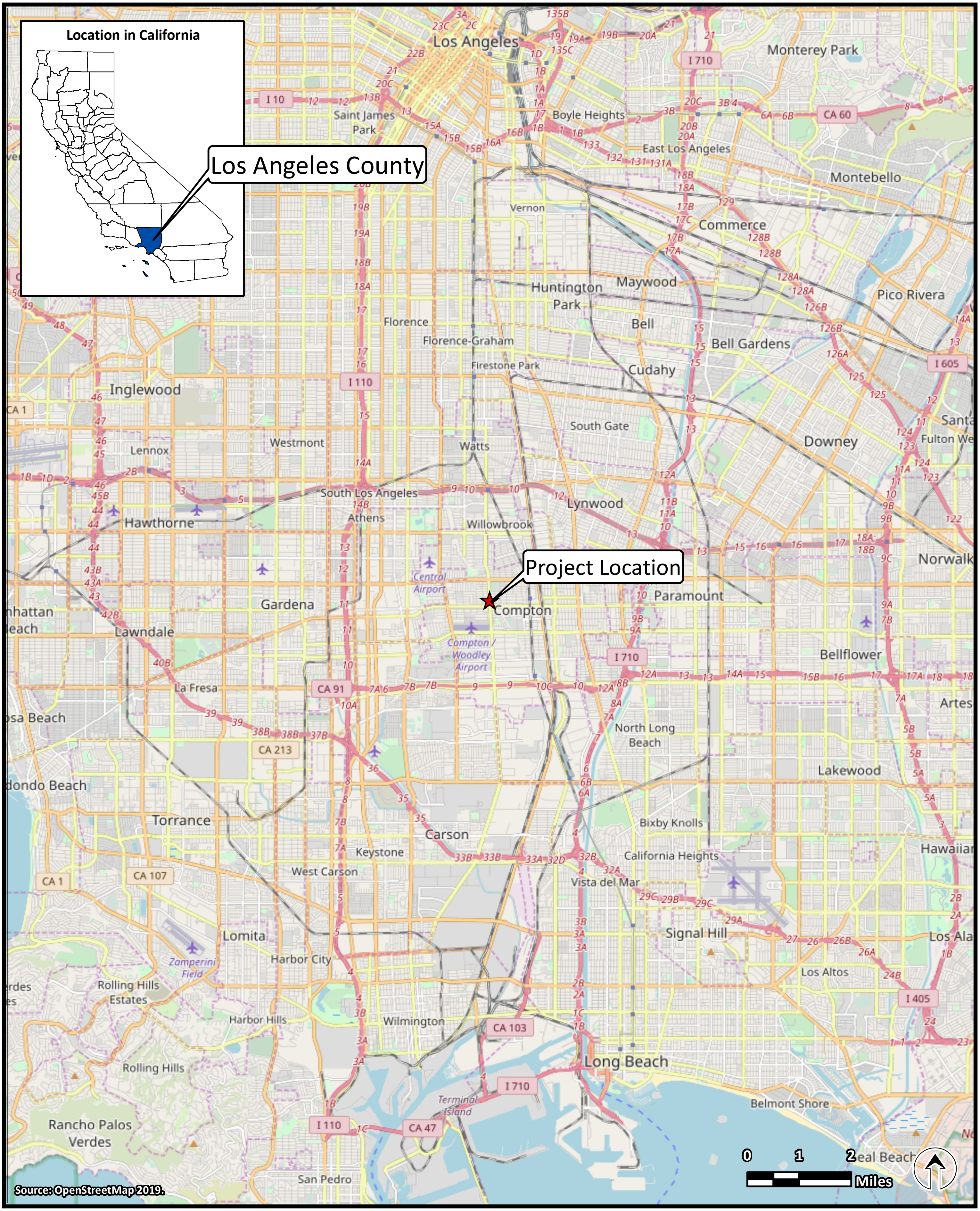


FIGURE 1. REGIONAL LOCATION MAP
Wilmington Avenue over Compton Creek

Public Works
LOS ANGELES COUNTY

FIGURE 2. PROJECT LOCATION MAP
Wilmington Avenue over Compton Creek

The construction of the bridge superstructure would involve the installation of precast/prestressed adjacent concrete box beams, a cast-in-place reinforced concrete deck, sidewalks, and bridge barriers. Installation of these superstructure components would utilize a hydraulic crane, concrete slipform machine, concrete truck, and concrete pump. After the superstructure has been constructed, the bike paths, and access ramp would be reconstructed and the roadway would be paved and restriped.

Project construction would also include the reconstruction of the sidewalks adjacent to the project limits. Furthermore, drainage improvements, such as catch basins, would occur on several private property driveways. Proposed construction activities would include installing CIDH concrete piles using a drill rig, hydraulic crane, concrete truck and concrete pump and installing a reinforced concrete slab using forklifts, loaders, concrete trucks, and a concrete pump.

Project construction would also include the replacement of the bike paths along the Compton Creek channel. Specifically, reconstruction of the bike paths would include 400 feet of bike path along the north side of the channel along Wilmington Avenue, where the bike path would be supported on a concrete slab structure with CIDH piles. An access road, approximately 150 feet long, would be reconstructed along the channel at the southwest corner to accommodate the two-foot change in bridge elevation.

1.3.4 Construction Schedule

Project construction is anticipated to occur between January 2021 and May 2022, and would last for approximately 300 working days. Construction would occur Monday through Friday from 7 a.m. to 3:30 p.m.

2 REGULATORY SETTING

2.1 Federal Laws and Requirements

Clean Water Act

In 1972 Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source unlawful unless the discharge is in compliance with a NPDES permit. Known today as the Clean Water Act (CWA), Congress has amended it several times. In the 1987 amendments, Congress directed dischargers of stormwater from municipal and industrial/construction point sources to comply with the NPDES permit program. Important CWA sections are:

- Sections 303 and 304 require states to promulgate water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity, which may result in a discharge to waters of the U.S., to obtain certification from the State that the discharge will comply with other provisions of the act. (Most frequently required in tandem with a Section 404 permit request. See below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. The Federal Environmental Protection Agency delegated to the California State Water Resources Control Board (SWRCB) the implementation and administration of the NPDES program in California. The SWRCB established nine Regional Water Quality Control Boards (RWQCBs). The SWRCB enacts and enforces the Federal NPDES program and all water quality programs and regulations that cross Regional boundaries. The nine RWQCBs enact, administer and enforce all programs, including NPDES permitting, within their jurisdictional boundaries. Section 402(p) requires permits for discharges of stormwater from industrial, construction, and Municipal Separate Storm Sewer Systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S, including wetlands. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide permits. 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 authorize a variety of minor project activities with no more than minimal effects.

There are also two types of Individual permits: Standard Individual permit and Letter of Permission. Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE’s Individual permits. For Standard Individual permit, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency’s (EPA) Section 404 (b)(1) Guidelines (U.S. EPA Code of Federal Regulations [CFR] 40 Part 230), and whether permit approval is in the public interest. The 404(b)(1) Guidelines were developed by the U.S. EPA in conjunction with USACE and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA), to the proposed discharge that would have less effects on waters of the U.S., and not have any other significant adverse environmental consequences. Per the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures have been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause “significant degradation” to waters of the U.S. In addition, every permit from the USACE, even if not subject to the 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4.

2.2 State Laws and Requirements

Porter-Cologne Water Quality Control Act

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

The SWRCB and RWQCBs are responsible for establishing the water quality standards as required by the CWA, and regulating discharges to protect beneficial uses of water bodies. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions, and then set standards necessary to protect these uses. Consequently, the water quality standards developed for particular water body segments are based on the designated use and vary depending on such use. Water body segments that fail to meet standards for specific pollutants are included in a Statewide List in accordance with CWA Section 303(d). If a Regional Board determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-source point controls (NPDES permits or Waste Discharge Requirements), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed. The SWRCB implemented the requirements of CWA Section 303(d) through Los Angeles County’s MS4 Permit, as it includes specific TMDLs for which the County is the named stakeholder.

State Water Resources Control Board and Regional Water Quality Control Boards

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

National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of stormwater dischargers, including MS4s. The U.S. EPA defines an MS4 as “any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that are designed or used for collecting or conveying stormwater.” The SWRCB has identified Los Angeles County as an owner/operator of an MS4 pursuant to federal regulations. The County’s MS4 permit covers all County rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

Construction General Permit

The State’s General Permit (NPDES No. CAS000002, SWRCB Order No. 2009-0009-DWQ adopted on November 16, 2010) became effective on February 14, 2011 and was amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. The permit regulates stormwater discharges from construction sites which result in a Disturbed Soil Area (DSA) or one acre or greater, and/or smaller sites that are part of a larger common plan of development.

For all projects subject to the CGP, the applicant is required to hire a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD) to develop and implement an effective SWPPP. All Project Registration Documents, including the SWPPP, are required to be uploaded into the SWRCB’s on-line Stormwater Multiple Application and Report Tracking System (SMARTS), at least 30 days prior to construction.

Section 401 Permitting

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

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

2.3 Regional and Local Requirements

Basin Plan for the Los Angeles Region

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

The Basin Plan lists the beneficial uses of surface waters and groundwaters in the region. Beneficial uses are uses that may be protected against quality degradation. These uses include and are not limited to domestic, municipal, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. The beneficial uses of surface waters and groundwaters in the basin are designated in the water quality control plans.

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

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

Phase I of the SWRCB’s MS4 program, issued in 1990, requires medium and large cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges. A municipal NPDES stormwater permit was issued to the County of Los Angeles and 84 incorporated cities (with the exception of the City of Long Beach) under Order No. R4-2012-0175, NPDES Permit No. CAS004001 by the Los Angeles RWQCB on November 8, 2012 (Los Angeles Regional Water Quality Control Board 2012).

Los Angeles County Code and Flood Control District Code

The Los Angeles County Code applies to the unincorporated areas that are directly affected by the Build Alternatives. Chapter 21 (Storm Water and Runoff Pollution Control) sets forth standards to regulate the stormwater and non-stormwater discharges to the facilities of the Los Angeles County Flood Control District to protect those facilities, the water quality of the waters in and downstream of those facilities, and the quality of the water that is being stored in underground water-bearing zones (County of Los Angeles 2013).

Los Angeles County General Plan

The *Los Angeles County General Plan* (County’s General Plan) contains the County’s goals related to land use and is designed to serve as the basis for development decisions. The following objective and policy from the County’s General Plan, Conservation and Open Space Element are applicable to the project (County of Los Angeles 1980):

- Objective: To conserve water and protect water quality.
- Policy 5: Encourage the maintenance, management, and improvement of the quality of imported domestic water, groundwater supplies, natural runoff, and ocean water.

The Greater Los Angeles County Integrated Regional Water Management Plan

The Greater Los Angeles County Region Integrated Regional Water Management group finalized the *Greater Los Angeles County Region Integrated Regional Water Management Plan* in 2014. Integrated Regional Water Management Plans are regional plans designed to improve collaboration in water resources management. The first Integrated Regional Water Management Plan for the Greater Los Angeles County Region Integrated Regional Water Management group was published in 2006 following a multiyear effort among water retailers, wastewater agencies, stormwater and flood managers, watershed groups, the business community, tribes, agriculture, and nonprofit stakeholders to improve water resources planning in the Los Angeles Basin. The plan provides a mechanism for: (1) coordinating, refining, and integrating existing planning efforts within a comprehensive, regional context; (2) identifying specific regional and watershed-based priorities for implementation projects; and (3) providing funding support for the plans, programs, projects, and priorities of existing agencies and stakeholders.

Los Angeles River Master Plan

Compton Creek is a tributary of the Los Angeles River. In July 1991, the Los Angeles County Board of Supervisors directed the County Departments of Public Works, Parks and Recreation, and Regional Planning to coordinate all interested public and private parties in the planning, financing, and implementation efforts of the *Los Angeles River Master Plan* (Los Angeles County Public Works 1996). The master plan identifies ways to enhance and revitalize the publicly owned rights of way along the Los Angeles River and Tujunga Wash.

The Compton Creek Master Plan 2006

The *Compton Creek Master Plan* was developed in 2006 to establish a vision for the future uses and needs of Compton Creek. The plan includes several design concepts for Compton Creek and surrounding land, which includes recreation opportunities, stormwater management, art, safety, and potential events and partnerships.

3 AFFECTED ENVIRONMENT

3.1 General Environmental Setting

3.1.1 Population and Land Use

Land use is an important factor in water quality. Surrounding land uses affect the quality and quantity of stormwater runoff that results from a precipitation event. Urbanized areas typically include greater proportions of impervious surface area, which could result in greater runoff potential and pollutant loads. The project area is in the City of Compton and is surrounded by low density residential, mixed use, and general commercial land uses. The project area includes and is adjacent to an existing transportation corridor, single-family residential homes, automotive and retail businesses, and open vacant land. A paved trail runs along the east side of the creek and is separated from the channel by chain-link fencing.

The project area overlaps with a vacant parcel, approximately one acre in size, and is directly southeast of the Compton Boulevard and Compton Creek intersection. Additionally, there are several parks and open spaces near the project area. Walter R. Tucker Park includes approximately four acres of open space and is 0.2 mile to the south of the project area. A second park, approximately one acre in size, is approximately 0.3 mile to the southwest of the project area. The Davis Middle School property includes a large recreational field that extends approximately 13.1 acres and is 0.3 mile to the north of the project area. Compton High School includes three recreational fields that are 10.3 acres in total, approximately 0.4 mile to the southeast of the project area.

3.1.2 Topography

California is divided into 11 geomorphic provinces, which are naturally defined geologic regions that display a distinct landscape or landform. The project area is in the central portion of the Peninsular Ranges geomorphic province. The Peninsular Ranges province is distinguished by northwest-trending mountain ranges and valleys following faults branching from the San Andreas Fault (California Geological Survey 2002). The Peninsular Ranges are bound to the east by the Colorado Desert and extend north locally to the Santa Monica Mountains, west into the submarine continental shelf, and south to the California state line.

The topography of the project area and surrounding land uses is mostly flat. Compton Creek is a completely concrete-lined rectangular channel with an approximately 0.1% bottom grade. Areas adjacent to the channel include a slight slope towards the channel.

3.1.3 Hydrology

3.1.3.1 Regional Hydrology

The Los Angeles RWQCB, Region 4, oversees the protection of surface water and groundwater quality in the Los Angeles Region, where the project study area is located (Los Angeles Regional Water Quality Control Board 2014). The Los Angeles Region encompasses 10 Watershed Management Areas, which generally consist of a single large watershed within which exist smaller subwatersheds that are tributary to the main river. The project area is in the Los Angeles River Watershed, as shown on **Figure 3**, Watershed Map.

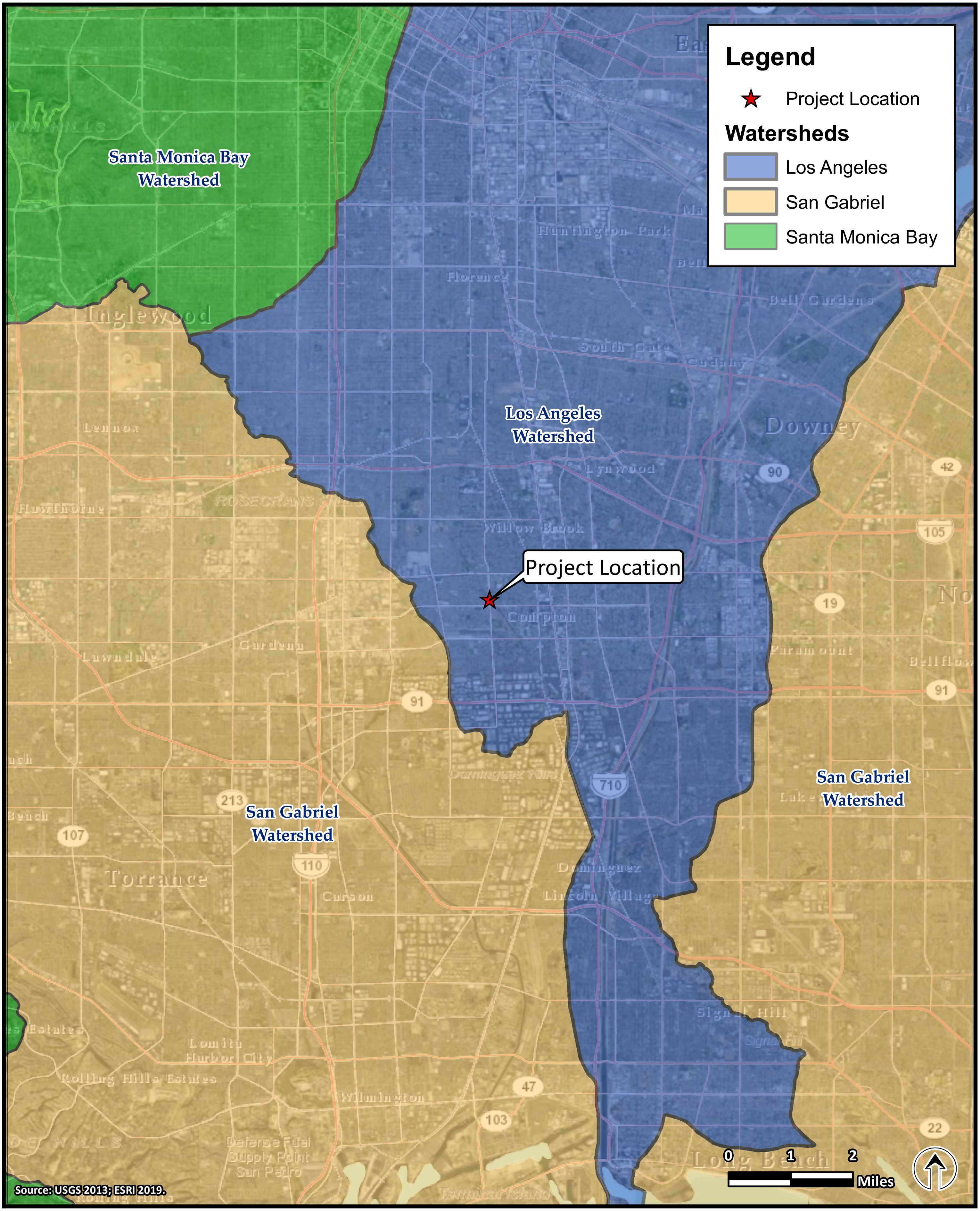


FIGURE 3. WATERSHED MAP
Wilmington Avenue over Compton Creek

The Los Angeles River Watershed is one of the largest in the region, at 824 square miles, with almost half of that covered by forest or open space, including the area near the headwaters, which originate in the Santa Monica, Santa Susana, and San Gabriel mountains (California State Water Resources Control Board 2018). The rest of the watershed is intensely urbanized, and the river itself is highly modified, having been lined with concrete along most of its length by the USACE. The project area is in the Compton Creek subwatershed of the Los Angeles River Watershed (California Department of Transportation 2019).

3.1.3.2 Local Hydrology

3.1.3.2.1 Precipitation and Climate

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

Precipitation in the project area in the year 2018 was approximately 6.94 inches, as measured by the Hawthorn Municipal Airport weather station (National Oceanic Atmospheric Administration 2018). The project area does not receive snowfall.

3.1.3.2.2 Surface Waters

Compton Creek is a tributary of the Los Angeles River. These waterways are shown on **Figure 4**, Surface Waters Map. The Compton Creek channel begins in the City of Los Angeles near Main Street and 107th Street, and flows south approximately 8.5 miles to the Los Angeles River in Rancho Dominguez (University of California Cooperative Extension 2019). The portion of Compton Creek Channel in the project area is owned and operated by the Los Angeles County Flood Control District. The creek has historically received water from surrounding freshwater marshes and willow-cottonwood forest. The creek landscape is now highly urbanized and is mostly channelized within a concrete box. The lower 2.7 miles of creek is reinforced by concrete along the sides and has an earthen bottom that supports wetland habitat. This portion of the creek begins approximately 1.4 miles to the southeast from the project area.

Beneficial uses of Compton Creek include groundwater recharge, municipal and domestic water supply, water contact recreation, noncontact water recreation, warm freshwater habitat, wetlands, and wildlife habitat (California Department of Transportation 2019). The creek is not considered a sediment-sensitive waterbody. The creek has been listed for several pollutants on the CWA 303(d) list; pollutants include benthic community effects, copper, indicator bacteria, lead, pH, trash, and zinc.

The project area is at a high point on Wilmington Avenue, and the surface water runoff generally follows both north and south away from the Prairie Avenue Bridge. The flow heading north is collected by the catch basin located at Wilmington Avenue and Palmer Street, approximately 400 feet north of the bridge. The flow heading south is collected by two catch basins located at Wilmington Avenue and School Street, approximately 100 feet south of the bridge.

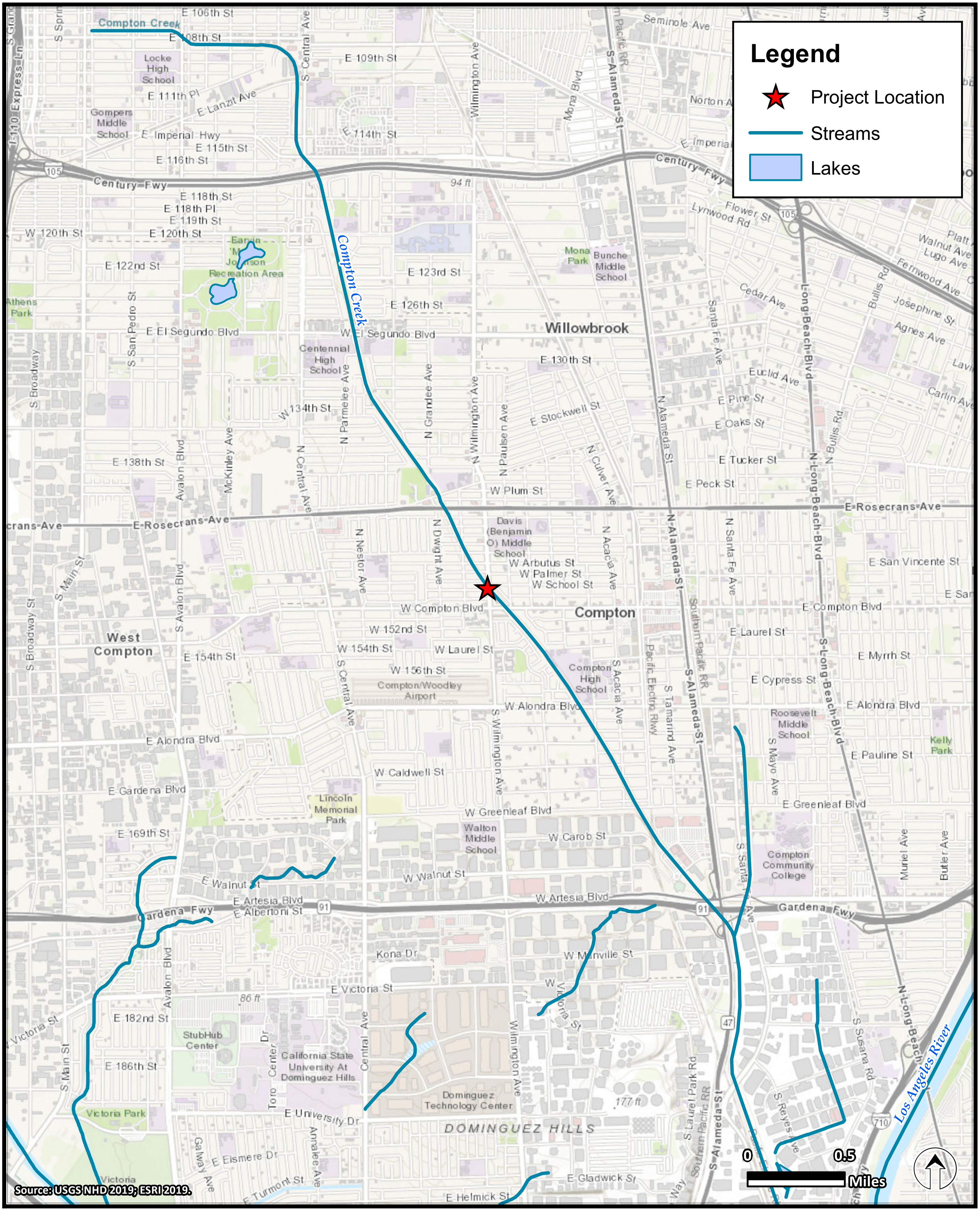


FIGURE 4. SURFACE WATERS MAP
Wilmington Avenue over Compton Creek

3.1.3.2.3 Floodplains

The project area is included in Panel 1815F of the Federal Emergency Management Agency (FEMA) Flood Insurance Risk Map (FIRM) for Los Angeles County, California. The project area is identified as Zone X, which is defined as an area determined to be outside of the 0.2 percent annual chance floodplain (see **Figure 5**, Flood Hazard Zones Map). Therefore, the project area is not considered to be within a floodplain. The Los Angeles River floodplain is approximately 0.4 mile to the east of the project area.

3.1.3.2.4 Municipal Supply

The City of Compton's water supply is a blend of mostly groundwater from the Central Basin groundwater basin and surface water imported by the Metropolitan Water District of Southern California (MWD). MWD's imported water sources are a blend of State Water Project water from Northern California and water from the Colorado River Aqueduct. The City utilizes eight groundwater wells to pump potable water from a natural underground reservoir. The nearest groundwater well to the project area is well number 870H approximately 0.4 mile to the northeast (Los Angeles County Department of Public Works n.d.). The City also has three imported water connections that help supplement the City's water demands.

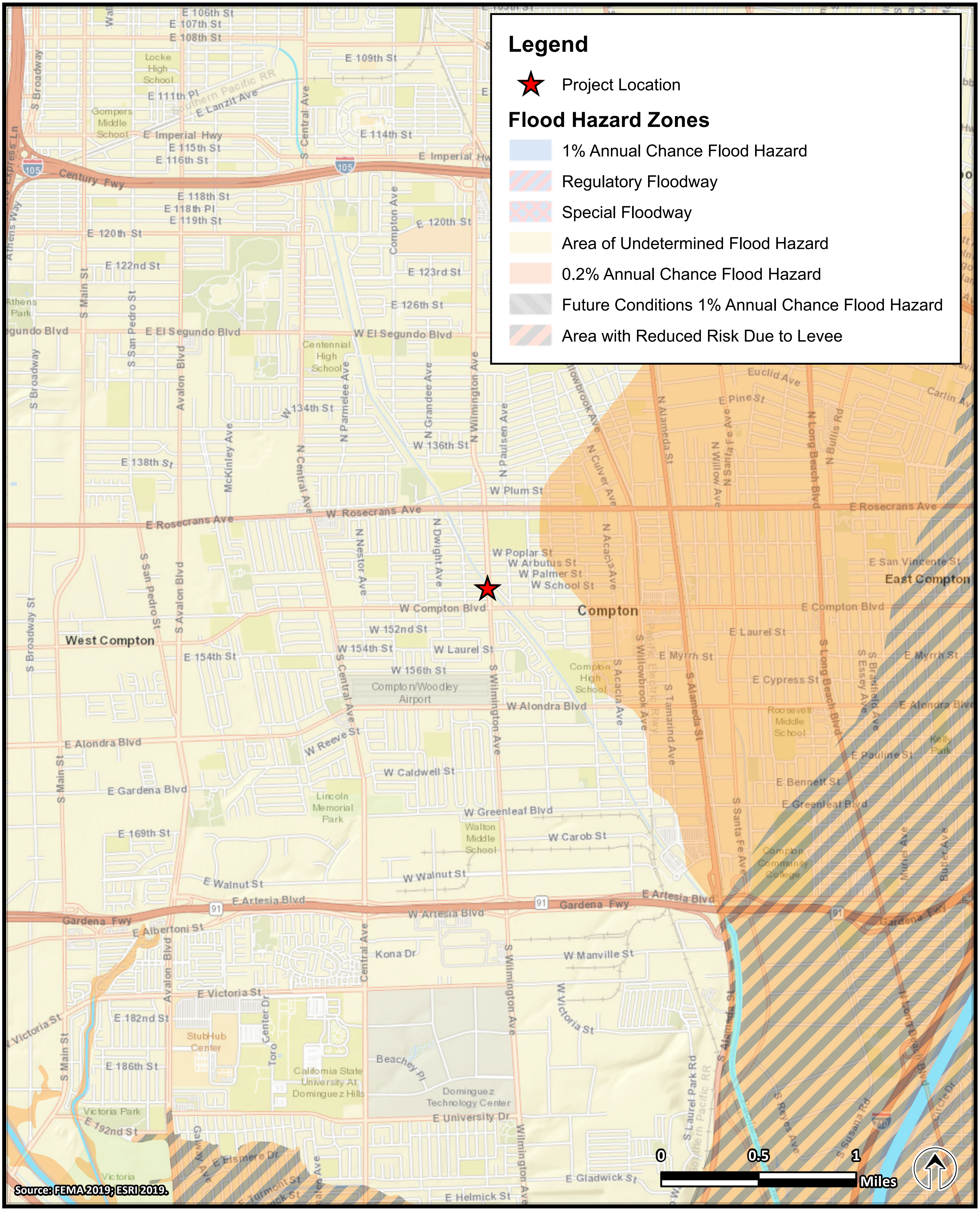
3.1.3.3 Groundwater Hydrology

The classification system for groundwater was developed by the California Department of Water Resources (CDWR), and divides groundwaters into hydrologic regions (HR), basins, and subbasins (California Department of Water Resources 2003a). HRs are areas defined by physical hydrologic features such as watershed boundaries (California Department of Conservation 2010).

The project area is in the South Coast HR, which is bounded by the Pacific Ocean to the west, the crest of the San Jacinto Mountains to the east, the crest of the Transverse Ranges through the San Gabriel and San Bernardino mountains to the north, and the international boundary with the Republic of Mexico to the south. The South Coast HR contains the San Fernando, San Gabriel, Santa Ana River, and Santa Clara River valleys (California Department of Water Resources 2003b). The South Coast HR includes all of Orange County, most of San Diego and Los Angeles Counties, parts of Riverside, San Bernardino, and Ventura Counties, and a small amount of Kern and Santa Barbara Counties.

The South Coast HR has 56 delineated groundwater basins. Twenty-one basins are in subregion 4 (Los Angeles), eight basins in subregion 8 (Santa Ana), and 27 basins in subregion 9 (San Diego) (California Department of Water Resources 2003b). The project area is in the Central Groundwater Subbasin of the South Coast HR. The Central Subbasin extends over approximately 177,000 acres and occupies a large portion of the southeastern part of the Coastal Plain of Los Angeles Groundwater Basin.

The depth of groundwater in the project area is approximately 45 feet below ground surface (bgs). Surface flows through Whittier Narrows are the major source of replenishment of the groundwater supply in the Central Subbasin. Groundwater also enters from surface and subsurface flow, and percolation of precipitation, stream flow, and imported and recycled water (California Department of Water Resources 2004b). Percolation is limited in some areas because of the number of paved surfaces.



Source: FEMA 2019; ESRI 2019.

Public Works
LOS ANGELES COUNTY

FIGURE 5. FLOOD HAZARD ZONES MAP
Wilmington Avenue over Compton Creek

Water levels have historically varied over a range of about 5 to 25 feet since 1961. Most water wells show levels in 1999 that are in the upper portion of their recent historical range. Beneficial uses for groundwater supply from the Central Subbasin include municipal and domestic supply, industrial process supply, industrial service supply, and agricultural supply.

3.1.4 Geology/Soils

The project area is within the Los Angeles Basin, which is an actively subsiding basin bound by the Santa Monica and San Gabriel mountains to the north, the Santa Ana Mountains to the east, and the Palos Verdes Hills to the south (United States Geological Survey 1965). The project area is on the border of the Southwestern and Central blocks of the Los Angeles Basin. The project area is underlain by Quaternary nonmarine terrace deposits to the west of Compton Creek and Alluvium to the east of the creek (California Department of Conservation 1962). Quaternary rocks include unconsolidated (i.e., loose materials such as clay and sand) and semi consolidated sediments that are formed from alluvium, lake, playa, and terrace deposits and are mostly nonmarine in origin.

The soil-erodibility factor (K) represents: (1) the susceptibility of soil or surface material to erosion, (2) the transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff, although these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high runoff rates and large runoff volumes.

The project area has a K-factor rating of 0.32, which means that underlying soil is medium-textured and yields runoff at a moderate rate. However, the creek is entirely paved with no potential for soil erosion within the channel.

3.1.5 Biological Communities

A *Natural Environment Study Minimal Impacts* (NESMI) was prepared to evaluate potential biological impacts that could occur as a result of the project (Dudek 2019). The following discussion incorporates findings from the NESMI.

The project area is surrounded by urban development and adjacent to a variety of land uses including residential and commercial. The project area also includes a recreational trail. Vegetation communities and land covers found within the project area are entirely non-native and non-natural land covers comprised of urban/developed land, disturbed habitat, ornamental vegetation, as well as concrete-lined channels associated with Compton Creek.

Areas of potential jurisdiction were evaluated according to the USACE, RWQCB, and CDFW criteria as part of the *Natural Environment Study Minimal Impacts* (NESMI) (GPA Consulting 2019). Within the project area, Compton Creek is a rectangular concrete-lined flood control channel devoid of vegetation in the channel bottom with a clear demarcation of the potential limits of regulatory agency jurisdiction. The limits of jurisdiction for channelized rectangular channels are defined as the channel bottom for USACE and RWQCB, and the top of the channel bank or vertical wall for CDFW. Channels with vertical concrete walls have the same limit of jurisdiction for all three regulatory agencies. Therefore, the project area contains regulated non-wetland Waters of the U.S. and State. Temporary and permanent impacts to waters of the U.S. and State are anticipated to occur as a result of the project. Therefore, the project would require a Section 404 Permit from USACE, a Section 401 Water Quality Certification from the RWQCB, and a 1600 Streambed Alteration Agreement from CDFW.

3.1.5.1 Aquatic Habitat

The proposed project is centered on Compton Creek (United States Geological Survey [USGS] Hydrologic Unit Code [HUC] 12: 180701050402), a north-south trending, USGS intermittent watercourse, and tributary to the Los Angeles River (USGS HUC8: 18070105) (USGS 2019) (United States Geological Survey 2019). Compton Creek within the project area conveys flow from upstream headwaters, through a heavily urbanized portion of the southern Los Angeles Basin, and eventually converges with the Los Angeles River approximately four miles southeast of the project area. Within the project area, Compton Creek is a rectangular concrete-lined flood control channel devoid of vegetation in the channel bottom with a clear demarcation of the potential limits of regulatory agency jurisdiction.

3.1.5.1.1 Special Status Species

Thirty-eight special-status plant species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, and Los Alamitos) or included within the United States Fish and Wildlife Service (USFWS) Information Planning and Conservation (IPaC) Trust Resource List for the proposed project. Potential habitat was determined to be absent for all of the thirty-eight species due to the heavily urbanized nature of the project area.

Forty-seven special-status wildlife species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, and Los Alamitos) (California Department of Fish and Wildlife 2019, United States Fish and Wildlife Service 2019, National Marine Fisheries Service 2016). Thirteen of these species are federally- and/or State-listed (or proposed for listing) as endangered or threatened species. Potential habitat was determined to be absent for forty-four species. Of the three species determined to have potential habitat present, none were determined to have a moderate or higher potential to occur.

3.1.5.1.2 Stream/Riparian Habitats

Streams are defined in the California Code of Regulations (CCR) (14 CCR Section 1.72) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and that support fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” Under the California Fish and Game Code, the limits of CDFW’s jurisdiction within streams and other drainages extends from the top of the stream bank to the top of the opposite bank, to the outer drip line in areas containing riparian vegetation, and/or within the 100-year floodplain of a stream or river system containing fish or wildlife resources. Compton Creek Channel is completely lined with concrete in the project area. The lower 2.7 miles of creek, which is outside the project area, is reinforced by concrete along the sides and has an earthen bottom that supports wetland habitat. This portion of the creek begins approximately 1.4 miles to the southeast from the project area. Compton Creek is considered a stream for the purposes of this report per 14 CCR Section 1.72.

3.1.5.1.3 Wetlands

CDFW has jurisdictional authority over waters of the state, including wetlands. In practice, CDFW follows the USFWS definition of wetlands in Cowardin's Classification of Wetlands and Deepwater Habitats of the United States: "Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: 1) at least periodically, the land supports hydrophytes; 2) the substrate is predominantly undrained hydric soil; and 3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year" (Cowardin, Carter, Golet, & LaRoe, 1979). The project area does not contain wetlands that meet the USFWS definition of wetlands.

3.1.5.1.4 Fish Passage

An official species list was obtained through email from the National Marine Fisheries Service (NMFS), and the species listed were considered for their potential to occur within the BSA. The NMFS species list is provided in Appendix B of the NESMI. One federal endangered/state fully protected and state endangered fish species, the Mohave tui chub (*Siphateles bicolor mohavensis*), is known to occur in areas surrounding the BSA. However, the fish species is not expected to occur in the project area because suitable associated habitat is not present in the BSA. In addition, the project area does not include Essential Fish Habitat (National Marine Fisheries Service 2019). Therefore, the project area does not include fish habitat or support fish passage.

4 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

Impacts to water quality can include temporary and/or long-term effects. Generally, temporary impacts apply to the construction phase of a project. The project would result in a DSA of 1.0 acre or more and is required to obtain coverage under Construction General NPDES Permit Number CAS000002 (CGP) (see Section 5, Avoidance and Minimization Measures).

Long-term impacts are usually caused by addition of net impervious surface area. As discussed below, the project could result in negligible increases in impervious surface area that would be accommodated by existing drainage systems. Therefore, proposed stormwater improvements are not included as part of the project. The project would comply with the *County of Los Angeles Best Management Practices Design Manual* (County of Los Angeles 2010) (see Section 5, Avoidance and Minimization Measures).

4.2 Potential Impacts to Water Quality

As discussed below, with implementation of the proposed minimization measures and BMPs, direct and indirect impacts on water quality would be minimized. In addition, no substantial or adverse changes in the physical/chemical, or biological, or human use characteristics of the aquatic environment are anticipated to result from the project.

4.2.1 Anticipated Changes to the Physical/Chemical Characteristics of the Aquatic Environment

4.2.1.1 Substrate

Project construction would require work within the Compton Creek Channel. Proposed construction activities within the channel include removal and reconstruction of the bridge pier. Hydraulic hammers and backhoe would be utilized to demolish and remove the existing concrete pier. Grading would be required for the foundation supporting the pile cap. A drill rig would be utilized to drill holes for the piles, and manual installation and a crane would be required to install the reinforcement and forms for the piles, pile cap, and pier wall. The project would include cut and fill activity for the construction of the abutment pile caps behind the existing channel walls. Excavation of approximately 10 feet deep along the cap length would be needed to construct the cap, and structural backfill would be needed after the cap is constructed. Concrete would be installed by concrete pump truck behind the existing channel walls. Pier construction would last approximately two months. The project would not result in exposed and erodible soils or substrate.

The project construction area would encompass approximately 1.72 acres. Temporary impacts on substrate could result from construction crews and equipment accessing the creek channels, temporary water diversions and support structures, dewatering activities, excavation of the channel bottom for cap construction, and the use of other heavy equipment within the channel. However, disturbance of substrate in the channel would be localized within relatively small areas directly beneath the bridge pier and footings. Temporary water diversions and support structures would be removed following construction, and disturbed areas would be restored to the extent feasible. The project would not result in any permanent impacts on substrate.

Therefore, the project would temporarily affect the substrate of the waterway during construction; however, the channel is concrete-lined, and these impacts would not adversely affect the beneficial uses of the creek.

Following project construction, no disturbance to the substrate would be required while the project is in operation. Therefore, no substantial changes to the substrate are anticipated.

4.2.1.2 Currents, Circulation or Drainage Patterns

The project would require in-channel work to replace the existing bridge. Project construction would include pile drilling at the pier locations. During construction, temporary water diversion and temporary structures could be required for work within the creek; however, these structures would be removed following construction. Therefore, any changes to circulation or drainage from these structures would be temporary. With implementation of BMPs, which include soil stabilization, sediment control, wind erosion control, tracking control, non-stormwater management, and waste management and material pollution control (see avoidance and minimization measure **WQ-3** listed in Section 5, Avoidance and Minimization Measures), project construction would not result in an altered flow rate or an increased volume of flow. In addition, construction of the project would not result in seasonal changes or tidal influences in the channel. The depth of Compton Creek would not change as a result of the project.

The project could result in negligible increases in impervious surface area. All of the other project components (bridge, sidewalks, bike path, new bridge abutments, and a sloping pier nose for the new bridge) are already impervious surfaces (concrete or asphalt). Because any potential change in impervious surface area would be minor, the drainage facilities at the bridge and creek channel would be able to accommodate future stormwater flows following project implementation. The project would not result in any permanent impacts on currents, circulation, or drainage patterns. Therefore, no substantial changes to currents, circulation, or drainage patterns are anticipated to result from the project.

4.2.1.3 Suspended Particulates (Turbidity)

Compton Creek is completely channelized with concrete. Some grassy areas and vegetation are adjacent to the channel walls. Construction activities and vehicle access within the channel would be required during project construction. The existing channel is lined with concrete and is not susceptible to erosion. However, existing pier timber piles would be removed three feet below the finished grade, and new pile caps would be graded in preparation for the new bridge structure. Additionally, project construction would include excavation and reconstruction of existing roadway, sidewalks, and bike path adjacent to the channel.

Removal and reconstruction of the bridge piers and adjacent roadways, sidewalks, and bike paths could result in temporary increases in debris and soil erosion. Therefore, soil disturbance could result in increased turbidity and total suspended solids during project construction. Measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, include compliance with the applicable NPDES Permit, SWPPP, and SWRCB CGP, which would include requirements to stabilize soils and minimize potential for discharge of suspended particulates in the creek. The contractor would develop a list of BMPs and inspection protocols that would comply with Caltrans standards. The existing roadway and embankment would be restored to match existing stabilized conditions. Therefore, temporary impacts related to suspended particulates would be minimized.

Following project construction, no soil-disturbing or erosive activity would be required while the project is in operation. Therefore, no substantial changes to suspended particulates and turbidity would be anticipated as a result of the project.

4.2.1.4 Oil, Grease and Chemical Pollutants

During construction, use of equipment and materials could result in the release of pollutants into waterbodies, including oil, grease or other chemical pollutants, such as metals and pesticides. Construction equipment would be staged on 200 feet of approach roadway on either side of the bridge. Additionally, project construction would require access and operation of construction equipment within the channel. The project would include implementation of measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures. Prior to construction, a SWPPP would be prepared to outline appropriate construction BMPs, which would include requirements to stabilize soils and minimize potential for discharge of suspended particulates, to prevent any pollutants from entering the creek within the project area. Therefore, no substantial changes to levels of oil, grease, and chemical pollutants are anticipated during project construction.

During project operation, oil, grease, and chemical pollutants could be discharged onto roadways as a result of incidental drippings from vehicles and accidental maintenance spills that could be carried into the creek through stormwater runoff. Potential pollutants could include oils, bridge paint, and surface treatments. The project would not result in increased vehicular use of a roadway or expansion of roadway surface area that could result in increased deposition of oil, grease, and other chemical pollutants typically collected on roadways. The project could result in a minor permanent increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. Therefore, the project would not result in a substantial increase in discharge of oil, grease, and chemical pollutants into the creek.

4.2.1.5 Temperature, Oxygen, Depletion and Other Parameters

Project construction could result in the generation of trash and debris that have potential to enter the creek, which could affect temperature, oxygen, and other parameters in the creek. Prior to construction, a SWPPP would be prepared to outline appropriate construction BMPs that would be implemented to prevent any pollutants from entering the creek within the project area. Additionally, the project would include implementation of measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, to prevent pollutants from entering the creek during construction.

Following project construction, the project would not generate additional sources of pollution that could affect temperature, oxygen, or other parameters. Therefore, the project would not result in permanent impacts related to these conditions.

4.2.1.6 Flood Control Functions

According to **Figure 4**, Flood Hazard Zones Map, the project area is identified as Zone X, which is defined as an area determined to be outside of the 0.2 percent annual chance floodplain. The maximum water depth of the channel in the project vicinity ranges from approximately 12.82 to 13.68 feet. During construction, the project would require work within the Compton Creek channel to replace the existing bridge. During project construction, minor, temporary supports could be required within the channel for the removal and reconstruction of the bridge pier; however, the supports would be minor structures that would be completely removed following construction.

The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. In addition, the proposed bridge structure is similar to the existing structure. Because proposed drainage conditions would be similar to existing conditions, stormwater runoff and creek flows would remain similar to existing flow conditions. Therefore, no substantial changes to the floodplains or flood control functions are anticipated.

4.2.1.7 Storm, Wave and Erosion Buffers

Wetlands may serve as buffer zones, shielding upland areas from wave actions, storm damage and erosion, per 40 CFR § 230.41. Storm, wave, and erosion buffers, including wetlands, are not located in the project area. Therefore, no substantial changes to storm, wave, and erosion buffers are anticipated during project construction or operation.

4.2.1.8 Erosion and Accretion Patterns

Some grassy areas and vegetation are adjacent to the channel walls. Equipment staging, movement of construction vehicles, and construction activity in and adjacent to the channel could result in increased erosion potential; however, the project would include implementation of measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, to avoid/minimize erosion during construction. A SWPPP would be prepared to outline appropriate construction BMPs that would be implemented to prevent erosion during project construction.

During project operation, there is no potential for erosion within the project area, as the project includes replacement and reconstruction of existing facilities, including the bridge, roadway, bicycle ramps, and embankments, which are paved and stabilized. Therefore, no substantial changes to erosion and accretion patterns are anticipated as a result of the project.

4.2.1.9 Aquifer Recharge/Groundwater

Groundwater is approximately 45 feet bgs in the project area. Project construction would include excavation to approximately 10 feet deep along the cap length to construct the cab and structural backfill. Therefore, project construction is not anticipated to require dewatering. Construction activity is not anticipated to reach groundwater and would not result in groundwater depletion or contamination.

The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. The project would include the replacement of the existing bridge, and the reconstruction of existing roadway and bicycle ramps, which are existing impervious surfaces. The project would not affect the infiltration of stormwater or groundwater recharge in the project area. Additionally, the project would not result in additional traffic or an increase in pollutant discharge that could contribute to groundwater contamination. Therefore, the project would not be anticipated to result in substantial changes to aquifer recharge or groundwater conditions.

4.2.1.10 Baseflow

Baseflow is the portion of water in a channel that is the constant stream flow in the absence or stormwater runoff. Year-round low flow in the project area is primarily from urban runoff. Compton Creek is a subwatershed of the Los Angeles River Watershed that drains approximately 42.1 square miles. The project could result in a permanent minor increase in impervious surface area (approximately 0.05 acre), resulting from an access road (currently dirt) on the southwest corner of the bridge that would be reconstructed with a concrete slab. However, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. Avoidance and minimization measures **WQ-1** through **WQ-3** would be implemented to avoid and minimize potential impacts on stormwater runoff and water quality as a result of the project. Therefore, the project would not result in substantial changes to baseflow of the creek.

4.2.2 Anticipated Changes to the Biological Characteristics of the Aquatic Environment

4.2.2.1 Special Aquatic Sites

According to CFR 40 Part 230, special aquatic sites are geographic areas that have special ecological characteristics, such as productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas, which include wetlands, mudflats, vegetated shallow, coral reefs, and riffle and pool complexes, are generally recognized as areas that substantially influence or positively contribute to the general overall environmental health or vitality of the entire ecosystem of a region. The project area does not include any geographic areas characterized as special aquatic sites. Therefore, the project would not result in impacts on special aquatic sites.

4.2.2.2 Habitat for Fish and Other Aquatic Organisms

The aquatic environment of the project area does not support fish habitat or habitat for other aquatic organisms; therefore, the project would have no impact on habitat for fish and other aquatic organisms.

4.2.2.2.1 Fish Passage (Beneficial Uses)

The aquatic environment of the project area does not support fish passage; therefore, the project would have no impact on fish passage.

4.2.2.3 Wildlife Habitat

The project area is unlikely to contain wildlife or potential wildlife habitat. Project construction would include ground disturbance within the Compton Creek Channel and along the channel banks. Although the proposed project is not expected to impact special-status wildlife species, ornamental vegetation within the project area could provide suitable habitat for nesting birds. Nesting birds could be indirectly impacted from short-term construction-related noise, resulting in decreased reproductive success or nest abandonment. Therefore, if project activities were to occur during the general avian breeding season of February 1 through September 1, the project may indirectly impact nesting birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game (CFG) Code. However, with implementation of avoidance and minimization measure **WQ-6**, the project would avoid impacts to nesting birds and potential nesting bird habitat. Therefore, the project is not anticipated to result in impacts on wildlife habitat.

4.2.2.3.1 Wildlife Passage (Beneficial Uses)

The project area is surrounded by urban, developed land uses, and does not contain any greenbelts for wildlife movement, or native vegetation and undeveloped land capable of facilitating the movement of species between large tracts of native habitat. The Compton Creek watershed is entirely urban, so the channel does not connect any large natural areas upstream with the Los Angeles River and Pacific Ocean downstream. Therefore, the project is not anticipated to result in impacts on wildlife passage.

4.2.2.4 Endangered or Threatened Species

The project area is located within a developed portion of southern Los Angeles County (i.e. City of Compton) and would not result in the removal or degradation of any natural communities. The project area is primarily developed with the bridge site spanning over an existing concrete-lined flood control channel (i.e., Compton Creek), reducing the potential for special-status plant and wildlife species to occur. No designated Critical Habitat is mapped within the project area. Additionally, no primary constituent elements for Critical Habitat in the region occur within the project area. Therefore, the project is not anticipated to result in impacts on endangered or threatened species.

4.2.2.5 Invasive Species

Invasive plants are a subset of nonnative plants that spread into undisturbed ecosystems and generally negatively impact native plants and alter ecosystem processes. One species was found in the project area that is rated as “Moderate” by California Invasive Plant Council (2019): shortpod mustard (*Hirschfeldia incana*). Shortpod mustard is common in the project vicinity in disturbed habitats. General BMPs that would be implemented as part of the project design would include the cleaning of construction equipment prior to entering the site to reduce the spread of invasive plant seeds. Therefore, the project is not anticipated to result in impacts related to invasive species.

4.2.3 Anticipated Changes to the Human Use Characteristics of the Aquatic Environment

4.2.3.1 Existing and Potential Water Supplies; Water Conservation

Beneficial uses of Compton Creek include groundwater recharge, municipal and domestic water supply, water contact recreation, noncontact water recreation, warm freshwater habitat, wetlands, and wildlife habitat (California Department of Transportation 2019). During project construction and operation, minimal water would be required for construction activities. Water would be brought in by truck and would not be sourced from the creek. Project operation would not require water supply. Therefore, the project would not result in a substantial change to existing or potential water supplies.

4.2.3.2 Recreational or Commercial Fisheries

No recreational or commercial fisheries are located within the project area. Therefore, the project would not result in impacts to recreational or commercial fisheries.

4.2.3.3 Other Water Related Recreation

Beneficial uses of Compton Creek include noncontact water recreation and contact water recreation. The noncontact recreational use in the project area includes multipurpose trails used by bicyclists and pedestrians. During construction, the project could result in temporary closures of Compton Creek Bike Trail that runs adjacent to the creek; however, a temporary detour would be provided during project construction and access to the trail would resume following project construction (see measure **WQ-4**, listed in Section 5, Avoidance and Minimization Measures). The portion of Compton Creek in the project area does not directly support any contact water recreation. Therefore, the project would not result in a substantial change in water-related recreation opportunities.

4.2.3.4 Aesthetics of the Aquatic Ecosystem

During project construction, construction equipment and activities would be visible in and around the aquatic ecosystems of the project area; however, the aesthetic quality of the aquatic ecosystems would return to similar conditions following project competition. During project operation, the project area would appear similar to existing conditions with regard to color, material, and scale. Infrastructure in the creek would be repurposed and would not be substantially modified. Therefore, the project would not result in substantial changes to the aesthetics of the aquatic ecosystem.

4.2.3.5 Parks, National and Historic Monuments, National Seashores, Wild and Scenic Rivers, Wilderness Areas, etc.

The nearest park, Walter R. Tucker Park, is approximately 0.2 mile south of the project area. The project area includes the Compton Creek Bike Trail along the east side of the creek. The project would include the reconstruction of 1660 feet of sidewalks along Wilmington Avenue and adjacent roadways; and 400 feet of bike path along the Compton Creek channel.

During construction, the project could result in temporary closures of Compton Creek Bike Trail that runs adjacent to the creek; however, a temporary detour would be provided during project construction and access to the trail would resume following project completion (see measure **WQ-4**, listed in Section 5, Avoidance and Minimization Measures). The project area does not include national and historic monuments, national seashores, wild and scenic rivers, or wilderness areas. Therefore, the project is not anticipated to result in substantial impacts on these resources.

4.2.3.6 Traffic/Transportation Patterns

During construction, full road closures on the Wilmington Avenue Bridge would be required for approximately 300 days, and planned detour routes would be provided on Rosecrans Avenue, Compton Boulevard, and Willowbrook Avenue (see measure **WQ-5**, listed in Section 5, Avoidance and Minimization Measures). Specifically, northbound traffic would be directed east on Compton Boulevard, north on Willowbrook Avenue, west on Rosecrans Avenue, and north back onto Wilmington Avenue. Southbound traffic would be directed east on Rosecrans Avenue, south on Willowbrook Avenue, west on Compton Boulevard, and south back onto Wilmington Avenue.

During operation, traffic and transportation would improve because the project would address nonstandard features and design deficiencies. Therefore, no substantial traffic or transportation changes are anticipated that would substantially alter water resources or water quality in the project area.

4.2.3.7 Energy Consumption of Generation

Project construction would require a temporary need for energy to operate construction vehicles and equipment. Energy consumption would be minimal. The project would not include adding any lanes on the bridge, and therefore, traffic levels and energy required for vehicle use would not increase in the project area as a result of the project. Additional long-term energy resources would not be required for project operation. Therefore, the project would not result in substantial changes to energy consumption or generation.

4.2.3.8 Navigation

Navigation is not permitted in Compton Creek; therefore, the project would result in no changes to navigation.

4.2.3.9 Safety

Temporary detours and signage would be provided during construction of the project to maintain vehicle and pedestrian safety (see measures **WQ-4** and **WQ-5**, listed in Section 5, Avoidance and Minimization Measures). The existing bridge is classified as structurally deficient due to extensive cracking and delamination of the bridge deck. The project would include replacement of the bridge to comply with structural safety standards. Therefore, existing traffic safety and operations are expected to improve.

4.2.4 Temporary Impacts to Water Quality

4.2.4.1 No Build Alternative

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

4.2.4.2 Build Alternative

The project would require construction activity that could result in temporary impacts on water quality. Proposed activities within Compton Creek would require coordination with, and permits from, several regulatory agencies, which could require additional time to coordinate. The anticipated reviews/permits associated with the improvements would include:

- CWA Section 401 Water Quality Certification (Los Angeles RWQCB)

- CWA Section 402 NPDES Permit (Los Angeles RWQCB, Order No. R4-2012-0175, NPDES Permit No. CAS004001) and Construction General Permit (SWRCB, 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ)
- CWA Section 404 Pre-Construction Notification (USACE) (Nationwide Permit 14 for Multiple Crossings and Nationwide Permit 33 for Temporary Construction, Access, and Dewatering)
- California Fish and Game Code Section 1602 Streambed Alteration Agreement (California Department of Fish and Wildlife (CDFW))

4.2.4.2.1 Physical/Chemical Characteristics

Project construction is anticipated to be completed between January 2021 and May 2022, and would last for approximately 300 working days. Construction activities would include grading, demolition, pile drilling, excavation, bridge construction, and pavement installation. Project construction could result in temporary increases of pollutant loads due to construction operations, such as oil and grease spills or leaks from heavy equipment or vehicle used for construction, trash from workers, construction debris, petroleum products from construction equipment, sanitary wastes from portable toilets, and other chemicals used for construction equipment such as coolants, concrete curing compounds, and concrete waste.

Measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, would be implemented as part of the project. Additionally, a SWPPP would be prepared to outline appropriate construction BMPs that would be implemented to prevent any pollutants from entering the creek within the project area. Through implementation of avoidance and minimization measures, pollutant discharges would be prevented throughout project construction. Therefore, the project would not be anticipated to result in substantial changes to the physical or chemical characteristics of the creek.

4.2.4.2.2 Biological Characteristics

Compton Creek within the project area does not include special aquatic sites or support habitat for fish and other aquatic organisms, wildlife, and endangered or threatened species. The project would require construction within the creek; however, the project is not anticipated to result in impacts on biological resources with implementation of BMPs and avoidance and minimization measure **WQ-6**.

4.2.4.2.3 Human Use Characteristics

Within the project area, existing beneficial uses include noncontact water recreation (California Department of Transportation 2019). During construction, access to the Compton Creek Bike Trail could be temporarily closed in some areas. Detours and signage would be implemented for trail users throughout the duration of construction (see measure **WQ-4**, listed in Section 5, Avoidance and Minimization Measures). Following project completion, full access to the trails would resume. Therefore, the project would result in substantial temporary changes to the human use characteristics of the creek.

4.2.5 Long-term Impacts During Operation and Maintenance

4.2.5.1 No Build Alternative

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

4.2.5.2 Build Alternative

4.2.5.2.1 Physical/Chemical Characteristics

The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. The project would not result in changes to line and grade of surface hydraulic conditions. The existing channel is completely lined with concrete and would remain channelized following project completion. The project is not anticipated to result in substantial changes to the physical or chemical characteristics of the creek.

4.2.5.2.2 Biological Characteristics

Compton Creek within the project area does not include special aquatic sites or support habitat for fish and other aquatic organisms, wildlife, and endangered or threatened species. The project could result in a permanent net increase to impervious surface area (approximately 0.05 acre). However, changes to net impervious surface area would be minor and would not result in impacts on biological resources. Project operation would not require long-term creek access. Therefore, the project is not anticipated to result in impacts on biological resources.

4.2.5.2.3 Human Use Characteristics

The project would include reconstruction of 400 feet of the Compton Creek Bike Trail in the same place as the existing trail. Soil excavated from roadway and structural excavation would fill portions of the trail at both corners of the bridge on Wilmington Avenue. The alignment and features of the proposed trail would be similar to the existing trail. Following project construction, the trail would function the same as existing conditions. Therefore, the project would not result in substantial long-term changes to the human use characteristics of the creek.

4.3 Impact Assessment Methodology

Impacts that would result from the project have been assessed for the Build Alternative. With the implementation of BMPs and standard measures, direct and indirect impacts on water quality would be minimized.

4.4 Cumulative Impacts

The cumulative setting is considered the Los Angeles watershed. The Los Angeles watershed includes the project area and Compton Creek. Existing and continuing development, as well as flood control measures and structures, contribute to cumulative water quality impacts. The project would include bridge removal and replacement and would not contribute to development in the project area or surrounding vicinity.

During project construction, the project could would result in disturbance of 1.72 acres. The project would have the potential to result in temporary increases to construction-related pollutants and turbidity within Compton Creek and its receiving water bodies. However, with implementation of measures **WQ-1** through **WQ-5**, listed in Section 5, Avoidance and Minimization Measures, the project is not anticipated to contribute to substantial cumulative impacts on water quality.

The project could result in a minor net increase to impervious surface area. The imperviousness of a drainage area contributes to the runoff volume and pollutant loads that a water body receives following a storm event. The minor increase in impervious surface as a result of the project would be considered negligible. Existing drainage systems in the project area would be able to accommodate any minor increases to stormwater runoff. Although minor, the long-term implementation of transportation projects that add to the imperviousness of the Los Angeles Watershed could be considered a cumulatively considerable impact to overall water quality of receiving waters. However, the project would not result in a substantial contribution to cumulative water quality impacts in the Los Angeles watershed.

5 AVOIDANCE AND MINIMIZATION MEASURES

To avoid and/or minimize potential impacts to water quality, the following measures would be implemented:

WQ-1: The project would comply with the applicable RWQCB NPDES Permit (Order No. R4-2012-0175, NPDES Permit No. CAS004001), SWPPP, and SWRCB CGP (2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ).

WQ-2: The project would comply with the *County of Los Angeles Best Management Practices Manual*.

WQ-3: The contractor would develop a BMP Inspections and Checklist that follows criteria identified in the *Los Angeles County Department of Public Works Construction Site Best Management Practices Manual*. The checklist would list standard construction BMPs, which include soil stabilization, sediment control, wind erosion control, tracking control, non-stormwater management, and waste management and material pollution control. BMPs would be inspected at a minimum of once per week, within 48 hours prior and after a qualifying rain event, and at least 24 hours during extended precipitation events during project construction.

WQ-4: A temporary trail detour would be provided during temporary closures of Compton Creek Bike Trail. Signage would be placed in the project area to notify the public of the temporary detour route.

WQ-5: During construction, temporary detours and signage would be provided to maintain the flow of vehicle traffic.

WQ-6: To avoid potential direct and indirect impacts to nesting birds protected by the MBTA and CFG Code, project activities would avoid the general nesting season of February 1 through September 1. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species within the tree proposed for removal, as well as vegetation within 300 feet (for non-raptor bird species) and 500 feet (for raptor species) of the proposed work area. If a nesting bird is found, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.

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6.2 Preparer Qualifications

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Appendix F

Field Noise Measurement Data

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT WILMINGTON BRIDGE
PROJECT # 11125 03 04
SITE ID
SITE ADDRESS
OBSERVER(S) PETE VIJAR
START DATE 5/14/19
END DATE 5/14/19
START TIME
END TIME

METEOROLOGICAL CONDITIONS
TEMP 64 F
HUMIDITY 76 % R.H.
WIND [✓ CALM] LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD MPH
DIR. N NE S SE S SW W NW
SKY SUNNY CLEAR [✓ OVRCAST] PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM-3
TYPE 1 2
SERIAL # 1403M004
CALIBRATOR BSWA CA 114
SERIAL # 480151
CALIBRATION CHECK PRE-TEST dBA SPL POST-TEST dBA SPL
WINDSCRN YES

SETTINGS A-WTD [✓ SLOW] FAST FRONTAL RANDOM ANSI OTHER:

ST-1

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
7-8	9:16	9:31	75.4	90.2	54.5				

COMMENTS
READING TAKEN AT WESTERN PROPERTY LINE OF 245 N. MAGNOLIA COUNTY, ALONGSIDE COMPTON CREEK AND WILMINGTON AVE; PRIMARY NOISE SOURCE IS TRAFFIC

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE [✓ TRAFFIC] AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT
DIST. TO RDWY C/L OR [✓ EOP]: 23' FROM WILMINGTON AVE EOP
TRAFFIC COUNT DURATION: – MIN

COUNT 1 (OR RDWY 1)	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
		MIN		SPEED	
	AUTOS				
	MED TRKS				
	HVY TRKS				
	BUSES				
	MOTRCLS				

IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE

COUNT 2 (OR RDWY 2)	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB
		MIN		SPEED	
	AUTOS				
	MED TRKS				
	HVY TRKS				
	BUSES				
	MOTRCLS				

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS [✓ BIRDS] DIST. INDUSTRIAL DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN [✓ HARD] SOFT MIXED FLAT OTHER:
PHOTOS 4502; 4503; 4504; 4505; 4506; 4507; 4508;
OTHER COMMENTS / SKETCH

N

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT WILMINGTON BRIDGE PROJECT # 11125 03 04
SITE ID
SITE ADDRESS OBSERVER(S) PETE VITAR
START DATE 5/14/19 END DATE 5/14/19
START TIME END TIME

METEOROLOGICAL CONDITIONS
TEMP 64 F HUMIDITY 76 % R.H. WIND [✓ CALM] LIGHT MODERATE
WINDSPD ____ MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY SUNNY CLEAR [✓ OVRCAST] PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM - 3 TYPE 1 2 SERIAL # M0317004
CALIBRATOR BSWA CA 114 SERIAL # 480151
CALIBRATION CHECK PRE-TEST ____ dBA SPL POST-TEST ____ dBA SPL WINDSCRN YES

SETTINGS A-WTD [✓ SLOW] FAST FRONTAL RANDOM ANSI OTHER:

ST-2

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
[illegible]	[illegible]	[illegible]	–	–	–	–	–	–	–
10-11	9:46	10:01	67.1	82.2	49.9				

COMMENTS
READING TAKEN IN FRONT OF 810 W. SCHOOL ST. (RESIDENTIAL); PRIMARY NOISE SOURCE IS TRAFFIC ON WILMINGTON AVE, TO THE EAST; 20' TO END OF PAVEMENT ON SCHOOL ST, 85' TO END OF PAVEMENT ON WILMINGTON AVE;

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE [✓ TRAFFIC] AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR [✓ EOP:] 20' TO SCHOOL ST/85' TO WILMINGTO
TRAFFIC COUNT DURATION: – MIN SPEED ____ MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)	NB/EB	SB/WB	NB/EB	SB/WB
AUTOS										
MED TRKS										
HVY TRKS										
BUSES										
MOTRCLS										

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS [✓ BIRDS] DIST. INDUSTRIAL DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN [✓ HARD] SOFT MIXED FLAT OTHER:
PHOTOS 4510; 4511; 4512; 4513; 4514; 4515
OTHER COMMENTS / SKETCH

N

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT WILMINGTON BRIDGE
PROJECT # 11125 03 04
SITE ID
OBSERVER(S) PETE VITAR
SITE ADDRESS
START DATE 5/14/19 END DATE 5/14/19
START TIME END TIME

METEOROLOGICAL CONDITIONS
TEMP 64 F
HUMIDITY 74 % R.H.
WIND [✓ CALM] LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD MPH
DIR. N NE S SE S SW W NW
SKY SUNNY CLEAR [✓ OVRCAST] PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM-3 TYPE 1 2 SERIAL # 140817004
CALIBRATOR BSWA CA 114 SERIAL # 480151
CALIBRATION CHECK PRE-TEST dBA SPL POST-TEST dBA SPL WINDSCRN YES

SETTINGS A-WTD [✓ SLOW] FAST FRONTAL RANDOM ANSI OTHER:

	REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
ST-3	12-13	10:08	10:23	60.7	73.9	49.0				

COMMENTS
READING TAKEN IN FRONT OF 810-812 PALMER ST. (RESIDENTIAL), ALONGSIDE COMPTON CREEK; PRIMARY NOISE SOURCE IS TRAFFIC ON WILMINGTON AVE;

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE [✓ TRAFFIC] AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT
DIST. TO RDWY C/L OR [✓ EOP]: 1' FROM EOP ON PALMER ST

TRAFFIC COUNT DURATION: — MIN

		MIN		SPEED			MIN		SPEED	
	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB
COUNT 1 (OR RDWY 1)	AUTOS					IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE				
	MED TRKS									
	HVY TRKS									
	BUSES									
	MOTRCLS									

COUNT 2 (OR RDWY 2)

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES [✓ DIST. BARKING DOGS] [✓ BIRDS] DIST. INDUSTRIAL DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN HARD SOFT [✓ MIXED] FLAT OTHER:
PHOTOS 4517; 4518; 4519; 4520; 4521; 4522; 4523;
OTHER COMMENTS / SKETCH

N

Appendix G

Traffic Counts

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	19	2	0	0	0	0	0	0	0	0	0	0	**21**
00:15	0	22	2	0	0	0	0	0	0	0	0	0	0	**24**
00:30	0	20	3	0	0	0	0	0	0	0	0	0	0	**23**
00:45	0	19	2	0	0	0	0	0	0	0	0	0	0	**21**
01:00	0	15	1	0	0	0	0	0	0	0	0	0	0	**16**
01:15	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
01:30	0	21	3	0	0	0	0	0	0	0	0	0	0	**24**
01:45	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
02:00	0	13	1	0	0	0	0	0	0	0	0	0	0	**14**
02:15	0	10	2	0	1	0	0	0	0	0	0	0	0	**13**
02:30	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
02:45	0	9	3	0	1	0	0	0	0	0	0	0	0	**13**
03:00	0	7	1	0	0	0	0	0	0	0	0	0	0	**8**
03:15	0	11	2	0	0	0	0	0	0	0	0	0	0	**13**
03:30	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
03:45	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
04:00	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
04:15	0	10	2	0	0	0	0	0	0	0	0	0	0	**12**
04:30	0	13	1	0	0	0	0	0	0	0	0	0	0	**14**
04:45	0	17	2	0	0	0	0	0	0	0	0	0	0	**19**
05:00	0	20	4	1	0	0	0	0	0	0	0	0	0	**25**
05:15	0	25	7	0	1	0	0	0	0	0	0	0	0	**33**
05:30	0	22	5	1	0	0	0	0	0	0	0	0	0	**28**
05:45	0	38	9	1	0	0	0	0	0	0	0	0	0	**48**
06:00	0	24	4	0	0	0	0	0	0	0	0	0	0	**28**
06:15	0	49	7	3	0	0	0	0	0	0	0	0	0	**59**
06:30	0	67	9	3	0	0	0	0	0	0	0	0	0	**79**
06:45	0	60	15	2	0	0	0	0	0	0	0	0	0	**77**
07:00	0	99	15	2	0	0	0	0	0	0	0	0	0	**116**
07:15	0	122	15	5	2	0	0	0	0	0	0	0	0	**144**
07:30	0	162	16	6	3	0	0	0	0	0	0	0	0	**187**
07:45	0	216	23	5	2	0	0	0	0	0	0	0	0	**246**
08:00	0	212	24	4	1	0	0	0	0	0	0	0	0	**241**
08:15	0	202	19	3	3	0	0	0	0	0	0	0	0	**227**
08:30	0	127	16	5	1	0	0	0	0	0	0	0	0	**149**
08:45	0	152	17	5	2	0	0	0	0	0	0	0	0	**176**
09:00	0	125	16	2	1	0	0	0	0	0	0	0	0	**144**
09:15	0	116	14	4	2	0	0	0	0	0	0	0	0	**136**
09:30	0	97	15	3	1	0	0	0	0	0	0	0	0	**116**
09:45	0	116	16	2	2	0	0	1	0	0	0	0	0	**137**
10:00	0	109	14	1	1	0	0	0	0	0	0	0	0	**125**
10:15	0	135	17	4	2	0	0	1	0	0	0	0	0	**159**
10:30	0	108	13	3	1	0	0	0	1	0	0	0	0	**126**
10:45	0	120	15	1	1	0	0	1	0	0	0	0	0	**138**
11:00	0	125	14	3	3	0	0	0	1	0	0	0	0	**146**
11:15	0	126	16	1	1	0	0	0	0	0	0	0	0	**144**
11:30	0	127	12	4	3	0	0	0	0	0	0	0	0	**146**
11:45	0	125	16	2	1	0	0	0	0	0	0	0	0	**144**
12:00 PM	0	130	15	2	3	0	0	0	0	0	0	0	0	**150**
12:15	0	134	22	3	2	1	0	0	0	0	0	0	0	**162**
12:30	0	115	14	2	3	0	0	0	0	0	0	0	0	**134**
12:45	0	136	16	2	2	0	0	0	0	0	0	0	0	**156**
13:00	0	136	14	4	1	0	0	0	0	0	0	0	0	**155**
13:15	0	116	15	1	1	0	0	0	0	0	0	0	0	**133**
13:30	0	131	17	2	2	1	0	0	0	0	0	0	0	**153**
13:45	1	130	17	4	3	0	0	0	0	0	0	0	0	**155**
14:00	0	152	17	4	2	0	0	0	0	0	0	0	0	**175**
14:15	0	177	29	5	1	0	0	0	0	0	0	0	0	**212**
14:30	0	240	35	6	1	0	0	0	0	0	0	0	0	**282**
14:45	0	282	32	5	3	0	0	0	0	0	0	0	0	**322**
15:00	0	228	23	4	3	0	0	0	0	0	0	0	0	**258**
15:15	0	204	30	3	4	0	0	0	0	0	0	0	0	**241**
15:30	0	210	33	6	1	0	0	0	1	0	0	0	0	**251**
15:45	0	271	34	4	3	0	0	0	0	0	0	0	0	**312**
16:00	0	226	29	6	2	0	0	0	0	0	0	0	0	**263**
16:15	0	270	41	5	3	0	0	0	0	0	0	0	0	**319**
16:30	1	249	32	4	2	0	0	0	0	0	0	0	0	**288**
16:45	1	263	39	5	2	0	0	0	0	0	0	0	0	**310**
17:00	0	200	23	3	1	0	0	0	1	0	0	0	0	**228**
17:15	0	291	40	4	1	0	0	0	0	0	0	0	0	**336**
17:30	0	261	26	6	2	0	0	0	0	0	0	0	0	**295**
17:45	0	243	30	3	2	0	0	0	1	0	0	0	0	**279**
18:00	0	223	23	6	1	0	0	0	0	0	0	0	0	**253**
18:15	0	224	28	2	3	0	0	0	0	0	0	0	0	**257**
18:30	0	164	20	4	3	0	0	0	0	0	0	0	0	**191**
18:45	0	152	20	3	1	0	0	0	0	0	0	0	0	**176**
19:00	0	144	18	3	1	0	0	1	0	0	0	0	0	**167**
19:15	0	103	10	2	0	0	0	0	0	0	0	0	0	**115**
19:30	0	117	13	3	1	0	0	0	0	0	0	0	0	**134**
19:45	1	106	12	1	1	0	0	0	0	0	0	0	0	**121**
20:00	0	89	10	2	0	0	0	0	0	0	0	0	0	**101**
20:15	0	99	15	1	1	0	0	0	0	0	0	0	0	**116**
20:30	0	85	11	1	0	0	0	0	0	0	0	0	0	**97**
20:45	0	76	9	2	0	0	0	0	0	0	0	0	0	**87**
21:00	0	71	7	1	0	0	0	0	0	0	0	0	0	**79**
21:15	0	65	6	1	0	0	0	0	0	0	0	0	0	**72**
21:30	0	57	7	2	0	0	0	0	0	0	0	0	0	**66**
21:45	0	56	6	1	0	0	0	0	0	0	0	0	0	**63**
22:00	0	56	7	2	0	0	0	0	0	0	0	0	0	**65**
22:15	0	47	5	1	0	0	0	0	0	0	0	0	0	**53**
22:30	0	48	3	1	0	0	0	0	0	0	0	0	0	**52**
22:45	0	23	3	0	0	0	0	0	0	0	0	0	0	**26**
23:00	0	23	2	1	0	0	0	0	0	0	0	0	0	**26**
23:15	0	27	2	0	0	0	0	0	0	0	0	0	0	**29**
23:30	0	32	4	0	0	0	0	0	0	0	0	0	0	**36**
23:45	0	27	2	0	1	0	0	0	0	0	0	0	0	**30**
Totals	4	10200	1282	209	99	2		4	5					11805
% of Totals	0%	86%	11%	2%	1%	0%		0%	0%					100%

AM Volumes	0	3291	416	76	36	0	0	3	2	0	0	0	0	3824
% AM		28%	4%	1%	0%			0%	0%					32%
AM Peak Hour		07:30	07:30	07:15	07:30	11:30		09:30	10:15					07:30
Volume		792	82	20	9	1		2	2					901
PM Volumes	4	6909	866	133	63	2	0	1	3	0	0	0	0	7981
% PM	0%	59%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	16:00	17:15	16:00	15:30	14:30	12:00		18:15	17:00					15:45
Volume	2	1018	141	21	11	1		1	2					1182

Directional Peak Periods **All Classes**	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	1486		13%	1198		10%	2318		20%	6803		58%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	13	2	0	0	0	0	0	0	0	0	0	0	**15**
00:15	0	15	0	0	0	0	0	0	0	0	0	0	0	**15**
00:30	0	15	1	0	0	0	0	0	0	0	0	0	0	**16**
00:45	0	7	2	0	0	0	0	0	1	0	0	0	0	**10**
01:00	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
01:15	0	9	2	0	0	0	0	0	0	0	0	0	0	**11**
01:30	0	10	2	0	0	0	0	0	0	0	0	0	0	**12**
01:45	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
02:00	0	4	1	0	0	0	0	0	1	0	0	0	0	**6**
02:15	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
02:30	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
02:45	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
03:00	0	10	0	0	0	0	0	0	0	0	0	0	0	**10**
03:15	0	9	2	0	0	0	0	0	1	0	0	0	0	**12**
03:30	0	10	1	0	0	0	0	0	0	0	0	0	0	**11**
03:45	0	13	2	0	0	0	0	0	0	0	0	0	0	**15**
04:00	0	12	2	0	0	0	0	0	0	0	0	0	0	**14**
04:15	0	22	2	0	0	0	0	0	0	0	0	0	0	**24**
04:30	0	39	6	0	0	0	0	0	0	0	0	0	0	**45**
04:45	0	43	4	1	1	0	0	0	0	0	0	0	0	**49**
05:00	0	38	7	0	0	0	0	0	0	0	0	0	0	**45**
05:15	0	54	11	1	1	0	0	0	0	0	0	0	0	**67**
05:30	0	77	8	1	2	0	0	0	0	0	0	0	0	**88**
05:45	0	90	11	2	1	0	0	0	0	0	0	0	0	**104**
06:00	0	91	13	1	2	1	0	0	0	0	0	0	0	**108**
06:15	1	102	16	2	2	0	0	0	0	0	0	0	0	**123**
06:30	0	145	23	3	1	0	0	0	0	0	0	0	0	**172**
06:45	0	152	19	2	1	0	0	0	0	0	0	0	0	**174**
07:00	1	204	21	3	5	1	0	1	0	0	0	0	0	**236**
07:15	0	172	24	1	3	0	0	0	0	0	0	0	0	**200**
07:30	0	231	27	2	4	0	0	0	0	0	0	0	0	**264**
07:45	0	241	26	3	5	1	0	0	0	0	0	0	0	**276**
08:00	0	234	32	2	4	0	0	0	0	0	0	0	0	**272**
08:15	0	201	30	3	4	0	0	0	0	0	0	0	0	**238**
08:30	0	156	21	2	2	0	0	0	0	0	0	0	0	**181**
08:45	0	135	19	3	1	0	0	0	0	0	0	0	0	**158**
09:00	0	132	17	3	1	0	0	0	0	0	0	0	0	**153**
09:15	0	128	15	2	3	0	0	0	0	0	0	0	0	**148**
09:30	0	122	17	1	3	0	0	0	0	0	0	0	0	**143**
09:45	0	136	14	2	1	0	0	0	0	0	0	0	0	**153**
10:00	0	133	14	1	2	0	0	0	0	0	0	0	0	**150**
10:15	0	149	16	1	1	0	0	0	0	0	0	0	0	**167**
10:30	0	154	22	0	2	0	0	0	0	0	0	0	0	**178**
10:45	0	127	12	0	3	0	0	0	0	0	0	0	0	**142**
11:00	0	155	20	2	4	0	0	0	0	0	0	0	0	**181**
11:15	0	143	21	1	2	0	0	0	0	0	0	0	0	**167**
11:30	0	173	26	3	5	0	0	0	0	0	0	0	0	**207**
11:45	0	159	16	1	1	0	0	0	0	0	0	0	0	**177**
12:00 PM	0	176	17	2	1	0	0	0	0	0	0	0	0	**196**
12:15	0	179	20	2	1	0	0	0	0	0	0	0	0	**202**
12:30	0	158	19	1	2	1	0	0	0	0	0	0	0	**181**
12:45	0	175	22	2	3	0	0	0	0	0	0	0	0	**202**
13:00	0	160	16	2	2	0	0	0	0	0	0	0	0	**180**
13:15	0	148	17	1	2	0	0	0	0	0	0	0	0	**168**
13:30	0	166	23	2	1	0	0	0	0	0	0	0	0	**192**
13:45	0	170	23	2	4	0	0	0	0	0	0	0	0	**199**
14:00	0	157	16	1	2	0	0	0	1	0	0	0	0	**177**
14:15	0	183	32	2	2	0	0	0	0	0	0	0	0	**219**
14:30	0	189	22	3	3	0	0	1	0	0	0	0	0	**218**
14:45	1	201	21	3	3	0	0	0	0	0	0	0	0	**229**
15:00	0	229	22	0	2	0	0	0	0	0	0	0	0	**253**
15:15	0	222	22	3	3	0	0	0	0	0	0	0	0	**250**
15:30	0	180	18	1	2	0	0	0	0	0	0	0	0	**201**
15:45	0	175	16	2	4	0	0	0	0	0	0	0	0	**197**
16:00	0	209	23	3	3	1	0	0	0	0	0	0	0	**239**
16:15	0	184	22	3	4	0	0	0	0	0	0	0	0	**213**
16:30	0	178	22	2	3	0	0	0	0	0	0	0	0	**205**
16:45	0	200	22	1	4	0	0	0	0	0	0	0	0	**227**
17:00	0	186	21	2	3	0	0	0	0	0	0	0	0	**212**
17:15	0	147	13	3	1	0	0	0	0	0	0	0	0	**164**
17:30	0	175	17	1	2	0	0	0	0	0	0	0	0	**195**
17:45	0	147	15	2	3	0	0	0	0	0	0	0	0	**167**
18:00	0	147	19	3	3	0	0	0	0	0	0	0	0	**172**
18:15	0	145	21	1	2	0	0	0	0	0	0	0	0	**169**
18:30	0	128	7	2	1	0	0	0	0	0	0	0	0	**138**
18:45	0	100	14	1	1	0	0	0	0	0	0	0	0	**116**
19:00	0	121	15	1	3	0	0	0	0	0	0	0	0	**140**
19:15	0	116	7	2	1	0	0	0	0	0	0	0	0	**126**
19:30	0	115	13	1	2	0	0	0	0	0	0	0	0	**131**
19:45	0	96	8	1	0	0	0	0	0	0	0	0	0	**105**
20:00	0	105	10	1	0	0	0	0	0	0	0	0	0	**116**
20:15	0	92	6	2	3	0	0	0	0	0	0	0	0	**103**
20:30	0	81	9	1	1	0	0	0	0	0	0	0	0	**92**
20:45	0	92	7	1	0	0	0	0	0	0	0	0	0	**100**
21:00	1	110	13	1	2	0	0	0	0	0	0	0	0	**127**
21:15	0	86	7	2	0	0	0	0	0	0	0	0	0	**95**
21:30	0	64	5	0	3	0	0	0	0	0	0	0	0	**72**
21:45	0	57	7	0	2	0	0	0	0	0	0	0	0	**66**
22:00	0	71	7	0	1	0	0	0	0	0	0	0	0	**79**
22:15	0	52	4	1	0	0	0	0	0	0	0	0	0	**57**
22:30	0	33	3	0	0	0	0	0	0	0	0	0	0	**36**
22:45	0	38	4	1	0	0	0	0	0	0	0	0	0	**43**
23:00	0	32	4	0	0	0	0	0	0	0	0	0	0	**36**
23:15	0	32	2	0	0	0	0	0	0	0	0	0	0	**34**
23:30	0	27	4	0	0	0	0	0	0	0	0	0	0	**31**
23:45	0	22	3	0	1	0	0	0	0	0	0	0	0	**26**
Totals	**4**	**10556**	**1231**	**117**	**153**	**5**		**2**	**4**					**12072**
% of Totals	0%	87%	10%	1%	1%	0%		0%	0%					100%

AM Volumes	2	4300	551	49	67	3	0	1	3	0	0	0	0	4976
% AM	0%	36%	5%	0%	1%	0%		0%	0%					41%
AM Peak Hour	06:15	07:30	07:30	08:15	07:00	07:00		06:15						07:30
Volume	2	907	115	11	17	2		1	1					1050
PM Volumes	2	6256	680	68	86	2	0	1	1	0	0	0	0	7096
% PM	0%	52%	6%	1%	1%	0%		0%	0%					59%
PM Peak Hour	14:00	14:30	14:15	15:45	15:45	12:00		13:45	13:15					14:30
Volume	1	841	97	10	14	1		1	1					950

Directional Peak Periods **All Classes**	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume		%	Volume		%	Volume		%	Volume		%
	1825	⟷	15%	1520	⟷	13%	1622	⟷	13%	7105	⟷	59%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	32	4	0	0	0	0	0	0	0	0	0	0	36
00:15	0	37	2	0	0	0	0	0	0	0	0	0	0	39
00:30	0	35	4	0	0	0	0	0	0	0	0	0	0	39
00:45	0	26	4	0	0	0	0	0	1	0	0	0	0	31
01:00	0	26	2	0	0	0	0	0	0	0	0	0	0	28
01:15	0	18	3	0	0	0	0	0	0	0	0	0	0	21
01:30	0	31	5	0	0	0	0	0	0	0	0	0	0	36
01:45	0	17	2	0	0	0	0	0	0	0	0	0	0	19
02:00	0	17	2	0	0	0	0	0	1	0	0	0	0	20
02:15	0	15	2	0	1	0	0	0	0	0	0	0	0	18
02:30	0	13	2	0	0	0	0	0	0	0	0	0	0	15
02:45	0	15	4	0	1	0	0	0	0	0	0	0	0	20
03:00	0	17	1	0	0	0	0	0	0	0	0	0	0	18
03:15	0	20	4	0	0	0	0	0	1	0	0	0	0	25
03:30	0	21	2	0	0	0	0	0	0	0	0	0	0	23
03:45	0	24	3	0	0	0	0	0	0	0	0	0	0	27
04:00	0	23	3	0	0	0	0	0	0	0	0	0	0	26
04:15	0	32	4	0	0	0	0	0	0	0	0	0	0	36
04:30	0	52	7	0	0	0	0	0	0	0	0	0	0	59
04:45	0	60	6	1	1	0	0	0	0	0	0	0	0	68
05:00	0	58	11	1	0	0	0	0	0	0	0	0	0	70
05:15	0	79	18	1	2	0	0	0	0	0	0	0	0	100
05:30	0	99	13	2	2	0	0	0	0	0	0	0	0	116
05:45	0	128	20	3	1	0	0	0	0	0	0	0	0	152
06:00	0	115	17	1	2	1	0	0	0	0	0	0	0	136
06:15	1	151	23	5	2	0	0	0	0	0	0	0	0	182
06:30	0	212	32	6	1	0	0	0	0	0	0	0	0	251
06:45	0	212	34	4	1	0	0	0	0	0	0	0	0	251
07:00	1	303	36	5	5	1	0	1	0	0	0	0	0	352
07:15	0	294	39	6	5	0	0	0	0	0	0	0	0	344
07:30	0	393	43	8	7	0	0	0	0	0	0	0	0	451
07:45	0	457	49	8	7	1	0	0	0	0	0	0	0	522
08:00	0	446	56	6	5	0	0	0	0	0	0	0	0	513
08:15	0	403	49	6	7	0	0	0	0	0	0	0	0	465
08:30	0	283	37	7	3	0	0	0	0	0	0	0	0	330
08:45	0	287	36	8	3	0	0	0	0	0	0	0	0	334
09:00	0	257	33	5	2	0	0	0	0	0	0	0	0	297
09:15	0	244	29	6	5	0	0	0	0	0	0	0	0	284
09:30	0	219	32	4	4	0	0	0	0	0	0	0	0	259
09:45	0	252	30	4	3	0	0	1	0	0	0	0	0	290
10:00	0	242	28	2	3	0	0	0	0	0	0	0	0	275
10:15	0	284	33	5	3	0	0	1	0	0	0	0	0	326
10:30	0	262	35	3	3	0	0	0	1	0	0	0	0	304
10:45	0	247	27	1	4	0	0	1	0	0	0	0	0	280
11:00	0	280	34	5	7	0	0	0	1	0	0	0	0	327
11:15	0	269	37	2	3	0	0	0	0	0	0	0	0	311
11:30	0	300	38	7	8	0	0	0	0	0	0	0	0	353
11:45	0	284	32	3	2	0	0	0	0	0	0	0	0	321
12:00 PM	0	306	32	4	4	0	0	0	0	0	0	0	0	346
12:15	0	313	42	5	3	1	0	0	0	0	0	0	0	364
12:30	0	273	33	3	5	1	0	0	0	0	0	0	0	315
12:45	0	311	38	4	5	0	0	0	0	0	0	0	0	358
13:00	0	296	30	6	3	0	0	0	0	0	0	0	0	335
13:15	0	264	32	2	3	0	0	0	0	0	0	0	0	301
13:30	0	297	40	4	3	1	0	0	0	0	0	0	0	345
13:45	1	300	40	6	7	0	0	0	0	0	0	0	0	354
14:00	0	309	33	5	4	0	0	0	1	0	0	0	0	352
14:15	0	360	61	7	3	0	0	0	0	0	0	0	0	431
14:30	0	429	57	9	4	0	0	1	0	0	0	0	0	500
14:45	1	483	53	8	6	0	0	0	0	0	0	0	0	551
15:00	0	457	45	4	5	0	0	0	0	0	0	0	0	511
15:15	0	426	52	6	7	0	0	0	0	0	0	0	0	491
15:30	0	390	51	7	3	0	0	0	1	0	0	0	0	452
15:45	0	446	50	6	7	0	0	0	0	0	0	0	0	509
16:00	0	435	52	9	5	1	0	0	0	0	0	0	0	502
16:15	0	454	63	8	7	0	0	0	0	0	0	0	0	532
16:30	1	427	54	6	5	0	0	0	0	0	0	0	0	493
16:45	1	463	61	6	6	0	0	0	0	0	0	0	0	537
17:00	0	386	44	5	4	0	0	0	1	0	0	0	0	440
17:15	0	438	53	7	2	0	0	0	0	0	0	0	0	500
17:30	0	436	43	7	4	0	0	0	0	0	0	0	0	490
17:45	0	390	45	5	5	0	0	0	1	0	0	0	0	446
18:00	0	370	42	9	4	0	0	0	0	0	0	0	0	425
18:15	0	369	49	3	5	0	0	0	0	0	0	0	0	426
18:30	0	292	27	6	4	0	0	0	0	0	0	0	0	329
18:45	0	252	34	4	2	0	0	0	0	0	0	0	0	292
19:00	0	265	33	4	4	0	0	1	0	0	0	0	0	307
19:15	0	219	17	4	1	0	0	0	0	0	0	0	0	241
19:30	0	232	26	4	3	0	0	0	0	0	0	0	0	265
19:45	1	202	20	2	1	0	0	0	0	0	0	0	0	226
20:00	0	194	20	3	0	0	0	0	0	0	0	0	0	217
20:15	0	191	21	3	4	0	0	0	0	0	0	0	0	219
20:30	0	166	20	2	1	0	0	0	0	0	0	0	0	189
20:45	0	168	16	3	0	0	0	0	0	0	0	0	0	187
21:00	1	181	20	2	2	0	0	0	0	0	0	0	0	206
21:15	0	151	13	3	0	0	0	0	0	0	0	0	0	167
21:30	0	121	12	2	3	0	0	0	0	0	0	0	0	138
21:45	0	113	13	1	2	0	0	0	0	0	0	0	0	129
22:00	0	127	14	2	1	0	0	0	0	0	0	0	0	144
22:15	0	99	9	2	0	0	0	0	0	0	0	0	0	110
22:30	0	81	6	1	0	0	0	0	0	0	0	0	0	88
22:45	0	61	7	1	0	0	0	0	0	0	0	0	0	69
23:00	0	55	6	1	0	0	0	0	0	0	0	0	0	62
23:15	0	59	4	0	0	0	0	0	0	0	0	0	0	63
23:30	0	59	8	0	0	0	0	0	0	0	0	0	0	67
23:45	0	49	5	0	2	0	0	0	0	0	0	0	0	56
Totals	8	20756	2513	326	252	7		6	9					23877
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	7591	967	125	103	3	0	4	5	0	0	0	0	8800
% AM	0%	32%	4%	1%	0%	0%		0%	0%					37%
AM Peak Hour	06:15	07:30	07:30	07:15	07:30	07:00		09:30	10:15					07:30
Volume	2	1699	197	28	26	2		2	2					1951
PM Volumes	6	13165	1546	201	149	4	0	2	4	0	0	0	0	15077
% PM	0%	55%	6%	1%	1%	0%		0%	0%					63%
PM Peak Hour	16:00	14:30	16:00	15:30	15:45	12:00		13:45	17:00					16:00
Volume	2	1795	230	30	24	2		1	2					2064

Directional Peak Periods All Classes	**AM 7-9**	**NOON 12-2**	**PM 4-6**	**Off Peak Volumes**
Volume	3311	2718	3940	13908
%	14%	11%	17%	58%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	80	9	0	0	0	0	0	0	0	0	0	0	**89**
01:00	0	54	6	0	0	0	0	0	0	0	0	0	0	**60**
02:00	0	40	7	0	2	0	0	0	0	0	0	0	0	**49**
03:00	0	40	5	0	0	0	0	0	0	0	0	0	0	**45**
04:00	0	51	6	0	0	0	0	0	0	0	0	0	0	**57**
05:00	0	105	25	3	1	0	0	0	0	0	0	0	0	**134**
06:00	0	200	35	8	0	0	0	0	0	0	0	0	0	**243**
07:00	0	599	69	18	7	0	0	0	0	0	0	0	0	**693**
08:00	0	693	76	17	7	0	0	0	0	0	0	0	0	**793**
09:00	0	454	61	11	6	0	0	1	0	0	0	0	0	**533**
10:00	0	472	59	9	5	0	0	2	1	0	0	0	0	**548**
11:00	0	503	58	10	8	0	0	0	1	0	0	0	0	**580**
12:00 PM	0	515	67	9	10	1	0	0	0	0	0	0	0	**602**
13:00	1	513	63	11	7	1	0	0	0	0	0	0	0	**596**
14:00	0	851	113	20	7	0	0	0	0	0	0	0	0	**991**
15:00	0	913	120	17	11	0	0	0	1	0	0	0	0	**1062**
16:00	2	1008	141	20	9	0	0	0	0	0	0	0	0	**1180**
17:00	0	995	119	16	6	0	0	0	2	0	0	0	0	**1138**
18:00	0	763	91	15	8	0	0	0	0	0	0	0	0	**877**
19:00	1	470	53	9	3	0	0	1	0	0	0	0	0	**537**
20:00	0	349	45	6	1	0	0	0	0	0	0	0	0	**401**
21:00	0	249	26	5	0	0	0	0	0	0	0	0	0	**280**
22:00	0	174	18	4	0	0	0	0	0	0	0	0	0	**196**
23:00	0	109	10	1	1	0	0	0	0	0	0	0	0	**121**
Totals	4	10200	1282	209	99	2		4	5					11805
% of Totals	0%	86%	11%	2%	1%	0%		0%	0%					100%

AM Volumes	0	3291	416	76	36	0	0	3	2	0	0	0	0	3824
% AM		28%	4%	1%	0%			0%	0%					32%
AM Peak Hour		08:00	08:00	07:00	11:00			10:00	10:00					08:00
Volume		693	76	18	8			2	1					793
PM Volumes	4	6909	866	133	63	2	0	1	3	0	0	0	0	7981
% PM	0%	59%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	16:00	16:00	16:00	14:00	15:00	12:00		19:00	17:00					16:00
Volume	2	1008	141	20	11	1		1	2					1180

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1486	⟷	13%	1198	⟷	10%	2318	⟷	20%	6803	⟷	58%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	50	5	0	0	0	0	0	1	0	0	0	0	56
01:00	0	38	6	0	0	0	0	0	0	0	0	0	0	44
02:00	0	20	3	0	0	0	0	0	1	0	0	0	0	24
03:00	0	42	5	0	0	0	0	0	1	0	0	0	0	48
04:00	0	116	14	1	1	0	0	0	0	0	0	0	0	132
05:00	0	259	37	4	4	0	0	0	0	0	0	0	0	304
06:00	1	490	71	8	6	1	0	0	0	0	0	0	0	577
07:00	1	848	98	9	17	2	0	1	0	0	0	0	0	976
08:00	0	726	102	10	11	0	0	0	0	0	0	0	0	849
09:00	0	518	63	8	8	0	0	0	0	0	0	0	0	597
10:00	0	563	64	2	8	0	0	0	0	0	0	0	0	637
11:00	0	630	83	7	12	0	0	0	0	0	0	0	0	732
12:00 PM	0	688	78	7	7	1	0	0	0	0	0	0	0	781
13:00	0	644	79	7	9	0	0	0	0	0	0	0	0	739
14:00	1	730	91	9	10	0	0	1	1	0	0	0	0	843
15:00	0	806	78	6	11	0	0	0	0	0	0	0	0	901
16:00	0	771	89	9	14	1	0	0	0	0	0	0	0	884
17:00	0	655	66	8	9	0	0	0	0	0	0	0	0	738
18:00	0	520	61	7	7	0	0	0	0	0	0	0	0	595
19:00	0	448	43	5	6	0	0	0	0	0	0	0	0	502
20:00	0	370	32	5	4	0	0	0	0	0	0	0	0	411
21:00	1	317	32	3	7	0	0	0	0	0	0	0	0	360
22:00	0	194	18	2	1	0	0	0	0	0	0	0	0	215
23:00	0	113	13	0	1	0	0	0	0	0	0	0	0	127
Totals	4	10556	1231	117	153	5		2	4					12072
% of Totals	0%	87%	10%	1%	1%	0%		0%	0%					100%

AM Volumes	2	4300	551	49	67	3	0	1	3	0	0	0	0	4976
% AM	0%	36%	5%	0%	1%	0%		0%	0%					41%
AM Peak Hour	06:00	07:00	08:00	08:00	07:00	07:00		07:00						07:00
Volume	1	848	102	10	17	2		1	1					976
PM Volumes	2	6256	680	68	86	2	0	1	1	0	0	0	0	7096
% PM	0%	52%	6%	1%	1%	0%		0%	0%					59%
PM Peak Hour	14:00	15:00	14:00	14:00	16:00	12:00		14:00	14:00					15:00
Volume	1	806	91	9	14	1		1	1					901

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1825	⟷	15%	1520	⟷	13%	1622	⟷	13%	7105	⟷	59%

Classification Definitions

1	Motorcycles
2	Passenger Cars
3	2-Axle, 4-Tire Single Units
4	Buses
5	2-Axle, 6-Tire Single Units
6	3-Axle Single Units
7	> =4-Axle Single Units
8	<=4-Axle Single Trailers
9	5-Axle Single Trailers
10	>=6-Axle Single Trailers
11	<=5-Axle Multi-Trailers
12	6-Axle Multi-Trailers
13	>=7-Axle Multi-Trailers

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	130	14	0	0	0	0	0	1	0	0	0	0	**145**
01:00	0	92	12	0	0	0	0	0	0	0	0	0	0	**104**
02:00	0	60	10	0	2	0	0	0	1	0	0	0	0	**73**
03:00	0	82	10	0	0	0	0	0	1	0	0	0	0	**93**
04:00	0	167	20	1	1	0	0	0	0	0	0	0	0	**189**
05:00	0	364	62	7	5	0	0	0	0	0	0	0	0	**438**
06:00	1	690	106	16	6	1	0	0	0	0	0	0	0	**820**
07:00	1	1447	167	27	24	2	0	1	0	0	0	0	0	**1669**
08:00	0	1419	178	27	18	0	0	0	0	0	0	0	0	**1642**
09:00	0	972	124	19	14	0	0	1	0	0	0	0	0	**1130**
10:00	0	1035	123	11	13	0	0	2	1	0	0	0	0	**1185**
11:00	0	1133	141	17	20	0	0	0	1	0	0	0	0	**1312**
12:00 PM	0	1203	145	16	17	2	0	0	0	0	0	0	0	**1383**
13:00	1	1157	142	18	16	1	0	0	0	0	0	0	0	**1335**
14:00	1	1581	204	29	17	0	0	1	1	0	0	0	0	**1834**
15:00	0	1719	198	23	22	0	0	0	1	0	0	0	0	**1963**
16:00	2	1779	230	29	23	1	0	0	0	0	0	0	0	**2064**
17:00	0	1650	185	24	15	0	0	0	2	0	0	0	0	**1876**
18:00	0	1283	152	22	15	0	0	0	0	0	0	0	0	**1472**
19:00	1	918	96	14	9	0	0	1	0	0	0	0	0	**1039**
20:00	0	719	77	11	5	0	0	0	0	0	0	0	0	**812**
21:00	1	566	58	8	7	0	0	0	0	0	0	0	0	**640**
22:00	0	368	36	6	1	0	0	0	0	0	0	0	0	**411**
23:00	0	222	23	1	2	0	0	0	0	0	0	0	0	**248**
Totals	**8**	**20756**	**2513**	**326**	**252**	**7**		**6**	**9**					**23877**
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	7591	967	125	103	3	0	4	5	0	0	0	0	8800
% AM	0%	32%	4%	1%	0%	0%		0%	0%					37%
AM Peak Hour	06:00	07:00	08:00	07:00	07:00	07:00		10:00						07:00
Volume	1	1447	178	27	24	2		2	1					1669
PM Volumes	6	13165	1546	201	149	4	0	2	4	0	0	0	0	15077
% PM	0%	55%	6%	1%	1%	0%		0%	0%					63%
PM Peak Hour	16:00	16:00	16:00	14:00	16:00	12:00		14:00	17:00					16:00
Volume	2	1779	230	29	23	2		1	2					2064

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	3311	⟷	14%	2718	⟷	11%	3940	⟷	17%	13908	⟷	58%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	11,805	12,072	23,

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOT
00:00	0	0	21		15		36		12:00	0	0	150		196		346
00:15	0	0	24		15		39		12:15	0	0	162		202		364
00:30	0	0	23		16		39		12:30	0	0	134		181		315
00:45	0	0	21	89	10	56	31	145	12:45	0	0	156	602	202	781	358
01:00	0	0	16		12		28		13:00	0	0	155		180		335
01:15	0	0	10		11		21		13:15	0	0	133		168		301
01:30	0	0	24		12		36		13:30	0	0	153		192		345
01:45	0	0	10	60	9	44	19	104	13:45	0	0	155	596	199	739	354
02:00	0	0	14		6		20		14:00	0	0	175		177		352
02:15	0	0	13		5		18		14:15	0	0	212		219		431
02:30	0	0	9		6		15		14:30	0	0	282		218		500
02:45	0	0	13	49	7	24	20	73	14:45	0	0	322	991	229	843	551
03:00	0	0	8		10		18		15:00	0	0	258		253		511
03:15	0	0	13		12		25		15:15	0	0	241		250		491
03:30	0	0	12		11		23		15:30	0	0	251		201		452
03:45	0	0	12	45	15	48	27	93	15:45	0	0	312	1062	197	901	509
04:00	0	0	12		14		26		16:00	0	0	263		239		502
04:15	0	0	12		24		36		16:15	0	0	319		213		532
04:30	0	0	14		45		59		16:30	0	0	288		205		493
04:45	0	0	19	57	49	132	68	189	16:45	0	0	310	1180	227	884	537
05:00	0	0	25		45		70		17:00	0	0	228		212		440
05:15	0	0	33		67		100		17:15	0	0	336		164		500
05:30	0	0	28		88		116		17:30	0	0	295		195		490
05:45	0	0	48	134	104	304	152	438	17:45	0	0	279	1138	167	738	446
06:00	0	0	28		108		136		18:00	0	0	253		172		425
06:15	0	0	59		123		182		18:15	0	0	257		169		426
06:30	0	0	79		172		251		18:30	0	0	191		138		329
06:45	0	0	77	243	174	577	251	820	18:45	0	0	176	877	116	595	292
07:00	0	0	116		236		352		19:00	0	0	167		140		307
07:15	0	0	144		200		344		19:15	0	0	115		126		241
07:30	0	0	187		264		451		19:30	0	0	134		131		265
07:45	0	0	246	693	276	976	522	1669	19:45	0	0	121	537	105	502	226
08:00	0	0	241		272		513		20:00	0	0	101		116		217
08:15	0	0	227		238		465		20:15	0	0	116		103		219
08:30	0	0	149		181		330		20:30	0	0	97		92		189
08:45	0	0	176	793	158	849	334	1642	20:45	0	0	87	401	100	411	187
09:00	0	0	144		153		297		21:00	0	0	79		127		206
09:15	0	0	136		148		284		21:15	0	0	72		95		167
09:30	0	0	116		143		259		21:30	0	0	66		72		138
09:45	0	0	137	533	153	597	290	1130	21:45	0	0	63	280	66	360	129
10:00	0	0	125		150		275		22:00	0	0	65		79		144
10:15	0	0	159		167		326		22:15	0	0	53		57		110
10:30	0	0	126		178		304		22:30	0	0	52		36		88
10:45	0	0	138	548	142	637	280	1185	22:45	0	0	26	196	43	215	69
11:00	0	0	146		181		327		23:00	0	0	26		36		62
11:15	0	0	144		167		311		23:15	0	0	29		34		63
11:30	0	0	146		207		353		23:30	0	0	36		31		67
11:45	0	0	144	580	177	732	321	1312	23:45	0	0	30	121	26	127	56
TOTALS				3824		4976		**8800**	**TOTALS**				7981		7096	
SPLIT %				43.5%		56.5%		**36.9%**	**SPLIT %**				52.9%		47.1%	

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	11,805	12,072	23,

AM Peak Hour			07:30	07:30	**07:30**	**PM Peak Hour**			15:45	14:30
AM Pk Volume			901	1050	**1951**	**PM Pk Volume**			1182	950
Pk Hr Factor			0.916	0.951	**0.934**	**Pk Hr Factor**			0.926	0.939
7 - 9 Volume	0	0	1486	1825	**3311**	**4 - 6 Volume**	0	0	2318	1622
7 - 9 Peak Hour			07:30	07:30	**07:30**	**4 - 6 Peak Hour**			16:00	16:00
7 - 9 Pk Volume	0	0	901	1050	**1951**	**4 - 6 Pk Volume**	0	0	1180	884
Pk Hr Factor	0.000	0.000	0.916	0.951	**0.934**	**Pk Hr Factor**	0.000	0.000	0.925	0.925

Prepared by NDS/ATD

Project #: CA19_5294_001 **City:** Compton

Location: W Compton Blvd Bet. S Matthisen Ave & N **Date:** 5/21/2019

Prepared by National Data & Surveying Services

Screenline Pedestrian & Bike Study

Location: W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave
City: Compton

Date: 05/21/2019
Day: Tuesday

TIME	Peds				TOTAL	Bikes				TOTAL
	Northleg		Southleg			Northleg		Southleg		
	EB	WB	EB	WB		EB	WB	EB	WB	
7:00 AM	1	2	2	0	5	0	0	0	0	0
7:15 AM	2	3	1	8	14	2	0	0	0	2
7:30 AM	5	6	5	2	18	0	1	2	0	3
7:45 AM	3	1	2	4	10	0	0	0	0	0
8:00 AM	3	2	3	0	8	0	0	2	1	3
8:15 AM	4	3	4	3	14	0	0	0	0	0
8:30 AM	0	0	4	3	7	0	1	0	1	2
8:45 AM	0	0	2	1	3	0	1	0	1	2
9:00 AM	8	2	1	0	11	1	1	1	0	3
9:15 AM	0	1	0	0	1	1	1	0	1	3
9:30 AM	1	0	4	0	5	0	0	1	1	2
9:45 AM	2	1	1	3	7	0	0	2	3	5
Totals	29	21	29	24	103	4	5	8	8	25
3:00 PM	6	9	0	3	18	1	0	1	3	5
3:15 PM	0	0	7	4	11	1	0	1	1	3
3:30 PM	0	1	2	0	3	0	1	2	0	3
3:45 PM	2	0	1	0	3	0	0	0	0	0
4:00 PM	1	7	2	4	14	0	0	0	0	0
4:15 PM	0	1	2	5	8	0	3	1	1	5
4:30 PM	0	2	0	3	5	1	1	0	0	2
4:45 PM	1	3	5	2	11	2	1	0	1	4
5:00 PM	1	1	1	3	6	0	0	0	0	0
5:15 PM	1	0	0	0	1	0	1	2	1	4
5:30 PM	0	0	1	2	3	1	1	1	1	4
5:45 PM	2	2	1	1	6	0	1	0	0	1
Totals	14	26	22	27	89	6	9	8	8	31
Grand Total	43	47	51	51	192	10	14	16	16	56

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	35	3	0	0	0	0	0	0	0	0	0	0	38
00:15	0	36	3	0	0	0	0	0	0	0	0	0	0	39
00:30	0	29	2	0	0	0	0	0	0	0	0	0	0	31
00:45	0	27	3	0	0	0	0	0	0	0	0	0	0	30
01:00	0	16	4	0	0	0	0	0	0	0	0	0	0	20
01:15	0	26	4	0	0	1	0	0	0	0	0	0	0	31
01:30	0	18	1	0	0	0	0	0	0	0	0	0	0	19
01:45	0	19	2	0	0	0	0	0	0	0	0	0	0	21
02:00	0	18	1	0	0	0	0	0	0	0	0	0	0	19
02:15	0	16	4	0	0	0	0	0	0	0	0	0	0	20
02:30	0	12	1	0	0	0	0	0	0	0	0	0	0	13
02:45	0	13	2	0	0	0	0	0	0	0	0	0	0	15
03:00	0	20	1	0	0	0	0	0	0	0	0	0	0	21
03:15	0	12	1	0	0	0	0	0	1	0	0	0	0	14
03:30	0	10	2	0	0	0	0	0	0	0	0	0	0	12
03:45	0	15	1	0	0	0	0	0	0	0	0	0	0	16
04:00	0	11	2	0	1	0	0	0	0	0	0	0	0	14
04:15	0	21	2	0	0	0	0	0	0	0	0	0	0	23
04:30	0	18	3	2	0	0	0	0	0	0	0	0	0	23
04:45	0	29	4	0	0	0	0	0	0	0	0	0	0	33
05:00	0	35	6	0	0	0	0	0	0	0	0	0	0	41
05:15	0	27	9	1	0	0	0	0	0	0	0	0	0	37
05:30	0	27	3	1	0	0	0	0	0	0	0	0	0	31
05:45	0	39	7	0	0	0	0	0	0	0	0	0	0	46
06:00	0	52	7	1	0	0	0	0	0	0	0	0	0	60
06:15	0	58	9	2	0	2	0	0	0	0	0	0	0	71
06:30	0	65	11	1	1	0	0	0	0	0	0	0	0	78
06:45	1	89	16	2	0	0	0	0	0	0	0	0	0	108
07:00	0	100	15	2	2	0	0	0	0	0	0	0	0	119
07:15	0	111	18	1	1	1	0	0	0	0	0	0	0	132
07:30	0	159	19	2	1	1	0	0	0	0	0	0	0	182
07:45	0	189	23	1	2	0	0	0	0	0	0	0	0	215
08:00	0	144	23	4	1	0	0	0	1	0	0	0	0	173
08:15	0	118	26	2	2	0	0	0	0	0	0	0	0	148
08:30	0	117	11	2	2	0	0	0	0	0	0	0	0	132
08:45	0	121	13	2	1	0	0	0	0	0	0	0	0	137
09:00	0	92	15	4	1	0	0	0	0	0	0	0	0	112
09:15	0	94	18	1	3	0	0	0	0	0	0	0	0	116
09:30	0	93	14	1	1	1	0	0	0	0	0	0	0	110
09:45	0	108	12	2	3	0	0	1	0	0	0	0	0	126
10:00	0	103	13	3	2	0	0	0	0	0	0	0	0	121
10:15	0	95	10	0	0	0	0	0	1	0	0	0	0	106
10:30	0	114	14	1	4	1	0	0	0	0	0	0	0	134
10:45	0	112	13	2	4	0	0	0	0	0	0	0	0	131
11:00	1	114	17	1	2	0	0	0	0	0	0	0	0	135
11:15	0	114	17	3	2	0	0	0	0	0	0	0	0	136
11:30	0	125	18	1	4	0	0	0	0	0	0	0	0	148
11:45	0	127	15	2	1	0	0	0	0	0	0	0	0	145
12:00 PM	0	118	13	1	1	0	0	0	0	0	0	0	0	133
12:15	0	142	14	4	2	0	0	0	0	0	0	0	0	162
12:30	0	144	17	1	1	0	0	0	0	0	0	0	0	163
12:45	0	122	23	1	0	0	0	0	0	0	0	0	0	146
13:00	0	153	25	1	2	0	0	0	0	0	0	0	0	181
13:15	0	109	13	3	0	0	0	0	0	0	0	0	0	125
13:30	0	158	19	1	2	1	0	0	0	0	0	0	0	181
13:45	0	138	18	1	3	0	0	0	0	0	0	0	0	160
14:00	0	156	18	3	2	0	0	0	0	0	0	0	0	179
14:15	0	154	30	3	2	0	0	0	0	0	0	0	0	189
14:30	0	188	29	2	1	0	0	1	0	0	0	0	0	221
14:45	1	192	26	1	3	1	0	0	0	0	0	0	0	224
15:00	0	226	26	2	2	0	0	0	0	0	0	0	0	256
15:15	0	201	27	3	1	2	0	0	0	0	0	0	0	234
15:30	0	177	24	1	2	0	0	0	0	0	0	0	0	204
15:45	0	215	35	2	3	0	0	0	0	0	0	0	0	255
16:00	0	228	27	3	4	1	0	0	0	0	0	0	0	263
16:15	0	210	26	2	2	0	0	0	0	0	0	0	0	240
16:30	0	235	30	0	1	0	0	0	0	0	0	0	0	266
16:45	0	220	33	1	5	0	0	0	0	0	0	0	0	259
17:00	1	227	36	1	0	0	0	0	0	0	0	0	0	265
17:15	0	224	33	1	2	0	0	0	0	0	0	0	0	260
17:30	0	236	21	2	2	0	0	0	0	0	0	0	0	261
17:45	0	194	30	3	1	0	0	0	1	0	0	0	0	229
18:00	0	215	23	2	3	0	0	0	0	0	0	0	0	243
18:15	0	181	29	2	1	0	0	0	0	0	0	0	0	213
18:30	0	166	18	2	2	0	0	0	0	0	0	0	0	188
18:45	0	143	18	1	1	0	0	0	0	0	0	0	0	163
19:00	1	138	18	1	1	0	0	0	0	0	0	0	0	159
19:15	0	141	15	0	0	0	0	0	0	0	0	0	0	156
19:30	0	137	14	2	8	0	0	0	0	0	0	0	0	161
19:45	0	157	18	2	1	0	0	0	0	0	0	0	0	178
20:00	0	111	12	1	3	0	0	0	0	0	0	0	0	127
20:15	0	111	15	1	1	0	0	0	0	0	0	0	0	128
20:30	0	115	12	2	2	0	0	0	0	0	0	0	0	131
20:45	0	113	11	1	1	0	0	0	0	0	0	0	0	126
21:00	1	120	14	1	1	0	0	0	0	0	0	0	0	137
21:15	0	105	8	1	0	0	0	0	0	0	0	0	0	114
21:30	0	92	10	0	0	0	0	0	0	0	0	0	0	102
21:45	0	101	8	1	2	0	0	0	0	0	0	0	0	112
22:00	0	83	5	0	0	0	0	0	0	0	0	0	0	88
22:15	0	71	6	1	0	0	0	0	0	0	0	0	0	78
22:30	0	50	9	0	1	0	0	0	0	0	0	0	0	60
22:45	0	50	4	0	0	0	0	0	0	0	0	0	0	54
23:00	0	45	2	0	0	0	0	0	0	0	0	0	0	47
23:15	0	48	4	1	1	0	0	0	0	0	0	0	0	54
23:30	0	48	3	0	0	0	0	0	0	0	0	0	0	51
23:45	0	41	5	0	1	0	0	0	0	0	0	0	0	47
Totals	6	10092	1312	112	115	12		2	4					11655
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	3143	438	47	41	7	0	1	3	0	0	0	0	3682
% AM	0%	27%	4%	0%	0%	0%		0%	0%					32%
AM Peak Hour	06:00	07:30	07:30	08:00	10:30	05:30		09:00	02:30					07:30
Volume	1	610	91	10	12	2		1	1					718
PM Volumes	4	6949	874	65	74	5	0	1	1	0	0	0	0	7973
% PM	0%	60%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	14:00	16:45	16:30	13:45	19:30	14:30		13:45	17:00					16:30
Volume	1	907	132	9	13	3		1	1					1050

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1238	⟷	11%	1251	⟷	11%	2043	⟷	18%	7123	⟷	61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	27	4	0	0	0	0	0	0	0	0	0	0	31
00:15	0	21	4	0	0	0	0	0	0	0	0	0	0	25
00:30	0	20	1	0	0	0	0	0	0	0	0	0	0	21
00:45	0	15	3	0	0	0	0	0	0	0	0	0	0	18
01:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
01:15	0	11	1	0	0	0	0	0	0	0	0	0	0	12
01:30	0	18	3	0	0	0	0	0	0	0	0	0	0	21
01:45	0	9	1	0	0	0	0	0	0	0	0	0	0	10
02:00	0	16	1	0	1	0	0	0	0	0	0	0	0	18
02:15	0	11	2	0	0	0	0	0	0	0	0	0	0	13
02:30	0	20	2	0	0	0	0	0	0	0	0	0	0	22
02:45	0	13	1	0	0	0	0	0	0	0	0	0	0	14
03:00	0	21	2	0	0	0	0	0	0	0	0	0	0	23
03:15	0	21	2	0	0	0	0	0	0	0	0	0	0	23
03:30	0	20	4	0	0	0	0	0	0	0	0	0	0	24
03:45	0	20	1	0	0	0	0	0	0	0	0	0	0	21
04:00	0	19	4	0	0	0	0	0	0	0	0	0	0	23
04:15	0	36	7	0	1	0	0	0	0	0	0	0	0	44
04:30	0	48	7	0	1	0	0	0	0	0	0	0	0	56
04:45	0	62	15	1	2	0	0	1	0	0	0	0	0	81
05:00	0	44	6	1	0	0	0	0	0	0	0	0	0	51
05:15	0	81	11	0	1	0	0	0	0	0	0	0	0	93
05:30	0	103	16	3	2	0	0	0	0	0	0	0	0	124
05:45	0	107	17	2	1	1	0	0	0	0	0	0	0	128
06:00	0	82	10	1	2	0	0	0	0	0	0	0	0	95
06:15	0	97	15	1	1	0	0	0	0	0	0	0	0	114
06:30	0	119	20	2	3	0	0	0	1	0	0	0	0	145
06:45	0	136	19	3	6	2	0	0	0	0	0	0	0	166
07:00	0	137	19	3	6	1	0	1	0	0	0	0	0	167
07:15	0	176	29	1	3	1	0	0	0	0	0	0	0	210
07:30	0	226	37	1	5	0	1	0	0	0	0	0	0	270
07:45	0	243	40	4	8	2	1	0	0	0	0	0	0	298
08:00	2	201	40	2	7	1	1	0	0	0	0	0	0	254
08:15	0	183	29	4	6	2	0	0	1	0	0	0	0	225
08:30	0	141	22	1	2	0	0	0	1	0	0	0	0	167
08:45	0	125	19	2	4	0	0	0	0	0	0	0	0	150
09:00	0	112	22	1	4	0	0	0	2	0	0	0	0	141
09:15	0	92	13	1	6	0	0	0	0	0	0	0	0	112
09:30	0	100	15	2	3	0	0	0	0	0	0	0	0	120
09:45	0	102	13	2	2	0	0	0	0	0	0	0	0	119
10:00	0	97	16	1	3	0	0	0	0	0	0	0	0	117
10:15	0	107	21	3	2	1	0	0	0	0	0	0	0	134
10:30	0	130	19	1	3	0	0	0	1	0	0	0	0	154
10:45	0	92	16	2	2	0	0	0	0	0	0	0	0	112
11:00	0	101	15	1	1	0	0	0	0	0	0	0	0	118
11:15	0	118	17	1	5	1	0	0	0	0	0	0	0	142
11:30	1	116	20	1	1	3	1	0	0	0	0	0	0	143
11:45	0	117	18	1	2	1	0	0	0	0	0	0	0	139
12:00 PM	0	122	19	4	3	0	0	0	0	0	0	0	0	148
12:15	0	116	25	1	3	0	0	0	0	0	0	0	0	145
12:30	0	116	20	4	5	1	0	0	0	0	0	0	0	146
12:45	0	121	22	3	5	0	0	0	0	0	0	0	0	151
13:00	0	138	22	3	4	0	0	0	0	0	0	0	0	167
13:15	1	121	16	1	3	0	0	0	1	0	0	0	0	143
13:30	0	143	24	1	3	1	0	0	0	0	0	0	0	172
13:45	0	132	18	3	4	0	0	0	0	0	0	0	0	157
14:00	0	122	19	1	1	0	1	0	1	0	0	0	0	145
14:15	0	144	26	4	7	0	0	0	1	0	0	0	0	182
14:30	0	157	29	1	3	1	0	0	1	0	0	0	0	192
14:45	0	175	23	3	5	0	0	0	0	0	0	0	0	206
15:00	1	159	23	2	2	0	0	0	0	0	0	0	0	187
15:15	0	145	18	2	3	0	0	0	0	0	0	0	0	168
15:30	0	169	23	3	4	1	0	0	0	0	0	0	0	200
15:45	0	153	26	2	5	0	0	0	0	0	0	0	0	186
16:00	0	144	23	3	3	0	0	0	1	0	0	0	0	174
16:15	0	143	18	1	2	0	0	0	0	0	0	0	0	164
16:30	0	130	18	1	4	0	0	0	0	0	0	0	0	153
16:45	0	138	22	2	8	1	0	0	0	0	0	0	0	171
17:00	0	135	20	2	4	0	0	0	0	0	0	0	0	161
17:15	2	141	19	1	2	2	1	1	0	0	0	0	0	169
17:30	0	141	17	2	0	0	0	0	0	0	0	0	0	160
17:45	1	141	19	1	6	1	0	0	0	0	0	0	0	169
18:00	0	119	27	1	1	0	0	0	0	0	0	0	0	148
18:15	0	147	20	2	2	0	0	0	0	0	0	0	0	171
18:30	0	118	21	2	1	0	0	0	0	0	0	0	0	142
18:45	0	114	12	1	2	0	0	0	0	0	0	0	0	129
19:00	0	133	19	1	3	0	1	0	0	0	0	0	0	157
19:15	0	135	12	2	0	0	0	0	0	0	0	0	0	149
19:30	0	123	16	1	1	0	0	0	0	0	0	0	0	141
19:45	0	96	19	1	0	0	0	0	0	0	0	0	0	116
20:00	0	95	13	1	1	0	1	0	1	0	0	0	0	112
20:15	0	94	10	2	2	0	0	0	0	0	0	0	0	108
20:30	0	87	11	1	2	0	0	0	0	0	0	0	0	101
20:45	0	73	11	0	0	0	0	0	0	0	0	0	0	84
21:00	0	71	9	1	2	0	0	0	0	0	0	0	0	83
21:15	0	72	6	1	2	1	0	0	0	0	0	0	0	82
21:30	0	65	10	0	2	0	0	0	0	0	0	0	0	77
21:45	0	67	7	1	1	0	0	0	0	0	0	0	0	76
22:00	0	57	7	0	2	0	0	0	0	0	0	0	0	66
22:15	0	39	3	0	0	0	0	0	0	0	0	0	0	42
22:30	0	45	9	0	1	0	0	0	0	0	0	0	0	55
22:45	0	36	2	1	0	0	0	0	0	0	0	0	0	39
23:00	0	33	3	0	0	0	0	0	1	0	0	0	0	37
23:15	0	36	4	0	0	0	0	0	0	0	0	0	0	40
23:30	0	30	2	1	0	0	0	0	0	0	0	0	0	33
23:45	0	25	3	0	1	0	0	0	0	0	0	0	0	29
Totals	8	9178	1386	120	211	25	8	3	13					10952
% of Totals	0%	84%	13%	1%	2%	0%	0%	0%	0%					100%

AM Volumes	3	3922	621	49	96	16	4	2	6	0	0	0	0	4719
% AM	0%	36%	6%	0%	1%	0%	0%	0%	0%					43%
AM Peak Hour	07:15	07:30	07:15	07:30	07:30	07:30	07:15	04:00	08:15					07:30
Volume	2	853	146	11	26	5	3	1	4					1047
PM Volumes	5	5256	765	71	115	9	4	1	7	0	0	0	0	6233
% PM	0%	48%	7%	1%	1%	0%	0%	0%	0%					57%
PM Peak Hour	17:00	14:45	14:15	12:00	16:15	16:30	13:15	16:30	13:45					14:15
Volume	3	648	101	12	18	3	1	1	3					767

Directional Peak Periods All Classes	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
	Volume		%	Volume		%	Volume		%	Volume		%
	1741	⟷	16%	1229	⟷	11%	1321	⟷	12%	6661	⟷	61%

Classification Definitions

1	Motorcycles	4	Buses	7	> =4-Axle Single Units	10	>=6-Axle Single Trailers	13	>=7-Axle Multi-Trailers
2	Passenger Cars	5	2-Axle, 6-Tire Single Units	8	<=4-Axle Single Trailers	11	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	6	3-Axle Single Units	9	5-Axle Single Trailers	12	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	62	7	0	0	0	0	0	0	0	0	0	0	**69**
00:15	0	57	7	0	0	0	0	0	0	0	0	0	0	**64**
00:30	0	49	3	0	0	0	0	0	0	0	0	0	0	**52**
00:45	0	42	6	0	0	0	0	0	0	0	0	0	0	**48**
01:00	0	25	6	0	0	0	0	0	0	0	0	0	0	**31**
01:15	0	37	5	0	0	1	0	0	0	0	0	0	0	**43**
01:30	0	36	4	0	0	0	0	0	0	0	0	0	0	**40**
01:45	0	28	3	0	0	0	0	0	0	0	0	0	0	**31**
02:00	0	34	2	0	1	0	0	0	0	0	0	0	0	**37**
02:15	0	27	6	0	0	0	0	0	0	0	0	0	0	**33**
02:30	0	32	3	0	0	0	0	0	0	0	0	0	0	**35**
02:45	0	26	3	0	0	0	0	0	0	0	0	0	0	**29**
03:00	0	41	3	0	0	0	0	0	0	0	0	0	0	**44**
03:15	0	33	3	0	0	0	0	0	1	0	0	0	0	**37**
03:30	0	30	6	0	0	0	0	0	0	0	0	0	0	**36**
03:45	0	35	2	0	0	0	0	0	0	0	0	0	0	**37**
04:00	0	30	6	0	1	0	0	0	0	0	0	0	0	**37**
04:15	0	57	9	0	1	0	0	0	0	0	0	0	0	**67**
04:30	0	66	10	2	1	0	0	0	0	0	0	0	0	**79**
04:45	0	91	19	1	2	0	0	1	0	0	0	0	0	**114**
05:00	0	79	12	1	0	0	0	0	0	0	0	0	0	**92**
05:15	0	108	20	1	1	0	0	0	0	0	0	0	0	**130**
05:30	0	130	19	4	2	0	0	0	0	0	0	0	0	**155**
05:45	0	146	24	2	1	1	0	0	0	0	0	0	0	**174**
06:00	0	134	17	2	2	0	0	0	0	0	0	0	0	**155**
06:15	0	155	24	3	1	2	0	0	0	0	0	0	0	**185**
06:30	0	184	31	3	4	0	0	0	1	0	0	0	0	**223**
06:45	1	225	35	5	6	2	0	0	0	0	0	0	0	**274**
07:00	0	237	34	5	8	1	0	1	0	0	0	0	0	**286**
07:15	0	287	47	2	4	2	0	0	0	0	0	0	0	**342**
07:30	0	385	56	3	6	1	1	0	0	0	0	0	0	**452**
07:45	0	432	63	5	10	2	1	0	0	0	0	0	0	**513**
08:00	2	345	63	6	8	1	1	0	1	0	0	0	0	**427**
08:15	0	301	55	6	8	2	0	0	1	0	0	0	0	**373**
08:30	0	258	33	3	4	0	0	0	1	0	0	0	0	**299**
08:45	0	246	32	4	5	0	0	0	0	0	0	0	0	**287**
09:00	0	204	37	5	5	0	0	0	2	0	0	0	0	**253**
09:15	0	186	31	2	9	0	0	0	0	0	0	0	0	**228**
09:30	0	193	29	3	4	1	0	0	0	0	0	0	0	**230**
09:45	0	210	25	4	5	0	0	1	0	0	0	0	0	**245**
10:00	0	200	29	4	5	0	0	0	0	0	0	0	0	**238**
10:15	0	202	31	3	2	1	0	0	1	0	0	0	0	**240**
10:30	0	244	33	2	7	1	0	0	1	0	0	0	0	**288**
10:45	0	204	29	4	6	0	0	0	0	0	0	0	0	**243**
11:00	1	215	32	2	3	0	0	0	0	0	0	0	0	**253**
11:15	0	232	34	4	7	1	0	0	0	0	0	0	0	**278**
11:30	1	241	38	2	5	3	1	0	0	0	0	0	0	**291**
11:45	0	244	33	3	3	1	0	0	0	0	0	0	0	**284**
12:00 PM	0	240	32	5	4	0	0	0	0	0	0	0	0	**281**
12:15	0	258	39	5	5	0	0	0	0	0	0	0	0	**307**
12:30	0	260	37	5	6	1	0	0	0	0	0	0	0	**309**
12:45	0	243	45	4	5	0	0	0	0	0	0	0	0	**297**
13:00	0	291	47	4	6	0	0	0	0	0	0	0	0	**348**
13:15	1	230	29	4	3	0	0	0	1	0	0	0	0	**268**
13:30	0	301	43	2	5	2	0	0	0	0	0	0	0	**353**
13:45	0	270	36	4	7	0	0	0	0	0	0	0	0	**317**
14:00	0	278	37	4	3	0	1	0	1	0	0	0	0	**324**
14:15	0	298	56	7	9	0	0	0	1	0	0	0	0	**371**
14:30	0	345	58	3	4	1	0	1	1	0	0	0	0	**413**
14:45	1	367	49	4	8	1	0	0	0	0	0	0	0	**430**
15:00	1	385	49	4	4	0	0	0	0	0	0	0	0	**443**
15:15	0	346	45	5	4	2	0	0	0	0	0	0	0	**402**
15:30	0	346	47	4	6	1	0	0	0	0	0	0	0	**404**
15:45	0	368	61	4	8	0	0	0	0	0	0	0	0	**441**
16:00	0	372	50	6	7	1	0	0	1	0	0	0	0	**437**
16:15	0	353	44	3	4	0	0	0	0	0	0	0	0	**404**
16:30	0	365	48	1	5	0	0	0	0	0	0	0	0	**419**
16:45	0	358	55	3	13	1	0	0	0	0	0	0	0	**430**
17:00	1	362	56	3	4	0	0	0	0	0	0	0	0	**426**
17:15	2	365	52	2	4	2	1	1	0	0	0	0	0	**429**
17:30	0	377	38	4	2	0	0	0	0	0	0	0	0	**421**
17:45	1	335	49	4	7	1	0	0	1	0	0	0	0	**398**
18:00	0	334	50	3	4	0	0	0	0	0	0	0	0	**391**
18:15	0	328	49	4	3	0	0	0	0	0	0	0	0	**384**
18:30	0	284	39	4	3	0	0	0	0	0	0	0	0	**330**
18:45	0	257	30	2	3	0	0	0	0	0	0	0	0	**292**
19:00	1	271	37	2	4	0	1	0	0	0	0	0	0	**316**
19:15	0	276	27	2	0	0	0	0	0	0	0	0	0	**305**
19:30	0	260	30	3	9	0	0	0	0	0	0	0	0	**302**
19:45	0	253	37	3	1	0	0	0	0	0	0	0	0	**294**
20:00	0	206	25	2	4	0	1	0	1	0	0	0	0	**239**
20:15	0	205	25	3	3	0	0	0	0	0	0	0	0	**236**
20:30	0	202	23	3	4	0	0	0	0	0	0	0	0	**232**
20:45	0	186	22	1	1	0	0	0	0	0	0	0	0	**210**
21:00	1	191	23	2	3	0	0	0	0	0	0	0	0	**220**
21:15	0	177	14	2	2	1	0	0	0	0	0	0	0	**196**
21:30	0	157	20	0	2	0	0	0	0	0	0	0	0	**179**
21:45	0	168	15	2	3	0	0	0	0	0	0	0	0	**188**
22:00	0	140	12	0	2	0	0	0	0	0	0	0	0	**154**
22:15	0	110	9	1	0	0	0	0	0	0	0	0	0	**120**
22:30	0	95	18	0	2	0	0	0	0	0	0	0	0	**115**
22:45	0	86	6	1	0	0	0	0	0	0	0	0	0	**93**
23:00	0	78	5	0	0	0	0	0	1	0	0	0	0	**84**
23:15	0	84	8	1	1	0	0	0	0	0	0	0	0	**94**
23:30	0	78	5	1	0	0	0	0	0	0	0	0	0	**84**
23:45	0	66	8	0	2	0	0	0	0	0	0	0	0	**76**
Totals	**14**	**19270**	**2698**	**232**	**326**	**37**	**8**	**5**	**17**					**22607**
% of Totals	0%	85%	12%	1%	1%	0%	0%	0%	0%					100%

AM Volumes	5	7065	1059	96	137	23	4	3	9	0	0	0	0	8401
% AM	0%	31%	5%	0%	1%	0%	0%	0%	0%					37%
AM Peak Hour	07:15	07:30	07:30	07:30	07:30	06:45	07:15	04:00	08:15					07:30
Volume	2	1463	237	20	32	6	3	1	4					1765
PM Volumes	9	12205	1639	136	189	14	4	2	8	0	0	0	0	14206
% PM	0%	54%	7%	1%	1%	0%	0%	0%	0%					63%
PM Peak Hour	17:00	16:45	14:15	12:00	16:00	14:30	13:15	13:45	13:45					16:45
Volume	4	1462	212	19	29	4	1	1	3					1706

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	2979	⟷	13%	2480	⟷	11%	3364	⟷	15%	13784	⟷	61%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	127	11	0	0	0	0	0	0	0	0	0	0	138
01:00	0	79	11	0	0	1	0	0	0	0	0	0	0	91
02:00	0	59	8	0	0	0	0	0	0	0	0	0	0	67
03:00	0	57	5	0	0	0	0	0	1	0	0	0	0	63
04:00	0	79	11	2	1	0	0	0	0	0	0	0	0	93
05:00	0	128	25	2	0	0	0	0	0	0	0	0	0	155
06:00	1	264	43	6	1	2	0	0	0	0	0	0	0	317
07:00	0	559	75	6	6	2	0	0	0	0	0	0	0	648
08:00	0	500	73	10	6	0	0	0	1	0	0	0	0	590
09:00	0	387	59	8	8	1	0	1	0	0	0	0	0	464
10:00	0	424	50	6	10	1	0	0	1	0	0	0	0	492
11:00	1	480	67	7	9	0	0	0	0	0	0	0	0	564
12:00 PM	0	526	67	7	4	0	0	0	0	0	0	0	0	604
13:00	0	558	75	6	7	1	0	0	0	0	0	0	0	647
14:00	1	690	103	9	8	1	0	1	0	0	0	0	0	813
15:00	0	819	112	8	8	2	0	0	0	0	0	0	0	949
16:00	0	893	116	6	12	1	0	0	0	0	0	0	0	1028
17:00	1	881	120	7	5	0	0	0	1	0	0	0	0	1015
18:00	0	705	88	7	7	0	0	0	0	0	0	0	0	807
19:00	1	573	65	5	10	0	0	0	0	0	0	0	0	654
20:00	0	450	50	5	7	0	0	0	0	0	0	0	0	512
21:00	1	418	40	3	3	0	0	0	0	0	0	0	0	465
22:00	0	254	24	1	1	0	0	0	0	0	0	0	0	280
23:00	0	182	14	1	2	0	0	0	0	0	0	0	0	199
Totals	6	10092	1312	112	115	12		2	4					11655
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	3143	438	47	41	7	0	1	3	0	0	0	0	3682
% AM	0%	27%	4%	0%	0%	0%		0%	0%					32%
AM Peak Hour	06:00	07:00	07:00	08:00	10:00	06:00		09:00	03:00					07:00
Volume	1	559	75	10	10	2		1	1					648
PM Volumes	4	6949	874	65	74	5	0	1	1	0	0	0	0	7973
% PM	0%	60%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	14:00	16:00	17:00	14:00	16:00	15:00		14:00	17:00					16:00
Volume	1	893	120	9	12	2		1	1					1028

Directional Peak Periods **All Classes**	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume		%	Volume		%	Volume		%	Volume		%
	1238	⟷	11%	1251	⟷	11%	2043	⟷	18%	7123	⟷	61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	83	12	0	0	0	0	0	0	0	0	0	0	95
01:00	0	47	7	0	0	0	0	0	0	0	0	0	0	54
02:00	0	60	6	0	1	0	0	0	0	0	0	0	0	67
03:00	0	82	9	0	0	0	0	0	0	0	0	0	0	91
04:00	0	165	33	1	4	0	0	1	0	0	0	0	0	204
05:00	0	335	50	6	4	1	0	0	0	0	0	0	0	396
06:00	0	434	64	7	12	2	0	0	1	0	0	0	0	520
07:00	0	782	125	9	22	4	2	1	0	0	0	0	0	945
08:00	2	650	110	9	19	3	1	0	2	0	0	0	0	796
09:00	0	406	63	6	15	0	0	0	2	0	0	0	0	492
10:00	0	426	72	7	10	1	0	0	1	0	0	0	0	517
11:00	1	452	70	4	9	5	1	0	0	0	0	0	0	542
12:00 PM	0	475	86	12	16	1	0	0	0	0	0	0	0	590
13:00	1	534	80	8	14	1	0	0	1	0	0	0	0	639
14:00	0	598	97	9	16	1	1	0	3	0	0	0	0	725
15:00	1	626	90	9	14	1	0	0	0	0	0	0	0	741
16:00	0	555	81	7	17	1	0	0	1	0	0	0	0	662
17:00	3	558	75	6	12	3	1	1	0	0	0	0	0	659
18:00	0	498	80	6	6	0	0	0	0	0	0	0	0	590
19:00	0	487	66	5	4	0	1	0	0	0	0	0	0	563
20:00	0	349	45	4	5	0	1	0	1	0	0	0	0	405
21:00	0	275	32	3	7	1	0	0	0	0	0	0	0	318
22:00	0	177	21	1	3	0	0	0	0	0	0	0	0	202
23:00	0	124	12	1	1	0	0	0	1	0	0	0	0	139
Totals	8	9178	1386	120	211	25	8	3	13					10952
% of Totals	0%	84%	13%	1%	2%	0%	0%	0%	0%					100%

AM Volumes	3	3922	621	49	96	16	4	2	6	0	0	0	0	4719
% AM	0%	36%	6%	0%	1%	0%	0%	0%	0%					43%
AM Peak Hour	08:00	07:00	07:00	07:00	07:00	11:00	07:00	04:00	08:00					07:00
Volume	2	782	125	9	22	5	2	1	2					945
PM Volumes	5	5256	765	71	115	9	4	1	7	0	0	0	0	6233
% PM	0%	48%	7%	1%	1%	0%	0%	0%	0%					57%
PM Peak Hour	17:00	15:00	14:00	12:00	16:00	17:00	14:00	17:00	14:00					15:00
Volume	3	626	97	12	17	3	1	1	3					741

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1741	↔	16%	1229	↔	11%	1321	↔	12%	6661	↔	61%

Classification Definitions

1	Motorcycles	4	Buses	7	> =4-Axle Single Units	10	>=6-Axle Single Trailers	13	>=7-Axle Multi-Trailers
2	Passenger Cars	5	2-Axle, 6-Tire Single Units	8	<=4-Axle Single Trailers	11	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	6	3-Axle Single Units	9	5-Axle Single Trailers	12	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	210	23	0	0	0	0	0	0	0	0	0	0	**233**
01:00	0	126	18	0	0	1	0	0	0	0	0	0	0	**145**
02:00	0	119	14	0	1	0	0	0	0	0	0	0	0	**134**
03:00	0	139	14	0	0	0	0	0	1	0	0	0	0	**154**
04:00	0	244	44	3	5	0	0	1	0	0	0	0	0	**297**
05:00	0	463	75	8	4	1	0	0	0	0	0	0	0	**551**
06:00	1	698	107	13	13	4	0	0	1	0	0	0	0	**837**
07:00	0	1341	200	15	28	6	2	1	0	0	0	0	0	**1593**
08:00	2	1150	183	19	25	3	1	0	3	0	0	0	0	**1386**
09:00	0	793	122	14	23	1	0	1	2	0	0	0	0	**956**
10:00	0	850	122	13	20	2	0	0	2	0	0	0	0	**1009**
11:00	2	932	137	11	18	5	1	0	0	0	0	0	0	**1106**
12:00 PM	0	1001	153	19	20	1	0	0	0	0	0	0	0	**1194**
13:00	1	1092	155	14	21	2	0	0	1	0	0	0	0	**1286**
14:00	1	1288	200	18	24	2	1	1	3	0	0	0	0	**1538**
15:00	1	1445	202	17	22	3	0	0	0	0	0	0	0	**1690**
16:00	0	1448	197	13	29	2	0	0	1	0	0	0	0	**1690**
17:00	4	1439	195	13	17	3	1	1	1	0	0	0	0	**1674**
18:00	0	1203	168	13	13	0	0	0	0	0	0	0	0	**1397**
19:00	1	1060	131	10	14	0	1	0	0	0	0	0	0	**1217**
20:00	0	799	95	9	12	0	1	0	1	0	0	0	0	**917**
21:00	1	693	72	6	10	1	0	0	0	0	0	0	0	**783**
22:00	0	431	45	2	4	0	0	0	0	0	0	0	0	**482**
23:00	0	306	26	2	3	0	0	0	1	0	0	0	0	**338**
Totals	**14**	**19270**	**2698**	**232**	**326**	**37**	**8**	**5**	**17**					**22607**
% of Totals	0%	85%	12%	1%	1%	0%	0%	0%	0%					100%

AM Volumes	5	7065	1059	96	137	23	4	3	9	0	0	0	0	8401
% AM	0%	31%	5%	0%	1%	0%	0%	0%	0%					37%
AM Peak Hour	08:00	07:00	07:00	08:00	07:00	07:00	07:00	04:00	08:00					07:00
Volume	2	1341	200	19	28	6	2	1	3					1593
PM Volumes	9	12205	1639	136	189	14	4	2	8	0	0	0	0	14206
% PM	0%	54%	7%	1%	1%	0%	0%	0%	0%					63%
PM Peak Hour	17:00	16:00	15:00	12:00	16:00	15:00	14:00	14:00	14:00					15:00
Volume	4	1448	202	19	29	3	1	1	3					1690

Directional Peak Periods **All Classes**	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume		%	Volume		%	Volume		%	Volume		%
	2979	⟷	13%	2480	⟷	11%	3364	⟷	15%	13784	⟷	61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

DAILY TOTALS	NB	SB	EB	WB	To
	11,655	10,952	0	0	22,

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TO
00:00	38		31		0	0	69		12:00	133		148		0	0	281
00:15	39		25		0	0	64		12:15	162		145		0	0	307
00:30	31		21		0	0	52		12:30	163		146		0	0	309
00:45	30	138	18	95	0	0	48	233	12:45	146	604	151	590	0	0	297
01:00	20		11		0	0	31		13:00	181		167		0	0	348
01:15	31		12		0	0	43		13:15	125		143		0	0	268
01:30	19		21		0	0	40		13:30	181		172		0	0	353
01:45	21	91	10	54	0	0	31	145	13:45	160	647	157	639	0	0	317
02:00	19		18		0	0	37		14:00	179		145		0	0	324
02:15	20		13		0	0	33		14:15	189		182		0	0	371
02:30	13		22		0	0	35		14:30	221		192		0	0	413
02:45	15	67	14	67	0	0	29	134	14:45	224	813	206	725	0	0	430
03:00	21		23		0	0	44		15:00	256		187		0	0	443
03:15	14		23		0	0	37		15:15	234		168		0	0	402
03:30	12		24		0	0	36		15:30	204		200		0	0	404
03:45	16	63	21	91	0	0	37	154	15:45	255	949	186	741	0	0	441
04:00	14		23		0	0	37		16:00	263		174		0	0	437
04:15	23		44		0	0	67		16:15	240		164		0	0	404
04:30	23		56		0	0	79		16:30	266		153		0	0	419
04:45	33	93	81	204	0	0	114	297	16:45	259	1028	171	662	0	0	430
05:00	41		51		0	0	92		17:00	265		161		0	0	426
05:15	37		93		0	0	130		17:15	260		169		0	0	429
05:30	31		124		0	0	155		17:30	261		160		0	0	421
05:45	46	155	128	396	0	0	174	551	17:45	229	1015	169	659	0	0	398
06:00	60		95		0	0	155		18:00	243		148		0	0	391
06:15	71		114		0	0	185		18:15	213		171		0	0	384
06:30	78		145		0	0	223		18:30	188		142		0	0	330
06:45	108	317	166	520	0	0	274	837	18:45	163	807	129	590	0	0	292
07:00	119		167		0	0	286		19:00	159		157		0	0	316
07:15	132		210		0	0	342		19:15	156		149		0	0	305
07:30	182		270		0	0	452		19:30	161		141		0	0	302
07:45	215	648	298	945	0	0	513	1593	19:45	178	654	116	563	0	0	294
08:00	173		254		0	0	427		20:00	127		112		0	0	239
08:15	148		225		0	0	373		20:15	128		108		0	0	236
08:30	132		167		0	0	299		20:30	131		101		0	0	232
08:45	137	590	150	796	0	0	287	1386	20:45	126	512	84	405	0	0	210
09:00	112		141		0	0	253		21:00	137		83		0	0	220
09:15	116		112		0	0	228		21:15	114		82		0	0	196
09:30	110		120		0	0	230		21:30	102		77		0	0	179
09:45	126	464	119	492	0	0	245	956	21:45	112	465	76	318	0	0	188
10:00	121		117		0	0	238		22:00	88		66		0	0	154
10:15	106		134		0	0	240		22:15	78		42		0	0	120
10:30	134		154		0	0	288		22:30	60		55		0	0	115
10:45	131	492	112	517	0	0	243	1009	22:45	54	280	39	202	0	0	93
11:00	135		118		0	0	253		23:00	47		37		0	0	84
11:15	136		142		0	0	278		23:15	54		40		0	0	94
11:30	148		143		0	0	291		23:30	51		33		0	0	84
11:45	145	564	139	542	0	0	284	1106	23:45	47	199	29	139	0	0	76
TOTALS		3682		4719				8401	TOTALS		7973		6233			
SPLIT %		43.8%		56.2%				37.2%	SPLIT %		56.1%		43.9%			

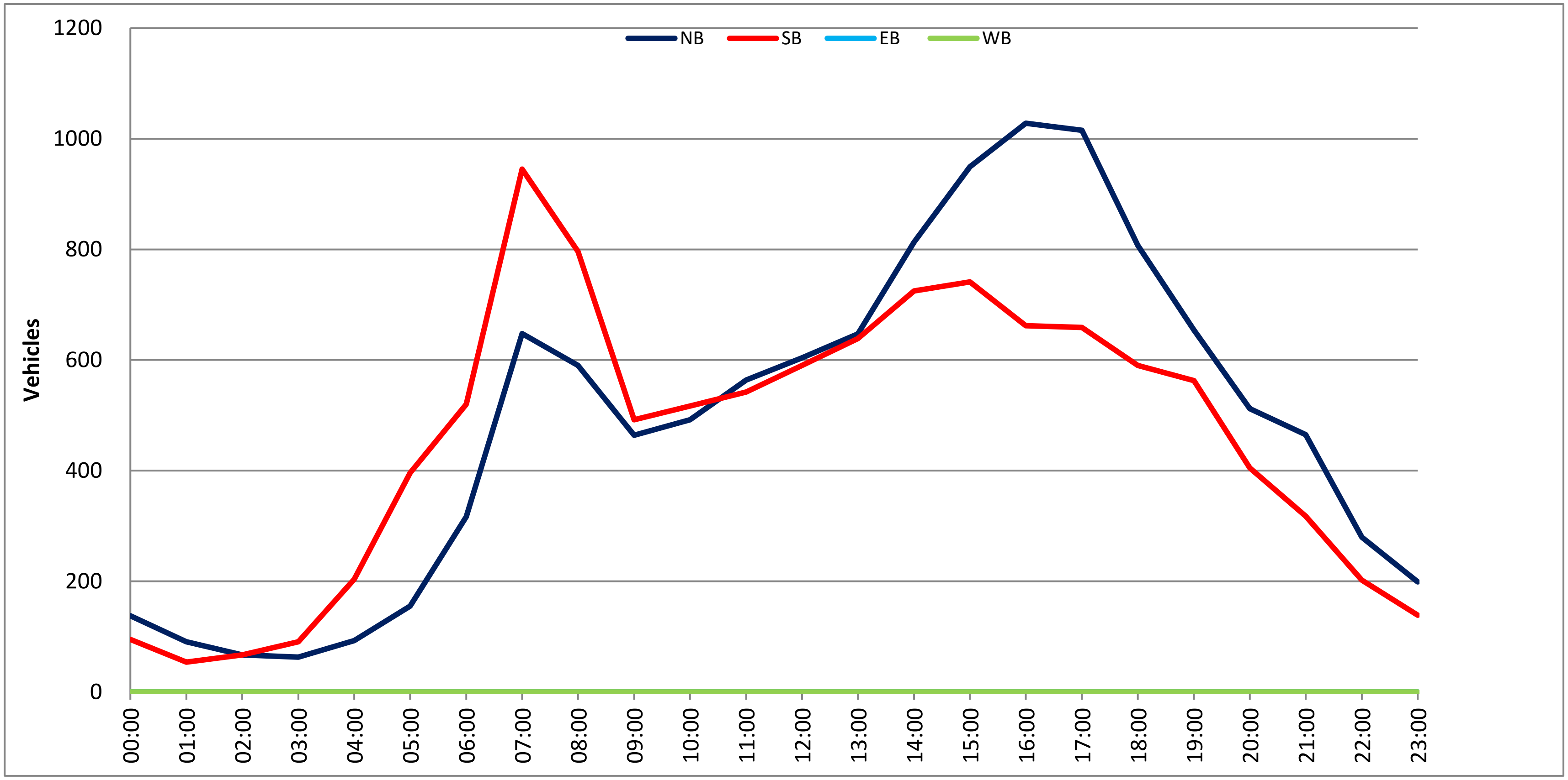
DAILY TOTALS	NB	SB	EB	WB	To
	11,655	10,952	0	0	22,

AM Peak Hour	07:30	07:30			07:30	PM Peak Hour	16:30	14:15		
AM Pk Volume	718	1047			1765	PM Pk Volume	1050	767		
Pk Hr Factor	0.835	0.878			0.860	Pk Hr Factor	0.987	0.931		
7 - 9 Volume	1238	1741	0	0	2979	4 - 6 Volume	2043	1321	0	0
7 - 9 Peak Hour	07:30	07:30			07:30	4 - 6 Peak Hour	16:30	16:00		
7 - 9 Pk Volume	718	1047	0	0	1765	4 - 6 Pk Volume	1050	662	0	0
Pk Hr Factor	0.835	0.878	0.000	0.000	0.860	Pk Hr Factor	0.987	0.951	0.000	0.000

Prepared by NDS/ATD

Project #: CA19_5294_002 **City:** Compton

Location: N Wilmington Ave Bet. W School St & W **Date:** 5/21/2019



Prepared by National Data & Surveying Services

Screenline Pedestrian & Bike Study

Location: N Wilmington Ave Bet. W School St & W Magnolia St
City: Compton

Date: 05/21/2019
Day: Tuesday

TIME	Peds				TOTAL	Bikes				TOTAL
	Eastleg		Westleg			Eastleg		Westleg		
	NB	SB	NB	SB		NB	SB	NB	SB	
7:00 AM	1	2	1	6	10	0	0	0	1	1
7:15 AM	0	1	0	2	3	0	0	0	1	1
7:30 AM	4	0	0	0	4	1	0	0	0	1
7:45 AM	3	0	3	2	8	0	0	0	0	0
8:00 AM	1	0	1	0	2	1	0	0	1	2
8:15 AM	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	2	0	0	2	1	0	0	0	1
8:45 AM	0	0	1	0	1	0	1	0	0	1
9:00 AM	0	2	1	0	3	1	0	0	0	1
9:15 AM	0	1	0	1	2	0	0	0	0	0
9:30 AM	0	0	0	0	0	1	0	0	0	1
9:45 AM	1	0	0	0	1	0	0	0	1	1
Totals	***10***	***8***	***7***	***11***	***36***	***5***	***2***	***0***	***4***	***11***
3:00 PM	0	2	3	1	6	0	1	0	0	1
3:15 PM	0	0	0	3	3	0	0	1	2	3
3:30 PM	0	2	3	2	7	2	0	0	0	2
3:45 PM	0	0	1	1	2	2	0	0	1	3
4:00 PM	1	2	5	1	9	0	0	0	0	0
4:15 PM	1	0	0	1	2	0	0	0	0	0
4:30 PM	0	0	1	0	1	2	1	0	0	3
4:45 PM	1	1	1	2	5	0	0	1	0	1
5:00 PM	4	2	5	1	12	0	1	1	1	3
5:15 PM	1	1	1	1	4	1	0	0	0	1
5:30 PM	1	0	0	0	1	0	0	1	1	2
5:45 PM	1	1	0	0	2	0	0	2	2	4
Totals	***10***	***11***	***20***	***13***	***54***	***7***	***3***	***6***	***7***	***23***
Grand Total	***20***	***19***	***27***	***24***	***90***	***12***	***5***	***6***	***11***	***34***

FINAL

Initial Study/Mitigated Negative Declaration

Wilmington Avenue Bridge Over Compton Creek Project

County of Los Angeles Department of Public Works

MAY 2023

Prepared for:

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
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APPENDICES

Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
APE	area of potential effects
AQMP	Air Quality Management Plan
bgs	below the ground surface
BMP	best management practice
BSA	biological survey area
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAMUTCD	Caltrans' Manual of Uniform Traffic Control Devices
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFG Code	California Fish and Game Code
CH_4	methane
CHRIS	California Historical Resources Information System
CIDH	cast-in-drilled hole
City	City of Compton
CMTP	Construction Monitoring and Treatment Plan
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
County	County of Los Angeles
dBA	A-weighted decibel
DOC	California Department of Conservation
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
GHG	greenhouse gas
GWP	global warming potential
HFC	hydrofluorocarbon
in/sec	inches per second
IPaC	Information Planning and Conservation System
IS	Initial Study
JWPCP	Joint Water Pollution Control Plant
LACM	Natural History Museum of Los Angeles County
LAFCD	Los Angeles Flood Control District
L_{eq}	Energy-equivalent noise level
L_{max}	Maximum sound level during a measurement period or a noise event
LST	localized significance threshold

Acronym/Abbreviation	Definition
LUST	leaking underground storage tank
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MM	mitigation measure
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MT	metric ton
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NF_3	nitrogen trifluoride
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
PCE	passenger car equivalent
PFC	perfluorocarbon
PM_{10}	particulate matter with an aerodynamic diameter less than or equal to 10 microns
$PM_{2.5}$	particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
ppv	peak particle velocity
PRC	California Public Resources Code
PRIMP	Paleontological Resources Impact Mitigation Program
Public Works	County of Los Angeles Department of Public Works
ROW	right-of-way
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SF_6	sulfur hexafluoride
SLF	Sacred Lands File
SO_2	sulfur dioxide
SO_x	sulfur oxides
SoCalGas	Southern California Gas Company
SRA	Source Receptor Area
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCP	Traffic Control Plan
TCR	tribal cultural resource
USFWS	U.S. Fish and Wildlife Service

Acronym/Abbreviation	Definition
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
VOC	volatile organic compound
WEAP	Workers Environmental Awareness Program

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Preface to the Final IS/MND

The Final Initial Study / Mitigated Negative Declaration (IS/MND) is an informational document intended to disclose the environmental consequences of approving and implementing the Wilmington Avenue Bridge Over Compton Creek Project (proposed project). This document has been prepared in accordance with the California Environmental Quality Act (CEQA) as outlined below. The Los Angeles County Department of Public Works (Public Works) is the lead agency under CEQA.

Public Review Period

The IS/MND for the proposed project was distributed on March 17, 2023 for public review pursuant to CEQA. The public review period concluded on April 17, 2023. The IS/MND was distributed to interested or involved public agencies and organizations for review. Additionally, a Notice of Intent to Adopt a Mitigated Negative Declaration (NOI) was mailed to addresses adjacent to and within the vicinity of the project. The NOI was filed with the County Clerk, and the IS/MND was made available for public review on the Public Works website at https://pw.lacounty.gov/tpp/docs/Wilmington-Ave-Bridge-Public-Review.pdf.

During the public review period, three comment letters were received. Responses to comments that address environmental issues in the IS/MND are included in this Final IS/MND in Section 5.0. Public Works has also prepared a mitigation monitoring and reporting program (MMRP) pursuant to CEQA Guidelines, Section 15074(d), which requires that a lead or responsible agency adopt a mitigation monitoring plan when approving or carrying out a project when an MND identifies measures to mitigate or avoid significant environmental effects. The MMRP constitutes Section 6.0 of the Final IS/MND.

CEQA Guidelines Regarding Recirculation

Pursuant to CEQA Guidelines, Section 15073.5, the lead agency is required to recirculate an IS/MND when the document is substantially revised after public notice of its availability but prior to its adoption. A substantial revision is identified as follows: (1) a new avoidable significant effect is identified and mitigation measures or project revisions must be added in order to reduce the effect to insignificance or (2) the lead agency determines that the proposed mitigation measures or project revisions will not reduce potential effects to less than significant and new measures or revisions must be required.

Public Works has determined that based on CEQA Guidelines Section 15073.5, recirculation of the IS/MND prior to adoption is not required. This conclusion is based on the fact that no new, avoidable significant effects have been identified, no new mitigation measures were added, and the text of the document has not been substantially revised in a manner requiring recirculation.

Following this Preface, the original text of the IS/MND is included in its entirety.

Record of Proceedings

The documents and other materials that constitute the record of proceedings upon which Public Works' project approval is based are located at the address below:

Department of Public Works
Transportation Planning and Programs Division, 11th Floor
Attention Ms. Reyna Soriano
P.O. Box 1460
Alhambra, California 91802-1460
E-mail: rsoriano@dpw.lacounty.gov

The Department of Public Works Transportation Planning and Programs Division office is the custodian of such documents and other materials that constitute the record of proceedings. The location of and custodian of the documents or other materials that constitute the record of proceedings for the proposed project is provided in compliance with CEQA Guidelines Section 15074(c).

ERRATA

Public Works has prepared this errata to provide clarifications or corrections to various issues raised in public comments received on the Draft IS/MND for the proposed project which will be considered by the decision makers prior to taking action on the proposed project. This section summarizes clarifications and/or corrections and shows text changes as strikethrough text (i.e., ~~strikethrough~~) signifying deletions and underlined text (i.e., underline) signifying additions. These changes are meant to provide clarification, corrections, or minor revisions made to the Draft IS/MND initiated by the Public Works, CDFW, reviewing agencies, and the public based on their review. Text changes are presented in the section and page order in which they appear in the Draft IS/MND. None of the corrections or additions constitutes “substantial revisions” that, in accordance with CEQA Guidelines Section 15073.5, would trigger the need to recirculate portions or all of the Draft IS/MND.

CHANGES TO THE IS/MND

Section 3.4, Biological Resources

Mitigation Measure BIO-1 as presented on pages 36 and 37 in Threshold a) analysis of Section 3.4, of the IS/MND is hereby amended as follows:

MM-BIO-1 To avoid potential direct and indirect impacts to nesting birds protected by the Migratory Bird Treaty Act and California Fish and Game Code, project activities should avoid the general nesting season of February 1 through September 30. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species within a 500-foot radius of the proposed project work area including under the bridge deck and in vegetation the proposed work area. If an active bird nest is found within the bridge deck, work would not be able to proceed until the nest is determined to be inactive (fledged or failed) by a qualified biologist. If project activities are delayed or suspended for more than 7 days during the nesting season, new nest surveys should be conducted. If an active bird nest is found within portions of the survey area adjacent to the bridge, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.

1 Introduction

1.1 Project Overview

The County of Los Angeles Department of Public Works (Public Works) proposes to replace the Wilmington Avenue Bridge over Compton Creek (project/proposed project). The proposed project would involve the demolition of the existing two-span Wilmington Avenue Bridge and the construction of a new two-span, pre-cast concrete bridge. The proposed project would be located in southern Los Angeles County in a northwest portion of the City of Compton where the Wilmington Avenue right-of-way (ROW) crosses Compton Creek, 500 feet north of the Compton Boulevard/Wilmington Avenue intersection. Public Works is the lead agency under the California Environmental Quality Act (CEQA).

The proposed project would address existing bridge deficiencies and enhance vehicular safety on the bridge. The existing steel girder bridge and middle pier have been determined to be structurally deficient due to extensive cracking and delamination of the bridge deck. The proposed project would demolish the existing bridge and construct a new bridge. The new bridge soffit (underside) would be raised approximately 2 feet higher than the existing bridge. The new bridge would include a new pier with a new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, and new channel walls/abutments. The new bridge pier would be constructed in the Compton Creek channel, at the same location as the existing pier. The new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place to provide clearance for the new bridge structure. Additionally, a new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. In addition to the proposed bridge replacement, the proposed project would include reconstruction of the existing bicycle path, which runs adjacent to the north of the Compton Creek channel, as well as reconstruction of several sidewalk and driveway locations, and the reconstruction of a new access road as described in Section 2, Project Description.

1.2 California Environmental Quality Act Compliance

CEQA applies to proposed projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. The proposed project constitutes a project as defined by CEQA (California Public Resources Code [PRC] Section 21065). Public Works, as a municipal entity, would implement the proposed project and will therefore act as the CEQA lead agency.

An Initial Study (IS) has been prepared by Public Works as the lead agency in accordance with the CEQA Guidelines to evaluate potential environmental effects and to determine whether an Environmental Impact Report (EIR) or a Negative Declaration or Mitigated Negative Declaration (MND) should be prepared for the proposed project. The IS has also been prepared to satisfy CEQA requirements of agencies that would provide sources of funding for the proposed project or that would otherwise have discretionary approval authority over the project. An MND is prepared for a project when an Initial Study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed Negative Declaration and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur; and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment.

The IS determined that the implementation of the proposed project could cause some potentially significant impacts on the environment but, as shown in the environmental analysis contained in Section 3, Initial Study Checklist, all of the project's potentially significant impacts would be reduced to less than significant through implementation of mitigation measures. Consequently, the analysis contained herein concludes that an MND is the appropriate document for the proposed project.

This document consists of both the Initial Study for the project and the MND (IS/MND). This IS/MND is composed of four sections. Section 1 provides an introduction to the proposed project, general information about the contents of the IS/MND, information about the lead agency, the project location, and the environmental setting. Section 2 provides a description of the proposed project components and information about their construction and operation. Section 3 consists of the CEQA Initial Study checklist, which provides the assessment of potential environmental impacts and the applicability of mitigation measures to reduce potentially significant impacts to a less-than-significant level. Section 4, References and Preparers, provides a list of the lead agency staff and consultants involved in preparing the environmental review documents for the proposed project. This document also includes several appendices related to air quality and greenhouse gas (GHG) emissions, biological resources, cultural resources, geology and soils, hydrology and water quality, noise, and traffic.

2 Project Description

2.1 Project Background

The proposed project would involve replacing the existing two-span Wilmington Avenue Bridge over Compton Creek with a new two-span, pre-cast concrete bridge. The existing bridge was built in 1938 and is supported by the abutments and middle pier. The existing bridge includes two 11-foot-wide travel lanes, one 11-foot-wide shoulder, a 13-foot-wide central raised median, and an approximately 4.5-foot-wide sidewalk in each direction. The existing steel girder bridge and middle pier have been determined to be structurally deficient per the California Department of Transportation (Caltrans) Bridge Design Specification and Caltrans Seismic Design Criteria due to extensive cracking and delamination of the bridge deck. The proposed project would address structural deficiencies and improve vehicular safety and efficiency. Further and to qualify for federal funding assistance, the federal funding guidelines require Public Works to design bridges to the current Caltrans adopted bridge design specifications (AASHTO LRFD Bridge Design Specifications). These specifications establish the load carrying capacity of bridges to withstand standard design truck with lane load (HS20 truck or 72,000 pounds with 640 pounds/feet lane loads). Therefore, the proposed project has been designed consistent with current Caltrans adopted bridge design specifications regarding load carrying capacity.

2.2 Project Location

As shown in Figure 1, Project Location, the project site is located in the City of Compton (City) in southern Los Angeles County, approximately 15 miles south of downtown Los Angeles. The project site is located in the northwest portion of the City where the Wilmington Avenue ROW crosses Compton Creek, 500 feet north of the Compton Boulevard/Wilmington Avenue intersection. Wilmington Avenue is a large, north-south running road with two lanes in either direction. The project site consists of 1.72 acres and includes the bridge and roadway approach. Within the project area, Wilmington Avenue includes a central, 13-foot-wide raised median that divides northbound and southbound traffic over the bridge deck. Two 4.5-foot-wide public sidewalks extend on either side of Wilmington Avenue. Although there are no dedicated bikeways within the Wilmington Avenue ROW, an existing bikeway extends parallel to the Compton Creek channel's northern bank on either side of Wilmington Avenue.

The project site crosses Compton Creek, a major tributary of the Los Angeles River. Compton Creek drains a watershed area of approximately 42.1 square miles, and travels south for 8.5 miles from South Main Street in the City of Los Angeles until it meets the Los Angeles River south of Del Amo Boulevard in the City of Carson. Compton Creek is encased within a concrete flood control channel for most of its course, including where it runs underneath the project site.

Major roadways and arterials that provide local and regional access to the project site include Rosecrans Avenue, located approximately 0.5 miles north of the project site; and California State Route 91, located approximately 1.6 miles south of the project site. There are no state designated or eligible scenic highways in proximity to the project site.

2.3 Surrounding Land Uses

As shown in Figure 2, Surrounding Land Uses, the project site is located in an urban, highly developed part of the City. Surrounding land use designations primarily include General Commercial and Single-Family Residential (City of Compton 2007). Land uses in the immediate vicinity of the project site include single-family residential and general commercial to the north, a church, automobile parts store and general commercial uses to the south, and residential land uses to the east and west. The nearest public park is Doctor Walter R. Tucker Park, located approximately 0.34 miles south of the project site. The nearest schools are General Benjamin O. Davis, Jr. Middle School (621 West Poplar Street), located approximately 0.17 miles north of the project site and Dickison Elementary School (905 N Aranbe Avenue), located approximately 0.33 miles northeast of the project site.

2.4 Project Design

As shown in Figure 3, Proposed Project (60% Elevation View), and Figure 4, Proposed Project (60% Plan View), the proposed project would include demolishing the existing steel girder bridge, concrete piers, and bridge deck and constructing a new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, as well as a new pier, channel walls/abutments, and a new bridge deck. Minor modifications to the existing abutments and channel walls would also be required. The proposed bridge surface would be constructed of similar materials (i.e., concrete) as existing bridge deck and the proposed concrete deck surface would be constructed in compliance with Caltrans' specifications to minimize noise generation. Lastly, the proposed lane configuration, number of lanes, and the center line location for the new bridge deck would remain the same as existing.

Proposed Bridge

The proposed bridge would be approximately 163 feet long and 92 feet wide. The new bridge pier would be constructed in the creek channel, at the same location as the existing pier. The new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place with minor modifications to provide clearance for the new bridge structure. Additionally, a new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. The proposed design would remedy the existing bridge deficiencies and enhance vehicular safety on the bridge. The proposed design of the bridge would not change the number of lanes and striping as compared to existing conditions.

Reconstruction of Sidewalks and Driveways

As shown in Figure 5, Proposed Project Details, in addition to the construction of the proposed bridge, the proposed project would also include the reconstruction of sidewalks and driveways in the immediate vicinity. Approximately 1,260 feet of driveways and/or sidewalks would be reconstructed under the proposed project. The majority of these proposed improvements would occur at private residences located in the immediate area. Additionally, drainage improvements, such as catch basins would be required on private properties at some driveway entrances.

Reconstruction of Bicycle Path and Access Road

The proposed project would include the reconstruction of approximately 400 feet of the existing bike path located along the north side of the channel. Reconstruction would include the construction of a concrete slab structure with cast-in-drilled hole (CIDH) piles intended for support. The proposed project would also include the reconstruction of approximately 200 feet of the existing access road located along the channel at the southwest corner (see Figure 5). Reconstruction would include the construction of a concrete slab structure intended for support and repaving. Reconstruction of the access roads and bicycle path would take approximately 60 days and the segment of the creek/channel trail nearest to the proposed project area of direct impact would be temporarily closed during construction.

Retaining Walls

Two retaining walls would be constructed under the proposed project, specifically; the retaining walls would be constructed at the southwest and northeast corners of the Wilmington Avenue Bridge. The retaining walls, as proposed, would be located behind the sidewalk within the existing Wilmington Avenue ROW. Temporary construction easements would be implemented approximately 5 feet behind the walls to accommodate construction access to these locations.

Right-of-Way Acquisition

As shown in Figure 5, the proposed project would include several permanent and temporary ROW acquisitions and/or permits. Specifically, the proposed project would include permanent ROW acquisitions to reconstruct the proposed access road, slope easements, drainage catch basins, and bike path; temporary ROW use to establish construction staging areas during the proposed project's 300-day construction period; and temporary permits to enter and reconstruct those private driveways impacted by construction. Most of these ROW acquisitions and temporary use would take place along Wilmington Avenue; however, a majority of the temporary permits would be needed to perform driveway rehabilitation at the private residences both east and west of the proposed project along School Street.

Anticipated temporary and permanent right-of-way acquisitions and use are listed below in Table 1, Anticipated Temporary and Permanent ROW Acquisitions and Use.

Table 1. Anticipated Temporary and Permanent ROW Acquisitions and Use

APN[1,2]	Owner Address	Area (SF)[1]
Road Right-of-Way (Permanent)		
615-100-8900	LAFCD	400
615-100-8908	LAFCD	1,280
615-601-3900	LAFCD	2,017
615-601-3034	LAFCD	1,282
615-601-3904	LAFCD	1,235
	Total	**6,214**
Temporary Construction Area		
615-100-6040	739 W School St, Compton, CA 90220	744
615-100-6041	306 N Wilmington Ave, Compton, CA 90220	605
615-100-6042	306 N Wilmington Ave, Compton, CA 90220	151
615-100-6043	308 N Wilmington Ave, Compton, CA 90220	145
615-100-8001	245 N Magnolia Ct, Compton, CA 90220	366
615-100-8900	LAFCD	79
615-100-8908	LAFCD	3,500
615-601-3034	201 N Wilmington Ave, Compton, CA 90220	2,494
615-601-3900	LAFCD	3,175
615-601-3904	LAFCD	1,384
615-601-4001	131 N Wilmington Ave, Compton, CA 90220	213
615-601-4028	125 N Wilmington Ave, Compton, CA 90220	138

Table 1. Anticipated Temporary and Permanent ROW Acquisitions and Use

APN[1,2]	Owner Address	Area (SF)[1]
615-601-4032	131 N Wilmington Ave, Compton, CA 90220	209
	Total	**13,203**
Access Ramp Structure and Bike Path Reconstruction		
615-100-8005	LAFCD	400
615-100-8053	LAFCD	600
615-100-8900	LAFCD	400
615-100-8901	LAFCD	200
615-601-2018	LAFCD	750
	Total	**2,350**
Driveway/Sidewalk Reconstruction		
615-100-6039	735 W School St, Compton, CA 90220	635
615-100-6040	739 W School St, Compton, CA 90220	302
615-100-6044	314 N Wilmington Ave, Compton, CA 90220	100
615-100-8001	245 N Magnolia Ct, Compton, CA 90220	299
615-100-8002	245 N Magnolia Ct, Compton, CA 90220	344
615-601-2018	303 N Wilmington Ave, Compton, CA 90220	999
615-601-2019	307 N Wilmington Ave, Compton, CA 90220	478
615-601-2020	305 N Wilmington Ave, Compton, CA 90220	500
615-601-3026	809 W School St, Compton, CA 90220	401
615-601-3034	201 N Wilmington Ave, Compton, CA 90220	606
615-601-4001	131 N Wilmington Ave, Compton, CA 90220	1,862
615-601-4004	810 W School St, Compton, CA 90220	630
	Total	**7,156**

Notes:

[1] Location and area (SF) is approximate and is subject to change due to further design plan refinements during the final phase of the project.

[2] Additional parcels within the project area may be included as potential ROW acquisition and or temporary construction easements are identified as design plans are develop during the final design phase.

Other Components

In addition to the items described above, the proposed project may include removal of private trees. Aesthetic elements may also be incorporated upon the City's recommendation.

2.5 Project Construction

The proposed project would include demolition and construction activities. Generally, construction activities would include demolition, grading, pile drilling, installation of metal beam guardrail system, construction of bridge abutments, bridge pier reconstruction, reconstruction of sidewalks, drainage improvements (catch basins at driveway entrances) bicycle path reconstruction, roadway reconstruction to accommodate and full road closures within project limits.

For purposes of this analysis, project construction activities have been divided into the following stages:

- Site Preparation
- Existing Bridge Demolition
- Proposed Bridge Construction
- Reconstruction of Access Road, Sidewalks, and Bicycle Path

Approximately 41,000 square feet of roadway would be reconstructed and repaved during proposed demolition and construction activities. During construction, approximately 1,906 cubic yards of excavated soils would be used as unclassified fill to reconstruct the existing bike paths, after which approximately 1,661 cubic yards of excavated soils would be exported from the project area. Excavated materials would be disposed of at the Savage Canyon Landfill, located approximately 14 roadway miles northeast of the project site.

Site Preparation

Site preparation would involve clearance of the project area and preparation for demolition activities. Surrounding businesses and residents would be notified of upcoming construction activities. Construction equipment and materials would arrive at the site and detours would be set up to direct traffic. The construction staging locations would also be determined. Site preparation activities would occur over a 6-week period.

Existing Bridge Demolition

Under the proposed project, the existing two-span Wilmington Avenue Bridge over Compton Creek would be demolished. The existing pier timber piles would be removed 3 feet below the finished grade, followed by the removal of the existing steel girders, cross brace members, reinforced concrete, asphalt pavement (bridge deck), and any excavated soil within the project limits of work. Specifically, the concrete bridge deck would be demolished by saw cutting and the steel girders would be removed by torch cutting before the transporting the fragmented pieces to the dump trucks using a crane. Once the bridge deck has been removed, all existing bridge bearing components would also be removed, including portions of the concrete abutments, which would be demolished using hoe rams and jackhammers, after which any gaps/voids would be patched with epoxy grout to obtain a smooth plane finish. The site of the new pile caps would be graded in preparation for the new bridge structure. Soils from the existing bridge and roadways would be reconstructed and used to fill bicycle path areas that would be reconstructed.

Proposed Bridge Construction

Once the existing structure has been demolished, a new two-span, precast, pre-stressed concrete box beam structure would be constructed in the same location. The new concrete bridge pier would be constructed in the Compton Creek channel, at the same location as the existing pier. Bridge pier construction would involve the installation of CIDH concrete piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations), construction of concrete pier footings and the stem wall. Specifically, a hydraulic crane and drill rig would be used to drill the holes and install the rebar cages, while a concrete truck, concrete pump, forklifts and loaders would be needed to fill the drilled holes and construct the footings and stem wall. This stage would require pile drilling, grading, construction of the bridge abutments and bridge pier reconstruction. Concrete barriers per Caltrans' standards with tubular hand railing would be installed along either side of the bridge and metal beam guardrails would be installed at the bridge approaches where conditions allow.

As shown in Figure 3, the new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place with minimal modification to accommodate clearance for the new bridge structure. Modification to the existing abutments that act as the channel walls would include removal of existing backwall down to the seat elevation to allow new bridge superstructure to span over the existing abutments. The existing channel walls outside of this limit will not be modified. The new bridge soffit (underside) would be raised approximately 2 feet higher than the existing bridge in order to meet the freeboard requirement. Similar to the construction of the bridge pier, the construction of the new bridge abutments would involve the installation of CIDH concrete piles, pile caps, and backwalls, which would use a drill rig and hydraulic crane, while an excavator and crane would be used to install the formwork and the reinforcement for the pile caps. Additional equipment needed to install the pile caps and backwall includes forklifts, loaders, concrete pumps, and a concrete truck.

Additionally, as shown in Figure 4, a new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. The construction of the bridge superstructure would involve the installation of precast/pre-stressed adjacent concrete box beams, a cast-in-place reinforced concrete deck, sidewalks, and bridge barriers. Installation of these superstructure components would use a hydraulic crane, concrete slipform machine, concrete truck, and concrete pump. After the superstructure has been constructed, the bike paths, and access ramp would be reconstructed and the roadway would be paved and restriped.

Reconstruction of Access Road, Sidewalks, and Bicycle Path

As shown in Figure 5, project construction would also include the reconstruction of the sidewalks adjacent to the project limits. ROW acquisition would be required for the parcels located along the east and west and at the southwest and northeast corners where the adjacent properties would be affected by the raised roadway and sidewalks. Furthermore, drainage improvements, such as catch basins, would occur on several private property driveways.

As shown in Figure 5, project construction would also include the replacement of the bike paths along the Compton Creek channel. Specifically, reconstruction of the bike paths would include 400 feet of bike path along the north side of the channel on either side of Wilmington Avenue, where the bike path would be supported on a concrete slab structure with CIDH piles. An access road, approximately 200 feet long, would be reconstructed along the channel at the southwest corner to accommodate the 2-foot change in bridge elevation. Proposed construction activities would include installing CIDH concrete piles using a drill rig, hydraulic crane, concrete truck, and concrete pump, and installing a reinforced concrete slab using forklifts, loaders, concrete trucks, and a concrete pump.

Construction Workers and Equipment

Construction activities, durations, workers, and equipment would vary during each construction phase. In general, the proposed project would require an average of 10 to 15 workers per day throughout the construction period. Daily vehicular trips that are expected to occur throughout construction are as follows: a maximum of 10 round trips per day for transportation of construction equipment to and from the work areas when necessary; approximately 10 to 30 round trips per day for transportation of construction workers to and from the work areas; and 10 round trips per day for haul trucks (i.e., dump trucks).

Construction equipment for each construction sub-phase is shown in Table 2 (see Section 3.3, Air Quality).

Construction Staging Locations

Given that full road closures would occur, the 300-foot approach roadways on either side of the bridge structure would likely be used as construction staging areas. See Figure 5 for approximation of staging area boundaries. As such, the proposed project would extend in a north-south direction within the Wilmington Avenue ROW from approximately North Brazil Street to approximately West Magnolia Street, with some driveway and easement re-construction taking place along School Street (see Figure 5) for purposes of fence/block wall reconstruction and hardscape adjoining the public sidewalk. Temporary K-rails would be installed at each end of the project limits, including a 6-foot-high perimeter fence to block pedestrians from entering the work area. Access for the properties adjacent to the construction site would be maintained during construction.

Construction-Related Road Closures

During construction, full road closures over the Wilmington Avenue Bridge would occur for approximately 300 days and planned detour routes would be established via Rosecrans Avenue, Compton Boulevard and Alameda Street. Specifically, northbound traffic would be directed east on Compton Boulevard, north on Alameda Street, west on Rosecrans Avenue, and north back onto Wilmington Avenue. Southbound traffic would be directed east on Rosecrans Avenue, south on Alameda Street, west on Compton Boulevard, and south back onto Wilmington Avenue. Wilmington Avenue Bridge would be closed to traffic and the bridge approaches would be used for construction staging and construction parking. Construction staging and parking would occur within the Direct APE as depicted on Figure 5.

Public Works construction projects, such as the proposed project, implement traffic control plans for work within road ROWs (PDF-TRAF-1). Therefore, PDF-TRAF-1, would be included as part of the proposed project.

PDF-TRAF-1 Traffic Control Plans (TCP) would be required for all construction work within the road right of way which modifies vehicular, bicycle, pedestrian and/or transit traffic patterns and are necessary to ensure the safe and efficient movement of traffic through construction work zones. The TCP would be prepared by the project's contractor and reviewed and managed by the County of Los Angeles.

Elements of a TCP should include, but are not necessarily limited to, the following:

a. Provision of public workshops and/or neighborhood meetings to notify and inform adjacent residents, impacted stakeholders and the general public regarding the schedule and duration of street closures, and implementation of detour routes and temporary traffic calming measures.

b. Develop detour plans to minimize impacts to local or residential streets, especially minimize truck traffic on local roadways to the extent possible and ensure least interference to pedestrians, bicyclists, transit and other vehicle users in the area. Develop traffic calming measures such as signage and speed radar warning signs needed to manage cut-through traffic along local residential streets adjacent to Wilmington Avenue and Compton Creek bridges.

c. Install temporary traffic control devices as specified in Part 6 of Caltrans' Manual of Uniform Traffic Control Devices (CAMUTCD) to maintain safe and effective movement of all road users (including pedestrians and bicyclists) through or around temporary traffic control zones while reasonably protecting from traffic incidents and equipment.

    - Use flaggers, signage, traffic control barricades, channelizing devices, pavement markings and/or work vehicles to safely direct traffic through construction work zones.
    - Use warning signs and plaques as specified in CAMUTCD for detours and temporary traffic control zones.

d. Coordinate with emergency service providers such as police, fire stations, hospitals as well as all stakeholders i.e. abutting property owners, residents and businesses and schools to ensure adequate accessibility to all road users during the construction period. Provide advance notification of the timing, location, and duration of construction activities and detour routes to residents, business or facility owners and administrators.

e. Coordinate with County and City officials, to obtain all necessary encroachment and trip permits.

f. To the extent feasible, schedule truck trips (equipment delivery and haul) outside of AM and PM peak commute hours. Encourage carpooling among workers to reduce worker commute trips.

Construction Schedule

Project construction is anticipated to begin in spring 2026, and would last for approximately 300 working days.[1] Demolition activities would last approximately 15 days. Bridge replacement and construction would last approximately 220 days (50 days for the bridge pier and pier nose construction; 60 days for the bridge abutment construction; 50 days for the bridge superstructure construction; and, 60 days for the bike path ramp and access road reconstruction). Construction would occur Monday through Friday from 7 a.m. to 3:30 p.m.

2.6 Project Operation

Public Works is solely responsible for design and construction. Once project construction has been completed, operation and maintenance would be the responsibility of the City of Compton. Implementation of the proposed project would improve transportation efficiency by enabling larger trucks to use the bridge. Operational activities would be limited to scheduled inspections. The primary responsibilities would be the maintenance and upkeep of the bridge.

2.7 Approvals Required for the Proposed Project

Numerous approvals and/or permits would be required to implement the proposed project. These approvals and permits may include, but may not be limited to, the items listed below:

- Adoption of the Mitigated Negative Declaration by the County of Los Angeles (County) Board of Supervisors
- Proposed project plan approval by the City of Compton
- Proposed project approval National Environmental Policy Act clearance by Caltrans
- A U.S. Army Corps of Engineers Section 404 Nationwide Permit
- Regional Water Quality Control Board Clean Water Act Section 401 Certification
- California Department of Fish and Wildlife Section 1602 Streambed Alteration Agreement

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[1] For the purposes of the air quality analysis (Table 2, Construction Scenario Assumptions), construction was assumed to start in April 2026 and last for approximately 300 working days. During the preparation of the IS/MND, an April 2026 start date was analyzed to represent the earliest possible construction schedule. Assuming an earlier start date for project construction represents the worst-case scenario for criteria air pollutant emissions, because equipment and vehicle emission factors for later years would be less due to more stringent standards for off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles. It should also be noted this construction schedule may change based on actual field conditions.

3 Initial Study Checklist

1. **Project title:**

   Wilmington Avenue Bridge over Compton Creek Project

2. **Lead agency name and address:**

   County of Los Angeles Department of Public Works
   900 South Fremont Avenue
   Alhambra, California 91803-1331

3. **Contact person and phone number:**

   Reyna Soriano
   Civil Engineer
   626.458.5199

4. **Project location:**

   City of Compton, Los Angeles County

5. **Project sponsor's name and address:**

   County of Los Angeles Department of Public Works
   900 South Fremont Avenue
   Alhambra, California 91803-1331

6. **General plan designation:**

   Surrounding properties are general designated as Low Density Residential, General Commercial, and Mixed Use.

7. **Zoning:**

   Surrounding properties are zoned Low Density Residential, Medium Density Residential, and Limited Commercial.

8. **Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):**

   The proposed project would involve the demolition of the existing two-span Wilmington Avenue Bridge and the construction of a new two-span, pre-cast concrete bridge. The proposed project would be located in southern Los Angeles County in a northwest portion of the City of Compton where the Wilmington Avenue ROW crosses Compton Creek, 500 feet north of the Compton Boulevard/Wilmington Avenue intersection. Refer to Section 2, Project Description, for additional details.

9. Surrounding land uses and setting (Briefly describe the project's surroundings):

The proposed project site is located in an urban, highly developed part of the City. Surrounding land use designations include General Commercial, Single-Family Residential and Low-density Multi-family Residential.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

See Section 2.7, Approvals Required for the Proposed Project.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Yes. See Section 3.18, Tribal Cultural Resources, of this IS/MND for details.

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 on the following pages.

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

Determination (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

May 15, 2023

Date

Evaluation of Environmental Impacts

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a. Earlier Analysis Used. Identify and state where they are available for review.
   b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a. The significance criteria or threshold, if any, used to evaluate each question; and
   b. The mitigation measure identified, if any, to reduce the impact to less than significance

3.1 Aesthetics

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
I.	**AESTHETICS** – Except as provided in Public Resources Code Section 21099, would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b)	Substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from 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?	☐	☐	☐	☒

a) Would the project have a substantial adverse effect on a scenic vista?

No Impact. Scenic vistas generally refer to views of expansive open space areas or other natural features, such as mountains, undeveloped hillsides, large natural water bodies, or coastlines. There are no views of scenic vistas from the project site, and the project site is located in an area that would not contribute to a view of a scenic vista. Rather, existing views from the project site are predominantly characterized by urban development, including single-family and multi-family residential to the north and south, and views of the Compton Creek channel to the east and west. Views in every direction are low to moderate quality due to the prevailing hardscaping and urban streetscaping, which includes overhead utility poles and wires, streetlights, signage, and incongruent urban landscaping. Additionally, the proposed project is a bridge replacement project, which, upon operation, would be aesthetically similar when compared to existing conditions. During the construction phase, the visual character of the area would be temporarily affected. However, these impacts would be temporary and would not constitute a significant impact. As such, the project would have no impact to scenic vistas.

b) Would the project substantially damage scenic resources including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The proposed project would not be located within the vicinity of an eligible or designated state scenic highway. The nearest designated state scenic highway is Highway 2 (Angeles Crest Scenic Highway) where it traverses from La Canada Flintridge to San Bernardino County, approximately 23 miles north of the project site (Caltrans 2022). Due to the distance and intervening development between this state scenic highway and the project site, the proposed project would not substantially damage scenic resources within a state scenic highway. While private trees would be removed during project construction, street and landscape trees within the project area are not visible from an eligible or designated scenic highway. Further, the trees within the project area are generally ornamental and commonplace to urban environments. Lastly, there are, rock outcroppings or historic buildings located on the project site. No impact would occur.

c) In non-urbanized areas, would the project 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 Impact. As stated in Section 3.1(a), the project site is located in a developed, urban portion of the City of Compton. Views in every direction from the project site are low to moderate quality due to the prevailing hardscaping and urban streetscaping, which includes overhead utility poles and wires, streetlights, signage, and incongruent urban landscaping. Additionally, the proposed project is a bridge replacement project, which, upon operation, would be aesthetically similar when compared to existing conditions. During the construction phase, the visual character of the area would be temporarily affected. However, these impacts would be temporary and would not constitute a significant impact. The proposed project would comply with applicable development standards as indicated in the County's General Plan and Municipal Code. Because the proposed project involves demolition and reconstruction of an existing bridge, the proposed use is consistent with the existing land use. As such, the project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant.

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

No Impact. As stated above, the proposed project would include the replacement of the existing Wilmington Avenue Bridge over Compton Creek with a new two-span, concrete bridge. Neither the new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, nor the new pier and new abutments would be constructed with materials commonly associated with producing day/nighttime light or glare. The project would not include the construction of any additional buildings or infrastructure that could potentially create a new source of substantial light or glare when compared to existing conditions. No impact would occur.

3.2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. **AGRICULTURE AND FORESTRY RESOURCES** – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project area includes, and is surrounded by, low-density residential, mixed use, and general commercial land uses (City of Compton 2011). The project area is not mapped by the California Department of Conservation (DOC) because of the developed nature of the area (DOC DLRP 2018). The project site is occupied with an existing bridge. No farmland occurs on, or in the vicinity of, the project site (DOC DLRP 2018). Therefore, the proposed project would not convert Farmland to non-agricultural uses, and no impact would occur.

b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project area includes, and is surrounded by, low-density residential, mixed use, and general commercial land uses (City of Compton 2011). The project area does not include land zoned or used for agricultural purposes (City of Compton 2011). Additionally, the project area is not included in any existing Williamson Act contracts (DOC DLRP 2016). The proposed project would include the replacement of an existing bridge. As such, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. No impact would occur.

c) Would the project 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 project area includes, and is surrounded by, low-density residential, mixed use, and general commercial land uses (City of Compton 2011). The project area does not include land zoned or used as forest land or timberland (City of Compton 2011). The proposed project would include the replacement of an existing bridge. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forestland, timberland, or timberland zoned Timberland Production. No impact would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project area includes, and is surrounded by, low-density residential, mixed use, and general commercial land uses (City of Compton 2011). As characterized above, no forest land is located within the project area or in the vicinity of the project. As such, no forest land would be converted or otherwise affected by the proposed project, and no impact would occur.

e) Would the project 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 described above, the project area includes, and is surrounded by, low-density residential, mixed use, and general commercial land uses (City of Compton 2011). No farmland or forest land is located in the project area or within the vicinity. The proposed project would include the replacement of an existing bridge, which, upon operation, would function the same as when compared to existing conditions. As such, the proposed project would not 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 would occur.

3.3 Air Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. **AIR QUALITY** – Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

a) *Would the project conflict with or obstruct implementation of the applicable air quality plan?*

Less-Than-Significant Impact. The project site is located within the South Coast Air Basin (SCAB), which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County, and is within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD).

The SCAQMD administers the Air Quality Management Plan (AQMP) for the SCAB, which is a comprehensive document outlining an air pollution control program for attaining all California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). The most recent adopted AQMP is the 2016 AQMP (SCAQMD 2017), which was adopted by the SCAQMD Governing Board in March 2017.[2] The 2016 AQMP represents a new approach, focusing on available, proven, and cost-effective alternatives to traditional strategies while seeking to achieve multiple goals in partnership with other entities promoting reductions in GHGs and toxic risk, as well as efficiencies in energy use, transportation, and goods movement (SCAQMD 2017).

The purpose of a consistency finding is to determine if a project is inconsistent with the assumptions and objectives of the regional air quality plans, and, thus, if it would interfere with the region's ability to comply with federal and state air quality standards. The SCAQMD has established criteria for determining

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[2] SCAQMD is currently working on the next iteration of the AQMP, the 2022 Air Quality Management Plan. The 2022 AQMP will incorporate the recently adopted SCAG's 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy (2020–2045 RTP/SCS). However, until the adoption of the 2022 AQMP, project AQMP consistency will be analyzed off the 2016 AQMP and the RTP/SCS that was adopted at the time, the 2016–2040 RTP/SCS.

consistency with the currently applicable AQMP in Chapter 12, Sections 12.2 and 12.3, in the SCAQMD CEQA Air Quality Handbook. The criteria are as follows (SCAQMD 1993):

- Whether the project would result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP.
- Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

To address the first criterion regarding the project's potential to result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new violations, or delay timely attainment of the ambient air quality standards or interim emission reductions in the AQMP, project-generated criteria air pollutant emissions were estimated and analyzed for significance and are addressed under Section 3.3(b). Detailed results of this analysis are included in Appendix A, CalEEMod Outputs. As presented in Section 3.3(b), project construction would not generate criteria air pollutant emissions that would exceed the SCAQMD thresholds, and the project is not anticipated to generate operational criteria air pollutant emissions.

The second criterion regarding the project's potential to exceed the assumptions in the AQMP or increments based on the year of project buildout and phase is primarily assessed by determining consistency between the project's land use designations and potential to generate population growth. In general, projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook). The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the Southern California Association of Governments (SCAG) for its Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) (SCAG 2016), which is based on general plans for cities and counties in the SCAB, for the development of the AQMP emissions inventory (SCAQMD 2017).[3] The SCAG 2016 RTP/SCS, and associated Regional Growth Forecast, are generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans.

As discussed in Section 2 of this IS/MND, the project would involve the replacement of the existing bridge. Construction of the new bridge would not change or affect the existing zoning or land use designations in the project area. Accordingly, the project is consistent with the SCAG RTP/SCS forecasts used in the SCAQMD AQMP development.

In summary, based on the considerations presented for the two criteria, impacts relating to the project's potential to conflict with or obstruct implementation of the applicable AQMP would be less than significant.

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[3] Information necessary to produce the emission inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including the California Air Resources Board (CARB), the California Department of Transportation, and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socioeconomic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into its Travel Demand Model for estimating/projecting vehicle miles traveled and driving speeds. SCAG's socioeconomic and transportation activities projections in their 2016 RTP/SCS are integrated in the 2016 AQMP (SCAQMD 2017).

b) ***Would the project 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 Impact. Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the SCAQMD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If a project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant (SCAQMD 2003).

A quantitative analysis was conducted to determine whether proposed construction activities would result in a cumulatively considerable net increase in emissions of criteria air pollutants for which the SCAB is designated as nonattainment under the NAAQS or CAAQS. Criteria air pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM_{10}), particulate matter with an aerodynamic diameter less than or equal to 2.5 microns ($PM_{2.5}$), and lead. Pollutants that are evaluated herein include volatile organic compounds (VOCs) and oxides of nitrogen (NO_x), which are important because they are precursors to O_3, as well as CO, sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$.

Regarding NAAQS and CAAQS attainment status,[4] the SCAB is designated as a nonattainment area for national and California O_3 and $PM_{2.5}$ standards (CARB 2017a; EPA 2017a). The SCAB is designated as a nonattainment area for California PM_{10} standards; however, it is designated as an attainment area for national PM_{10} standards. The SCAB nonattainment status of O_3, PM_{10}, and $PM_{2.5}$ standards is the result of cumulative emissions from various sources of air pollutants and their precursors within the SCAB, including motor vehicles, off-road equipment, and commercial and industrial facilities. The SCAB is designated as an attainment area for national and California NO_2, CO, and SO_2 standards. Although the SCAB has been designated as partial nonattainment (Los Angeles County) for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard.[5]

Appendix G of the CEQA Guidelines indicates that, where available, the significance criteria established by the applicable air district may be relied upon to determine whether a project would have a significant impact on air quality. The SCAQMD has established Air Quality Significance Thresholds, as revised in March 2015, which set forth quantitative emissions significance thresholds below which a project would not have a significant impact on ambient air quality (SCAQMD 2015). The quantitative air quality analysis provided herein applies the SCAQMD thresholds to determine the potential for the project to result in a significant impact under CEQA. The SCAQMD mass daily construction thresholds are as follows: 75 pounds per day for VOC, 100 pounds per day for NO_x, 550 pounds per day for CO, 150 pounds per day for SO_x, 150 pounds per day for PM_{10}, and 55 pounds per day for $PM_{2.5}$.

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[4] An area is designated as in attainment when it is in compliance with the NAAQS and/or the CAAQS. The NAAQS and CAAQS are set by the Environmental Protection Agency and CARB, respectively, for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. Attainment = meets the standards; attainment/maintenance = achieve the standards after a nonattainment designation; nonattainment = does not meet the standards.

[5] Re-designation of the lead NAAQS designation to attainment for the Los Angeles County portion of the SCAB is expected based on current monitoring data. The phase out of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.

The following discussion quantitatively evaluates project-generated construction impacts and qualitatively evaluates operational impacts that would result from implementation of the proposed project.

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment and soil disturbance) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

The California Emissions Estimator Model (CalEEMod) Version 2022.1.5 was used to estimate emissions for construction of the proposed project CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant emissions associated with construction activities from a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters, including the project size, construction schedule, number of worker/delivery/haul trips, and anticipated construction equipment utilization, were based on information provided by Public Works and default model assumptions when project-specific data were not available.

For the purpose of conservatively estimating project emissions, it is assumed that construction of the project would start in spring 2026 and would occur over approximately 300 days. The construction phasing schedule and duration, vehicle trip assumptions and construction equipment mix used for estimating the project-generated emissions are shown in Table 2.

Internal combustion engines used by construction equipment, trucks, and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. PM_{10} and $PM_{2.5}$ emissions would also be generated by entrained dust, which results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil. It is anticipated that the project would require the export of approximately 1,000 cubic yards of soil. Excavated material would be transported to the Whittier or Puente Landfills, which are located approximately 30 miles from the project site. It was assumed that the project would require a maximum of 10 round trips per day for delivery of construction materials to and from the work areas; and approximately a maximum of 15 round trips per day for transportation of construction workers to and from the work areas; and a total of 525 round trips per day for haul trucks required for excavation and demolition over the entire construction period. Overall, the proposed project would result in a maximum daily vehicle miles traveled (VMT) of 1,384 miles, due to the augur drilling and bridge construction phases, and a total VMT of approximately 199,372 miles over the entire construction duration. In addition, the proposed project would be required to comply with SCAQMD Rule 403 to control dust emissions during any dust-generating activities (SCAQMD 2005). Standard construction practices that would be employed to reduce fugitive dust emissions include watering of the active grading areas two times per day, with additional watering depending on weather conditions.

Estimated maximum daily construction criteria air pollutant emissions from all on-site and off-site emission sources is provided in Table 3.

Table 2. Construction Scenario Assumptions

			One-Way Vehicle Trips			Equipment		
Construction Phase	Start Date	Finish Date	Average Daily Workers	Average Daily Vendor Trucks[1]	Average Daily Haul Trucks[2]	Type	Quantity	Usage Hours
Clear and Grub and AC Removal	04/01/2026	04/14/2026	6	2	10	Graders	1	8
						Tractors/Loaders/Backhoes	2	8
Drainage/Sub-Grade	04/08/2026	05/05/2026	6	2	0	Graders	1	8
						Tractors/Loaders/Backhoes	1	8
Grading/Excavation	05/04/2026	05/15/2026	8	2	5	Graders	1	8
						Rollers	2	8
						Tractors/Loaders/Backhoes	3	8
Retaining Walls	05/18/2026	07/10/2026	8	2	0	Aerial Lifts	1	8
						Cranes	1	8
						Pumps	1	8
						Rough Terrain Forklifts	1	8
Access Ramp	06/02/2026	08/24/2026	10	2	0	Bore/Drill Rigs	1	8
						Cranes	1	8
						Pumps	1	8
						Rough Terrain Forklifts	1	8
						Tractors/Loaders/Backhoes	1	8
Diversion Structure/Excavation	07/09/2026	07/22/2026	8	2	0	Graders	1	8
						Tractors/Loaders/Backhoes	1	8
Bridge Demolition	07/21/2026	08/31/2026	6	0	10	Concrete/Industrial Saws	1	8
						Tractors/Loaders/Backhoes	1	8
Augur Drilling	08/27/2026	11/18/2026	8	22	10	Bore/Drill Rigs	1	8
Bridge Construction	10/13/2026	03/22/2027	30	20	0	Aerial Lifts	1	8
						Cranes	2	8
						Pumps	1	8
						Rough Terrain Forklifts	2	8

Table 2. Construction Scenario Assumptions

			One-Way Vehicle Trips			Equipment		
Construction Phase	Start Date	Finish Date	Average Daily Workers	Average Daily Vendor Trucks[1]	Average Daily Haul Trucks[2]	Type	Quantity	Usage Hours
Subgrade	03/23/2027	04/19/2027	6	2	0	Graders	1	8
						Tractors/Loaders/Backhoes	1	8
Paving	04/20/2027	07/19/2027	10	24	0	Graders	1	8
						Paving Equipment	1	8
						Pumps	1	8
						Rollers	3	8
						Sweepers/Scrubbers	1	8
						Tractors/Loaders/Backhoes	2	8
Electrical/Striping	07/20/2027	08/16/2027	6	2	0	Air Compressors	1	8

Source: Public Works 2019a.
Notes: See Appendix A for details.
Equipment types provided by the Public Works were matched with the construction equipment presented in CalEEMod.

[1] Water trucks are included as vendor trips for construction modeling.

[2] Dump trucks are included as haul trips for construction modeling.

Table 3. Estimated Maximum Daily Construction Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per Day					
2026	1.83	17.40	23.80	0.05	1.55	0.70
2027	1.37	10.90	15.10	0.03	0.91	0.47
Maximum daily emissions	1.83	17.40	23.80	0.05	1.55	0.70
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: SCAQMD 2015.
Notes: See Appendix A for detailed results.
VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.

As shown in Table 3, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during project construction.

As discussed in previously, the SCAB has been designated as a federal nonattainment area for O_3 and $PM_{2.5}$ and a state nonattainment area for O_3, PM_{10}, and $PM_{2.5}$. Proposed construction activities of the project would generate VOC and NO_x emissions (which are precursors to O_3) and emissions of PM_{10} and $PM_{2.5}$. However, as indicated in Table 3, project-generated construction emissions would not exceed the SCAQMD emission-based significance thresholds for VOC, NO_x, PM_{10}, or $PM_{2.5}$, and therefore the project would not cause a cumulatively significant impact.

Cumulative localized impacts would potentially occur if a construction project were to occur concurrently with another off-site project. One Public Works project, the Compton Boulevard Bridge over Compton Creek Project, has been identified as a cumulative project located approximately 800 feet southeast of the project site where the Compton Boulevard ROW crosses Compton Creek. Construction of the Compton Boulevard Bridge over Compton Creek would not, however, occur concurrently with the proposed project. Construction schedules for other potential future projects near the project site are currently unknown; therefore, potential construction impacts associated with two or more simultaneous projects would be considered speculative.[6] However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the SCAQMD. Cumulative PM_{10} and $PM_{2.5}$ emissions would also be reduced because all future projects would be subject to SCAQMD Rule 403 (Fugitive Dust), which sets forth general and specific requirements for all construction sites in the SCAQMD (SCAQMD 2005). Based on the previous considerations, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant.

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[6] The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145). This discussion is nonetheless provided in an effort to show good-faith analysis and comply with CEQA's information disclosure requirements.

Operational Emissions

Once project construction is complete, minimal operational activities associated with the proposed project would occur (infrequent maintenance including use operation of equipment or vehicle trips). Because proposed maintenance activities associated with the proposed project would generate a minimal amount of vehicle trips, operational emissions would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less-Than-Significant Impact. Localized project impacts associated with construction criteria air pollutants emissions are assessed as follows.

Sensitive Receptors

Sensitive receptors are those individuals more susceptible to the effects of air pollution than the population at large. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). The closest sensitive receptor land uses are residences adjacent to the project site to the east.

Localized Significance Thresholds

The SCAQMD recommends a localized significance threshold (LST) analysis to evaluate localized air quality impacts to sensitive receptors in the immediate vicinity of the project site as a result of construction activities. The impacts were analyzed using methods consistent with those in the SCAQMD's Final Localized Significance Threshold Methodology (SCAQMD 2009). The project is located in Source Receptor Area (SRA) 12 (South Central Los Angeles County). The project's construction activities would occur over a 1.72-acre work area; therefore, for the purposes of the LST analysis, emissions thresholds based on a 1-acre site were used. This is a conservative approach, as LSTs increase with the size of project site. As mentioned previously, the closest sensitive receptors are residences adjacent to the project site to the east. The closest receptor distance available in the SCAQMD LST Methodology is 25 meters (82 feet) and is what was assumed for this analysis.

Project construction activities would result in temporary sources of on-site criteria air pollutant emissions associated with construction equipment exhaust and dust-generating activities. The maximum daily on-site construction emissions generated during construction of the proposed project is presented in Table 4, and compared to the SCAQMD localized significance criteria for SRA 12 to determine whether project-generated on-site construction emissions would result in potential LST impacts.

Table 4. Construction Localized Significance Thresholds Analysis

Year	NO_2	CO	PM_{10}	$PM_{2.5}$
	Pounds per Day (on site)			
2026	17.10	22.20	1.58	0.64
2027	10.30	14.40	0.70	0.38
Maximum Daily On-Site Construction Emissions	17.10	22.20	1.58	0.64
SCAQMD LST Criteria	*46*	*231*	*4*	*3*
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: SCAQMD 2009.
Notes: See Appendix A for detailed results.
NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
Localized significance thresholds are shown for a 1-acre project site corresponding to a distance to a sensitive receptor of 25 meters.

As shown in Table 4, proposed construction activities would not generate emissions in excess of site-specific LSTs; therefore, localized project construction impacts would be less than significant.

CO Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO "hotspots." CO transport is extremely limited because CO disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections. Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots. During construction of the project, construction traffic would affect the intersections near the project site. However, the project would be temporary and would not be a source of daily, long-term mobile-source emissions. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing. Finally, as discussed in Section 3.17, Transportation, of this IS/MND, transportation impacts would be less than significant. Therefore, the proposed project would not generate additional traffic volumes and impacts related to CO hot spots would be less than significant.

Toxic Air Contaminants

Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. As discussed under the LST analysis, the nearest sensitive receptors are residences adjacent to the project site to the east.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SCAQMD recommends an incremental cancer risk threshold of 10 in 1 million. "Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of

Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. The SCAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) non-carcinogenic effects.[7] TACs that would potentially be emitted during construction activities associated with the proposed project would be diesel particulate matter.

Diesel particulate matter emissions would be emitted from heavy equipment operations and heavy-duty trucks. Heavy-duty construction equipment is subject to a California Air Resources Board (CARB) Airborne Toxics Control Measure for in-use diesel construction equipment to reduce diesel particulate emissions. As described for the LST analysis, PM_{10} and $PM_{2.5}$ (representative of diesel particulate matter) exposure would be minimal. According to the Office of Environmental Health Hazard Assessment, health risk assessments (which determine the exposure of sensitive receptors to toxic emissions) should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should also be limited to the period/duration of activities associated with the project. The duration of the proposed construction activities would constitute a small percentage of the total 30-year exposure period. The construction period for the project would be approximately 300 workdays, after which construction-related TAC emissions would cease. Due to this relatively short period of exposure and minimal particulate emissions on site, TACs generated during construction would not be expected to result in concentrations causing significant health risks.

Following completion of on-site construction activities, the project would not involve routine operational activities that would generate TAC emissions. Operation of the project would not result in any non-permitted direct emissions (e.g., those from a point source such as diesel generators). For the reasons previously described, the project would not result in substantial TAC exposure to sensitive receptors in the vicinity of the project, and impacts would be less than significant.

Asbestos

Demolition activities could result in airborne entrainment of asbestos, particularly where structures built prior to 1980 would be demolished. The regulation of asbestos is covered under the U.S. Environmental Protection Agency's National Emissions Standards for Hazardous Air Pollutants. In addition, these materials would be removed in accordance with regulatory requirements prior to demolition (pursuant to SCAQMD Rule 1403, Asbestos Emissions), which establishes survey, notification, and work practice requirements to prevent asbestos emissions during building demolition. Because adherence to this rule is mandatory, the potential for significant adverse health impacts would be reduced to a less-than-significant level.

Health Effects of Criteria Air Pollutants

Construction emissions of the project would not exceed the SCAQMD thresholds for any criteria air pollutants, including VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$.

Health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2019). VOCs and NO_x are precursors to O_3, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of VOCs

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[7] Non-cancer adverse health risks are measured against a hazard index, which is defined as the ratio of the predicted incremental exposure concentrations of the various non-carcinogens from the project to published reference exposure levels that can cause adverse health effects.

and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SCAB due to O_3 precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Further, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O_3 NAAQS and CAAQS tend to occur between April and October when solar radiation is highest. Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of O_3 precursors is speculative. Because the project would not exceed the SCAQMD thresholds, the project would not contribute to health effects associated with O_3.

Health effects associated with NO_x include lung irritation and enhanced allergic responses (CARB 2019). Because project-related NO_x emissions would not exceed the SCAQMD mass daily thresholds, and because the SCAB is a designated attainment area for NO_2 and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards, it is not anticipated that the project would cause an exceedance of the NAAQS and CAAQS for NO_2 or result in potential health effects associated with NO_2 and NO_x.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2019). CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots was discussed previously and determined to be less than significant. Thus, the project's CO emissions would not contribute to significant health effects associated with CO.

Health effects associated with PM_{10} include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2019). Construction of the project would not exceed thresholds for PM_{10} or $PM_{2.5}$, would not contribute to exceedances of the NAAQS and CAAQS for particulate matter, and would not obstruct the SCAB from coming into attainment for these pollutants. The project would also not result in substantial diesel particulate matter emissions during construction. Additionally, the project would be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction (SCAQMD 2005). Due to the minimal contribution of particulate matter during construction, the project is not anticipated to result in health effects associated with PM_{10} or $PM_{2.5}$.

In summary, construction and operation of the project would not result in exceedances of the SCAQMD significance thresholds for criteria pollutants, and potential health effects associated with criteria air pollutants would be less than significant.

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

Less-Than-Significant Impact. The occurrence and severity of potential odor impacts depend on numerous factors. The nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress among the public, and generate citizen complaints.

During project construction, exhaust from equipment may produce discernible odors typical of most construction sites. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. However, such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Accordingly, impacts associated with odors during construction would be less than significant.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). Operation of the project would not entail any of these potentially odor-causing land uses. Therefore, the project would not create any new sources of odor during operation. Accordingly, impacts associated with project operations would be less than significant.

3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game 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 Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☒	☐
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

The following analysis is based on a Natural Environmental Study (Minimal Impacts), which included a biological resource survey, conducted by Dudek biologist Tracy Park under the supervision of senior biologist Michael Cady on August 1, 2019, in the 45.08-acre biological survey area (BSA). The BSA was established around the project site and a 500-foot buffer to determine the biological resources within and near the proposed project that could potentially be affected by project implementation. The Natural Environment Study (Minimal Impacts) included a pre-field review of the latest relevant literature and databases, maps, special-status species occurrence, and critical habitat designation (Appendix B, Natural Environment Study).

A search of the California Natural Diversity Database, California Native Plant Society On-Line Electronic Inventory of Rare and Endangered Vascular Plants of California, and National Marine Fisheries Service Species List was conducted to identify sensitive biological flora and fauna potentially present in the BSA. In addition, the U.S. Fish and Wildlife Service (USFWS) Information Planning and Conservation (IPaC) System and USFWS Critical Habitat Mapper was reviewed for special-status species occurrence data and critical habitat designation within the BSA.

Vegetation communities and land covers found within the BSA are entirely non-native and non-natural land covers composed of urban/developed land, ornamental vegetation, and concrete-lined channels associated with Compton Creek (Figure 6, Vegetation Types and Impact Areas). The vegetation communities and land covers identified within the BSA are discussed in further detail below. The BSA is generally situated in a heavily urbanized setting with vegetation limited to ornamental plantings or ruderal vegetation. One plant species was found in the BSA that is rated as “Moderate” by the California Invasive Plant Council: shortpod mustard (*Hirschfeldia incana*). Species rated as “Moderate” have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure (Cal-IPC 2019).

No special-status plant or wildlife species were detected within the BSA during the biological resource survey conducted on August 1, 2019. Based on the review of current state and federal databases, including the California Natural Diversity Database and USFWS IPaC System, no special-status plant or wildlife species have a moderate or higher potential to occur in the BSA. In addition, the BSA is not located within any USFWS-designated critical habitat or a designated wildlife movement corridor. The BSA also does not reside within any approved or proposed Habitat Conservation Plans or Natural Community Conservation Plans. The BSA does contain ornamental vegetation that could provide suitable nesting habitat for resident and migratory bird species protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFG Code).

a) ***Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?***

Less-Than-Significant Impact With Mitigation Incorporated. No special-status plant species are expected to occur based on the lack of suitable habitat. However, nesting birds could be indirectly impacted from short-term construction-related noise. Based on compliance with the MBTA and CFG Code, impacts would be less than significant.

Special-Status Plant Species

A total of 17 plant species were recorded during the field survey. A full list of plant species observed within the proposed project area is provided in Appendix B. No special-status plant species were detected during the biological reconnaissance survey. Due to the extent of developed lands and disturbed vegetation within the BSA, there are no special-status plant species with a moderate or high potential to occur within the BSA. Additionally, proposed project activities will primarily occur within existing paved areas (i.e., roadways, bridge decks, and concrete channel bottom). Therefore, no impacts to potentially occurring special-status plant species would occur.

Special-Status Wildlife Species

A total of eight wildlife species were recorded during the field survey. A full list of wildlife species observed within the proposed project area is provided in Appendix B. No special-status wildlife species were observed during the biological reconnaissance survey. Due to the extent of developed lands and disturbed vegetation within the BSA, there are no special-status wildlife species with a moderate or high potential to occur within the BSA.

No bats or signs of bats (i.e., urine staining and guano droppings) were visually observed at the time of the site visit; however, it should be noted that specific focused surveys for bats were not conducted. Seven special-status bat species have recorded occurrences in the project vicinity (CDFW 2019): pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), silver-haired bat (*Lasionycteris noctivagans*), hoary bat (*Lasiurus cinereus*), western yellow bat (*Lasiurus xanthinus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and big free-tailed bat (*Nyctinomops macrotis*). All the species have potential to forage over the project site, but only pallid bat has a potential to roost within the bridge due to the lack of suitable roosting habitat for the other six species. Pallid bat is commonly found on bridges (Erickson 2002); however, the BSA lacks the habitat that the species is associated with and there are few modern records from the Los Angeles Basin (CDFW 2019; GBIF 2019). Additionally, the project is within a highly urbanized area, which is a deterrent to roosting (Erickson 2002).

Ornamental vegetation within the BSA and the underside of the bridge deck mat provide suitable nesting habitat for a number of common resident and migratory bird species protected under the MBTA and CFG Code Section 3500. Suitable nesting habitat for common, urban-adapted species such as house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), and lesser goldfinch (*Spinus psaltria*) occurs within the BSA.

Although the proposed project is not expected to impact special-status wildlife species, ornamental vegetation scattered throughout the BSA and the underside of the bridge deck could provide suitable habitat for nesting birds protected under the MBTA and CFG Code. Nesting birds could be directly impacted by the removal of the existing bridge deck. Nesting birds could also be indirectly impacted from short-term construction-related noise, resulting in decreased reproductive success or nest abandonment. Therefore, if project activities were to occur during the general avian breeding season of February 1 through September 30, the project may directly and indirectly impact nesting birds protected under the MBTA and CFG Code (MM-BIO-1).

MM-BIO-1 To avoid potential direct and indirect impacts to nesting birds protected by the Migratory Bird Treaty Act and California Fish and Game Code, project activities should avoid the general nesting season of February 1 through September 30. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species within a 500-foot radius of the proposed project work area including under the bridge deck and in vegetation the proposed work area. If an active bird nest is found within the bridge deck, work would not be able to proceed until the nest is determined to be inactive (fledged or failed) by a qualified biologist. <u>If project activities are delayed or suspended for more than 7 days during the nesting season, new nest surveys should be conducted.</u> If an active bird nest is found within portions of the survey area adjacent to the bridge, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.

Upon implementation of MM-BIO-1 impacts to species identified as a candidate, sensitive, or special status species would be less than significant.

b) Would the project 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. As shown in Figure 6, vegetation communities and land covers found within the BSA are entirely non-native and non-natural land covers composed of urban/developed land, ornamental vegetation, and concrete-lined channels associated with Compton Creek. None of the above identified vegetation communities are recognized by the Natural Communities List. Additionally, based on a review of the USFWS Critical Habitat viewer, there is no USFWS-designated critical habitat for listed wildlife species within the BSA (USFWS 2019). As a result, there would be no impact to riparian or sensitive vegetation communities.

c) Would the project 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 Impact. The concrete channel contains the waters of Compton Creek that are likely to be determined Waters of the U.S., Waters of the State, and a California Department of Fish and Wildlife (CDFW)-regulated stream. A formal jurisdictional waters delineation was not conducted; however, the limits of jurisdiction are expected to be delineated along the channel bottom for U.S. Army Corps of Engineers and the Regional Water Quality Control Board (RWQCB), and along the top of the vertical wall of the channel for CDFW, with the horizontal demarcation for each of these jurisdictions being concurrent. The channel is devoid of vegetation within the BSA.

As shown in Figure 6, temporary and permanent impacts to waters of the U.S. and State are anticipated to occur as a result of the proposed project. Construction of the proposed project would temporarily impact 0.49 acres of the concrete channel. The proposed new pier in the middle of the channel would be constructed where the existing bridge pier is located and the proposed footing (including the sloping pier nose) would result in very small increase over the existing footing (0.01 acres). Therefore, the proposed project would likely require a Section 404 Permit from U.S. Army Corps of Engineers, a Section 401 Water Quality Certification from the RWQCB, and a 1600 Streambed Alteration Agreement from CDFW.

Potential temporary impacts to jurisdictional waters within the concrete channel would result from proposed construction activities. Temporary impacts would include vehicles and equipment within the channel, the generation of concrete debris and sediment due to the demolition of the existing bridge, and the potential introduction of chemical pollutants (fuel, oil, lubricants, paints, release agents, and other construction materials). The release of chemical pollutants can reduce the water quality downstream, especially if water is actively flowing through a project site. Work would be conducted during the dry season (April 15 to October 15); however, based on historical imagery, urban runoff is present in the Compton Creek channel throughout the year.

To reduce temporary impacts, work areas would be reduced to the maximum extent feasible, and staging areas would be along the roadways and outside of Compton Creek. During construction, erosion-control measures would be implemented by the contractor as part of their County-certified Stormwater Pollution Prevention Plan (SWPPP) for the proposed project. The SWPPP will identify the sources of pollutants that may affect the quality of stormwater and include best management practices (BMPs) to control the pollutants. All work shall conform to the site specific surface water diversion plan prepared for the project that will comply with the conditions included in the Water Quality Certification from the RWQCB and include pertinent BMPs from the Construction Site Best Management Practices (BMPs) Manual (Public Works 2010). These include, but are not limited to, temporary sediment control, temporary soil stabilization, waste management and materials pollution control, wind erosion control, and other non-stormwater BMPs.

For these reasons, impacts related to substantial adverse effect on state or federally protected wetlands would be less than significant.

d) ***Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

Less-Than-Significant Impact. The BSA is surrounded by urban, developed land uses, and does not contain any greenbelts for wildlife movement, or native vegetation and undeveloped land capable of facilitating the movement of species between large tracts of native habitat. The Compton Creek watershed is entirely urban, so the channel does not connect any large natural areas upstream with the Los Angeles River and Pacific Ocean downstream. On a local level, urban-adapted wildlife, such as coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*), may use the below-grade Compton Creek Channel to move within the urban environment and as a source of water. As such, the proposed project would not interfere with the movement of any resident or migratory fish or wildlife species. Impacts would be less than significant.

e) ***Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

No Impact. The County implements an Oak Tree Ordinance that applies to all unincorporated areas of the County. The ordinance prohibits cutting, destroying, removing, relocating, inflicting damage on, or encroaching into the protected zone of any tree of the oak tree genus (*Quercus*) without first obtaining a permit. Per Chapter 20-4 of the City's Municipal Code, the removal of any City trees requires the Director of Public Works to authorize such work. The project site (including Temporary Construction Area) supports several ornamental trees and the proposed project may include the removal of trees located on private property. As the removal of private trees may occur, Public Works would coordinate with the City Department of Public Works to obtain authorization for proposed removals (including trees located on private property). Therefore, no impacts associated with local policies or ordinances protecting biological resources would occur.

f) Would the project 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 BSA does not reside within any approved or proposed Habitat Conservation Plans or Natural Community Conservation Plans. Therefore, the proposed project would not be in conflict with any such plans, and no impact would occur.

3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. **CULTURAL RESOURCES** – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Less-Than-Significant Impact with Mitigation Incorporated. An area of potential effects (APE) was established for the project and includes a Direct APE that encompasses all areas where ground disturbance is expected to occur and any areas to be used for staging and transportation of materials. An Indirect APE was also established and includes a one-parcel bump-out around all portions of the Direct APE where ground-disturbing activities are expected to occur that could potentially result in indirect effects (e.g., noise, vibration, alteration of setting) to adjacent properties. A total of 16 built environment resources over 50 years old, consisting of both residential and commercial properties, fall within the Indirect APE. These include residences along School Street and commercial storefronts and businesses along Wilmington Avenue (Figure 7, Area of Potential Effects Map).

A California Historical Resources Information System (CHRIS) records search (Confidential Appendix C, Records Search Map and Finding of No Adverse Effect) was conducted at the South Central Coastal Information Center on October 2, 2019. The search included any previously recorded cultural resources (including archaeological and historic built environment resources) and previous investigations within the proposed project APE and a 0.5-mile radius. Results of the records search indicate that two cultural resource studies have been conducted within a 0.5-mile radius of the proposed project APE from 2007 through 2009. None of these studies overlap or are adjacent to the proposed project APE. Results of the records search also indicate the no prehistoric or historic-era archaeological resources were identified within the proposed project's APE or the 0.5-mile search radius. The Wilmington Avenue Bridge (#53C0907) was constructed in 1938 and was individually evaluated as part of the Caltrans Historic Bridge Inventory (Caltrans 2019) and was assigned a Category 5 (not eligible for the National Register of Historic Places).

The project site was surveyed by qualified cultural resources specialists trained in archaeological and historic built environment fieldwork on October 22, 2019. The surveyed included examination and photo-documentation of the Compton Creek Channel, Wilmington Avenue Bridge, and a windshield survey of properties within the Indirect APE. All privately owned residential and commercial properties within the Indirect APE were exempt from evaluation as part of the Programmatic Agreement used as part of the Section 106 of the National Historic Preservation Act process by Caltrans. Although this Programmatic Agreement does not apply to CEQA, these exempted properties also do not qualify as historical resources under CEQA because they were found to be unremarkable Post-World War II builders' houses and housing tracts with no potential for historical significance, a heavily altered building, or an unremarkable building less than 50 years old. As such, none of these properties appear eligible for the National Register of Historic Places, California Register of Historical Resources, or local register.

Three historic properties were identified within the project APE as a result of the background research: the potentially Los Angeles Flood Control District (LAFCD) historic district, and two of its contributing resources, the Compton Creek Channel and the Wilmington Avenue Bridge.

The Compton Creek Channel has the potential to be adversely impacted by the demolition and construction of the new Wilmington Avenue Bridge and adjacent bicycle path improvements. However, with implementation of the project-specific SOIS Action Plan (being implemented as part of the Caltrans Section 106 process), the major character-defining features of the Compton Creek Channel will be retained and protected such that project impacts on the channel would be less than significant. As a result, the Compton Creek Channel will remain a contributing feature of the LAFCD upon completion of the project.

The Wilmington Avenue Bridge would be directly impacted by the proposed project in that it would be demolished and replaced with a new bridge. The Wilmington Avenue Bridge is not eligible at the individual level of significance and is a Caltrans Category 5 bridge (not eligible for the National Register of Historic Places). Despite its integrity issues, the Wilmington Avenue Bridge was assumed eligible for the National Register of Historic Places under Criterion A as a contributor to the larger LAFCD, as it is still serving its intended function, in its original alignment and configuration within the larger LAFCD system. Given that the Wilmington Avenue Bridge has already been altered and is not eligible under Criterion C for its engineering merits, nor is it eligible at the individual level, only the most basic character-defining features that convey the bridge's historical associations with the LAFCD require consideration. These features include its function as a crossing, its location, alignment, approximate size, use of compatible replacement materials, and its relationship to the Compton Creek Channel. Therefore, the overall impact on the larger resource is not significant. With replacement of the original bridge in the same location and alignment, the LAFCD will continue to convey its significance under Criterion A despite the loss of the already altered Wilmington Avenue Bridge as a contributor.

As a result of the Finding of No Adverse Effect document (Confidential Appendix C) prepared during the Caltrans Section 106 process and the associated SOIS Action Plan being implemented as mitigation to retain and protect the major character-defining features of the Compton Creek Channel as part of both the National Environmental Policy Act and CEQA process, the proposed project would have a less-than-significant impact on historical resources with mitigation incorporated.

MM-CUL-1 Public Works shall implement the Secretary of the Interior's Standards for the Treatment of Historic Properties Action Plan (SOIS Action Plan) prepared for the project as part of the Section 106 process to ensure that design documents and project construction comply with the Rehabilitation Standards throughout the design and construction process. The SOIS Action Plan is included as Appendix C to this Mitigated Negative Declaration and details required tasks for responsible parties at each stage of project development and progress (i.e., plan development/construction documents, during construction, and post-construction).

b) Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less-Than-Significant Impact with Mitigation Incorporated. The archaeological survey report prepared for the proposed project (contained in this document as Confidential Appendix C) documents the results of an archaeological resources inventory and whether the implementation of the proposed project would have the potential to impact known or previously identified archaeological resources and discusses the likelihood of encountering previously unknown archaeological resources. No newly or previously recorded archaeological resources were identified within the project during the CHRIS records search, Native American Heritage Commission Sacred Lands File (NAHC SLF) search, or pedestrian survey (Confidential Appendix C). Furthermore, the potential for previously unknown, intact, buried archaeological deposits to be present within the previously disturbed soils is highly unlikely based on a review of as-built engineering drawings, a geotechnical report, historic maps and site records, and a review of aerial images. These documents demonstrate that the project site has been subject to significant ground disturbances (approximately 42 feet and 11 inches at the pier/abutments, 15 feet 10 inches in the conduit, and 24 inches from the ground surface within approach areas such as driveways, curbs and gutters, and roadways). However, previously undisturbed soils would be encountered during excavation activities for the replacement of the existing Wilmington Avenue Bridge. These activities include pile drilling associated with new abutments, which would extend approximately 50 feet deep, and cut/fill activity 15 feet behind the existing abutments that is anticipated to reach depths of 10 feet. Given the negative CHRIS and NAHC SLF records search results and pedestrian survey, and the review of as-built engineering drawings, historic aerials and topo maps demonstrating significant disturbance within the project site, and the fact that some undisturbed soils would exist at depths too low for cultural deposits, potential impacts to unknown archaeological resources is considered low. However, it is possible that previously undiscovered intact archaeological deposits are present at subsurface levels in areas of previously undisturbed soils and could be uncovered during ground disturbing activities. As such, mitigation measure MM-CUL-2 is provided to address inadvertent discoveries during construction. Impacts related to archaeological resources would be less than significant with mitigation incorporated.

MM-CUL-2 In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5(f); California PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, data recovery, and/or monitoring may be warranted.

c) Would the project disturb any human remains, including those interred outside of dedicated cemeteries?

Less-Than-Significant Impact. There is no indication that human remains are present within the boundaries of the project site. However, the discovery of human remains would require handling in accordance with California PRC 5097.98, which states that if human remains are discovered during construction, construction activity shall be halted and the area shall be protected until consultation and treatment can occur as prescribed by law. In addition and in accordance with California PRC Section 5097.98, the Native American Heritage Commission must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The most likely descendant would then determine, in consultation with the property owner, the disposition of the human remains. Upon discovery, a qualified archaeologist will be retained to ensure proper implementation of the treatment agreed upon by the most likely descendant and property owner. Therefore, through compliance with Section 7050.5 of the California Health and Safety Code and California PRC 5097.98, impacts associated with unexpected discovery of human remains unearthed during construction activities would be less than significant.

3.6 Energy

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. Energy – 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?	☐	☐	☒	☐

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

Less-Than-Significant Impact. The service providers, supply sources, and estimated consumption for electricity, natural gas, and petroleum is discussed as follows.

Energy Overview

Electricity

Southern California Edison (SCE) is the utility provider within the project area. SCE provides electric services to 15 million customers, located within a 50,000-square-mile area in central, coastal, and Southern California. According to SCE, customers consumed approximately 84 billion kilowatt-hours of electricity in 2017 (CEC 2018a). SCE receives electric power from a variety of sources. According to the SCE Sustainability Report, 32% of SCE's power came from renewable energy sources in 2017, including biomass/waste, geothermal, hydroelectric, solar, and wind sources (SCE 2018). Due to the state's energy efficiency building standards and efficiency and conservation programs, California's electricity use per capita has remained stable for more than 30 years, while the national average has steadily increased (CEC 2015).

Natural Gas

Southern California Gas Company (SoCalGas) serves the proposed project area. SoCalGas serves 21.6 million customers in a 20,000-square-mile service area that includes over 500 communities (SoCalGas 2018). In 2017 (the most recent year for which data are available), SoCalGas delivered 5,142 million therms of natural gas, with the majority going to residential uses (CEC 2018b). Demand for natural gas can vary depending on factors such as weather, price of electricity, the health of the economy, environmental regulations, energy-efficiency programs, and the availability of alternative renewable energy sources. Natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand.

Petroleum

Transportation accounts for the majority of California's total energy consumption (CEC 2020). According to the Energy Information Association, California used approximately 672 million barrels of petroleum in 2016 (EIA 2018). This equates to a daily use of approximately 1.8 million barrels of petroleum. There are 42 U.S. gallons in a barrel, so California consumes approximately 77 million gallons of petroleum per day, adding up to an annual consumption of 28 billion gallons of petroleum. However, technological advances, market trends, consumer behavior, and government policies could result in significant changes in fuel consumption by type and in total. At the federal and state levels, various policies, rules, and regulations have been enacted to improve vehicle fuel efficiency, promote the development and use of alternative fuels, reduce transportation-source air pollutants and GHG emissions, and reduce vehicle miles traveled.

Construction Energy Use

Electricity

Temporary electric power for as-necessary lighting and electronic equipment would be provided by SCE. The amount of electricity used during construction would be minimal because typical demand would stem from electrically powered hand tools. The electricity used for construction activities would be temporary and minimal; therefore, proposed project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity. Impacts would be less than significant.

Natural Gas

Natural gas is not anticipated to be required during construction of the proposed project. Fuels used for construction would primarily consist of diesel and gasoline, which are discussed under the subsection "Petroleum." Any minor amounts of natural gas that may be consumed as a result of proposed project construction would be temporary and negligible and would not have an adverse effect; therefore, proposed project construction would not result in wasteful, inefficient, or unnecessary consumption of natural gas. Impacts would be less than significant.

Petroleum

Petroleum would be consumed throughout construction. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction. Transportation of construction materials and construction workers would also result in petroleum consumption. Heavy-duty construction equipment, vendor trucks, and haul trucks would use diesel fuel. Construction workers would likely travel to and from the project area in gasoline-powered vehicles. Construction is expected to take approximately 300 workdays, beginning construction in spring 2026. Once construction activities cease, petroleum use from off-road equipment and transportation vehicles would end. Because of the short-term nature of construction and relevantly small scale of the project, impacts would be less than significant.

Operational Energy Use

As discussed in Section 2, the project consists of replacing the existing Wilmington Avenue Bridge with a new pre-cast concrete bridge. Thus, there would minimal operational or maintenance activities associated with the proposed project. Therefore, there operational energy use associated with the project would be less than significant.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less-Than-Significant Impact. The project would follow applicable energy standards and regulations during the construction phases. Worker vehicles would meet the applicable standards of Assembly Bill (AB) 1493 (vehicles manufactured 2009 or later) and, as a result, would likely consume less energy as fuel efficiency standards are increased and vehicles are replaced. As such, impacts related to the project's potential to conflict with plans for renewable energy and energy efficiency would be less than significant.

3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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.	☐	☐	☐	☒
i) ii) Strong seismic ground shaking?	☐	☐	☒	☐
ii) iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iii) iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

a) Would the project 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 project site does not lie within an Alquist-Priolo Special Studies Zone. The closest such fault zone is located approximately 1.3 miles west-southwest of the project site, along the Newport-Inglewood Fault Zone (CGS 1986). No other Holocene-active or pre-Holocene (i.e., Quaternary) faults are located in the vicinity of the site (CGS 2010). In addition, the project would not exacerbate the potential for fault rupture to occur. Therefore, the project would not directly or indirectly cause potential substantial adverse effects involving rupture of a known earthquake fault. No impacts would occur.

ii) Strong seismic ground shaking?

Less-Than-Significant Impact. The project site is in a seismically active region of Southern California, which is subject to substantial hazards as a result of strong seismically induced ground shaking. Ground shaking due to earthquakes on the nearby Newport-Inglewood Fault, or other regional faults, can be anticipated during the life of the structure. The maximum probable earthquake on the Newport-Inglewood Fault is moment magnitude (Mw) 6.0 to 7.4 (SCEDC 2013). Design and construction of the project would comply with provisions of the California Building Code and Caltrans seismic design protocol, including Caltrans Memo to Designers 20-1, Seismic Design Methodology (Caltrans 2010) and Memo to Designers 20-4, Seismic Retrofit Guidelines for Bridges in California (Caltrans 2016). In addition, the project would not exacerbate the potential for seismic ground shaking to occur. Conversely, seismic upgrades included in the proposed project design would result in beneficial impacts with respect to ground shaking. Therefore, the project would not directly or indirectly cause potential substantial adverse effects involving strong seismic ground shaking. Impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less-Than-Significant Impact. Liquefaction occurs when shallow, loose, unconsolidated, fine- to medium-grained sediments, saturated with groundwater, are subjected to strong seismically induced ground shaking. Lateral spreading is the lateral movement of gently to steeply sloping, saturated soils deposits caused by liquefaction. The possibility of liquefaction occurring at any specific site is dependent on the intensity of the earthquake, shallowness of groundwater, and on the grain size, plasticity, relative density, and confining pressure of the soils at the project site. Liquefaction typically occurs when groundwater is located at a depth of 50 feet or less. The project site is underlain primarily by stiff to very stiff clay and silt, with a layer of very dense, well-graded sand from a depth of 65 to 75 feet. Groundwater is present at a depth of 45 to 53 feet (Appendix D, Geotechnical Memorandum).

The project is in a potential liquefaction zone (CGS 1999). However, design and construction of the project would comply with provisions of the California Building Code and Caltrans seismic design protocol, as discussed in Section 3.7(a-ii). In addition, the project would not exacerbate the potential for seismically related ground failure, including liquefaction, to occur. Conversely, seismic upgrades included in the proposed project design would result in beneficial impacts with respect to seismic related ground shaking, including liquefaction. Therefore, the project would not directly or indirectly cause potential substantial adverse effects involving seismically related ground failure, including liquefaction. Impacts would be less than significant.

iv) Landslides?

Less-Than-Significant Impact. The topography of the site is relatively flat to gently sloping and therefore not conducive to slope instability. No hillsides that might be prone to landslides are in the vicinity of the site. During construction, the existing bridge would be removed, including the existing pier and pier invert, the existing steel girder, and the existing superstructure as well as the reinforced concrete, asphalt pavement, and soils within the limits of the new work. All existing bridge bearing components would be removed, including bearings, anchor bolts and grout pads. Removal of the bridge and appurtenances would include preserving the existing abutments/channel walls, which would remain in place, thereby avoiding the need for any temporary steep creek banks. Prior to cutting the backwall across the existing abutments, the soil behind the wall would be removed. The new abutments would then be constructed behind the remaining channel walls, which would retain the soil at all times. The removal and reconstruction of the existing pier in the middle of the channel would include excavation of approximately 2 to 3 feet. Based on these methodologies the project would prevent caving and creek bank slope failure. All demolition and construction would be completed in accordance with provisions of the California Building Code, which includes measures for stabilization of temporary slopes during construction and long-term slope stability during operations. Therefore, impacts would be less than significant and no mitigation is required.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less-Than-Significant Impact. The project site is currently paved and therefore not susceptible to erosion. However, the proposed project would result in excavation and removal of approximately 73,630 square feet (1.72 acres) of roadway and removal of the existing bridge and underlying structural supports. Demolition and new construction would result in temporary exposure of soil, which could result in short-term erosion and sedimentation of Compton Creek. Sedimentation of the creek can result in adverse biological impacts, including disturbance of existing roadway and sediments underlying the bridge. Since the project would likely result in disturbance of slightly greater than 1 acre of soil, the proposed project would comply with the provisions of the Construction General Permit, which is National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Associated with Construction Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002). Additionally, Public Works would be required to submit a Notice of Intent to the RWQCB to obtain approval to complete construction activities under the Construction General Permit. This permit would include a number of design, management, and monitoring requirements for the protection of water quality and the reduction of construction phase impacts related to stormwater discharges. Permit requirements would include the preparation of a SWPPP, implementation and monitoring of BMPs, and periodic submittal of performance summaries and reports to the RWQCB. In addition, demolition and construction would be completed in compliance with the County of Los Angeles Construction Site Best Management Practices (BMPs) Manual and the Stormwater Pollution Prevention Plan (SWPPP) and Water Pollution Control Program (WPCP) Preparation Manual.

Issues related to stream scour would be further evaluated and addressed during final design. All bridge components would be designed using the Memo to Designers 20-4, Seismic Retrofit Guidelines for Bridges in California (Caltrans 2016), which addresses stream scour in combination with seismic hazards on new bridges, in accordance with Caltrans Seismic Design Criteria Section 2.2.5. As a result, impacts related to soil erosion and loss of topsoil would be less than significant.

c) Would the project 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 Impact. As previously discussed in Sections 3.7(a-i) through 3.7(a-iii), seismic upgrades included in the proposed project design would result in beneficial impacts with respect to seismic related ground failure. The project would result in less-than-significant impacts related to unstable soils and no mitigation is required.

d) Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less-Than-Significant Impact. Expansive soils generally have a high clay content that causes soil shrinkage when dry and swelling when wet. The change in volume exerts stress on buildings and other structural loads. The extent of shrink/swell is influenced by the amount and type of clay in the soil. Based on geotechnical borings drilled at the site, the project site is underlain by clay and sandy clay (Appendix D), which may be prone to soil expansion. However, design and construction of the project would comply with provisions of the California Building Code, which includes remedial measures to protect against risks to life or property associated with expansive soils. Therefore, impacts would be less than significant and no mitigation is required.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. Neither septic tanks nor alternative wastewater disposal systems are part of the project. Therefore, no impacts would occur.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less-Than-Significant Impact With Mitigation Incorporated. The project site is in the City of Compton and lies within the northernmost Peninsular Ranges Geomorphic Province (CGS 2002; Norris and Webb 1990). Northwest trending mountain ranges and valleys that extend over 900 miles from the tip of the Baja Peninsula to the Transverse Ranges (i.e., the San Bernardino and San Gabriel Mountains in southern California) characterize this geomorphic province. Regionally, the Peninsular Ranges are bounded to the east by the Colorado Desert and the west by the continental shelf and offshore islands (Santa Catalina, Santa Barbara, San Nicholas, and San Clemente) (CGS 2002; Norris and Webb 1990). Regional mountain ranges in the Peninsular Ranges geomorphic province include the Santa Ana, San Jacinto, and Santa Rosa Mountains. Geologically, these mountains are dominated by Mesozoic, plutonic igneous and metamorphic rocks that are part of the Peninsular Ranges batholith (Southern California batholith) (Jahns 1954).

More specifically, the project site lies within the southwestern block of the Los Angeles Basin (Yerkes et al. 1965). The Los Angeles Basin (also called the coastal plain) extends from the Santa Monica Mountains in the north to the San Joaquin Hills of Orange County in the south and is a structural basin that in some areas has been subsiding and filling with sediments since the late Cretaceous (Yerkes et al. 1965). The Los Angeles Basin is characterized by alluvial coastal plains, underlain by older alluvial and marine sediments, and punctuated by uplifted highlands owing to the numerous faults underlying the Basin. These faults, which include the Newport-Inglewood fault zone (a strike-slip fault zone) in the south and the Sierra Madre fault zone in the north (a reverse fault), are part of the greater San Andreas fault system, characterized by numerous strike-slip faults. According to geological mapping by Jennings (1962) at a scale of 1:250,000, the project site is underlain by Holocene (<11,700 years ago) alluvium (map unit Qal) east of Compton Creek and Quaternary nonmarine terrace deposits (map unit Qt) west of Compton Creek. The Quaternary nonmarine terrace deposits are generally late Pleistocene age (approximately 126,000 years ago to 11,700 years ago). More recent and larger-scale (more detailed) mapping of Saucedo et al. (2003) at a scale of 1:62,500 mapped the entire project site as Holocene young alluvium (map unit Qya_2).

Dudek requested a paleontological records search of the Natural History Museum of Los Angeles County (LACM) vertebrate paleontological collections for the project and a one-half mile radius buffer on June 21, 2019, and the results were received on July 15, 2019. Not citing specific geological mapping, the LACM indicated the project site is underlain by Holocene alluvium, which is in turn underlain by Pleistocene alluvium (McLeod 2019). The LACM did not report any previously recorded vertebrate fossil localities within the proposed project site or within the one-half mile radius buffer; however, they did report fossil localities from Pleistocene alluvium near the proposed project site. The closest vertebrate fossil locality (LACM 4685), approximately 3 kilometers northwest of the proposed project near Avalon Boulevard between 135th and 136th Streets, yielded a fossil proboscidean at an unknown depth below the ground surface (bgs). A fossil mammoth (*Mammuthus*) locality (LACM 3382) was recovered east of Wilmington Boulevard and north of Artesia Boulevard from a depth of approximately 5 feet bgs (McLeod 2019). Vertebrate fossil localities LACM 1344, 3266, and 3365, located around the Harbor Freeway (Interstate 110) and Athens on the Hill, produced fossil specimens of mammoth (*Mammuthus*), squirrel (*Sciuridae*), horse (*Equus*), and pronghorn antelope (*Breameryx*) from between 15 and 20 feet bgs. Finally, the LACM reported a Pleistocene fauna (LACM 1295 and 4206) from the Harbor Freeway (Interstate 110) between 112th and 113th Streets and near Main Street and the Imperial Highway that included pond turtle (*Clemmys*), puffin (*Mancalla*), turkey (*Paroparvo*), ground sloth (*Paralmylodon*), mammoth (*Mammuthus*), dire wolf (*Canis dirus*), horse (*Equus*), deer (*Cervus*), pronghorn antelope (*Capromeryx*), bison (*Bison*), rabbit (*Sylvilagus*), squirrel (*Sciuridae*), deer mouse (*Microtus*), and pocket gopher (*Thomomys*) from relatively shallow depths bgs (McLeod 2019).

In addition to the vertebrate fossil localities reported by the LACM, Jefferson (1991) and Miller (1971) reported numerous Pleistocene fossil vertebrate localities in this portion of the Los Angeles Basin. Specimens include amphibians, reptiles, birds, and large and small mammals.

The institutional records search or desktop geological and paleontological review did not reveal any fossil localities within the proposed project site, and the proposed project is not anticipated to be underlain by unique geologic features. While this area is underlain by Holocene sediments that are generally too young to contain significant paleontological resources, intact paleontological resources may be present below the Holocene alluvial sediments where older, Pleistocene, sediments are anticipated. The LACM records search suggested Pleistocene sediments could be as shallow as 5 feet bgs. If intact paleontological resources are located on site, ground-disturbing activities associated with construction of the proposed project, such as grading during site preparation and trenching for utilities, have the potential to destroy a unique paleontological resource or site. As such, the proposed project site is potentially sensitive for paleontological resources and without mitigation, the potential damage to paleontological resources during construction associated with the project is considered a potentially significant impact. Given the proximity of past fossil discoveries in Pleistocene sediments within this part of the Los Angeles Basin and the potential for underlying, Pleistocene-age older alluvial deposits, the proposed project area is highly sensitive for supporting paleontological resources below the depth of fill and recent Quaternary alluvium. However, upon implementation of MM-GEO-1, impacts would be reduced to below a level of significance. Impacts of the project are considered less than significant with mitigation incorporated during construction.

MM-GEO-1 Prior to commencement of any grading activity on site that is greater than 5 feet below ground surface, the applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology’s 2010 Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the proposed project.

The PRIMP shall be consistent with the Society of Vertebrate Paleontology's 2010 guidelines and should outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the proposed project area based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The qualified paleontologist shall attend the preconstruction meeting and a paleontological monitor shall be on site during all rough grading and other significant ground-disturbing activities in previously undisturbed, fine-grained older Quaternary alluvial deposits. These deposits may be encountered at depths as shallow as 5 feet below ground surface or below the depth of any artificial fill present on site. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – 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?	☐	☐	☒	☐

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

Less-Than-Significant Impact. Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period of time (decades or longer). The Earth's temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in Earth's energy balance. The greenhouse effect is the trapping and build-up of heat in the atmosphere (troposphere) near the Earth's surface. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature, and it creates a livable environment on Earth. Human activities that emit additional GHGs to the atmosphere increase the amount of infrared radiation that gets absorbed before escaping into space, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHGs. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation in the atmosphere; in other words, GHGs trap heat in the atmosphere. As defined in California Health and Safety Code Section 38505(g) for purposes of administering many of the state's primary GHG emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (see also 14 CCR 15364.5). The three GHGs evaluated herein are CO_2, CH_4, and N_2O. Emissions of HFCs, PFCs, SF_6, and NF_3 are generally associated with industrial activities including the manufacturing of electrical components, heavy duty air conditioning units, and insulation of electrical transmission equipment (substations, power lines, and switch gears). Therefore, emissions of these GHGs were not evaluated or estimated in this analysis because the project would not include these activities or components and would not generate HFCs, PFCs, SF_6, and NF_3 in measurable quantities.

Gases in the atmosphere can contribute to climate change both directly and indirectly.[8] The Intergovernmental Panel on Climate Change developed the global warming potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO_2; therefore, GWP-weighted emissions are measured in metric tons of CO_2 equivalent (MT CO_2e). Consistent with CalEEMod, this GHG emissions analysis assumed the GWP for CH_4 is 25 (emissions of 1 MT of CH_4 are equivalent to emissions of 25 MT of CO_2), and the GWP for N_2O is 298, based on the Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC 2007).

As discussed in Section 3.3 of this IS/MND, the project is located within the jurisdictional boundaries of the SCAQMD. In October 2008, the SCAQMD proposed recommended numeric CEQA significance thresholds for GHG emissions for lead agencies to use in assessing GHG impacts of residential and commercial development projects as presented in its Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold (SCAQMD 2008). This document, which builds on the previous guidance prepared by the California Air Pollution Control Officers Association, explored various approaches for establishing a significance threshold for GHG emissions. The draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. However, in December 2008, the SCAQMD adopted an interim 10,000 MT CO_2e per-year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency (see SCAQMD Resolution No. 08-35, December 5, 2008).

The SCAQMD formed a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds until statewide significance thresholds or guidelines are established. From December 2008 to September 2010, the SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. The SCAQMD has continued to consider adoption of significance thresholds for

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[8] Direct effects occur when the gas itself absorbs radiation. Indirect radiative forcing occurs when chemical transformations of the substance produce other GHGs, when a gas influences the atmospheric lifetimes of other gases, and/or when a gas affects atmospheric processes that alter the radiative balance of the Earth (e.g., affect cloud formation or albedo) (EPA 2017b).

residential and general land use development projects. The most recent proposal, issued in September 2010, uses the following tiered approach to evaluate potential GHG impacts from various uses (SCAQMD 2010):

Tier 1. Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.

Tier 2. Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

Tier 3. Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 MT CO_2e per-year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MT CO_2e per year), commercial projects (1,400 MT CO_2e per year), and mixed-use projects (3,000 MT CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 MT CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.

Tier 4. Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. The 2020 efficiency targets are 4.8 MT CO_2e per-service population for project-level analyses and 6.6 MT CO_2e per-service population for plan-level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

Tier 5. Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, establish specific thresholds of significance, or mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance that are consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009).

To determine the project's potential to generate GHG emissions that would have a significant impact on the environment, the project's GHG emissions were compared to the non-industrial land project quantitative threshold of 3,000 MT CO_2e per year. Because the project does not include operational sources of emissions, and because the project does not conform to the standard land use types, the 3,000 MT CO_2e per year threshold, which was identified under Tier 3 Option 1, was applied herein. Per the SCAQMD guidance, construction emissions should be amortized over the operational life of the project, which is assumed to be 30 years (SCAQMD 2008). This impact analysis, therefore, compares amortized construction emissions to the proposed SCAQMD threshold of 3,000 MT CO_2e per year.

Construction Emissions

Construction of the project would result in GHG emissions primarily associated with the use of off-road construction equipment, on-road trucks, and worker vehicles. A depiction of expected construction schedules (including information regarding phasing, equipment used during each phase, truck trips, and worker vehicle trips) assumed for the purposes of emissions estimation is provided in Table 2 and in Appendix A. On-site sources of GHG emissions include off-road equipment; off-site sources include trucks and worker vehicles. Table 5 presents construction GHG emissions for the project from on-site and off-site emissions sources.

Table 5. Estimated Annual Construction Greenhouse Gas Emissions

Year	CO_2	CH_4	N_2O	R	CO_2e
	Metric Tons per Year				
2026	313.00	0.01	0.02	0.12	318.00
2027	203.00	0.01	0.01	0.06	205.00
Total	**516.00**	**0.02**	**0.03**	**0.18**	**523.00**
				Amortized Construction Emissions	**17.43**

Source: See Appendix A for complete results.
Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; R = refrigerants; CO_2e = carbon dioxide equivalent.

As shown in Table 5, the estimated total GHG emissions in 2026 and 2027, would be approximately 523 MT CO_2e. Amortized over 30 years, construction GHG emissions would be approximately 17 MT CO_2e per year. In addition, as with project-generated construction criteria air pollutant emissions, GHG emissions generated during proposed construction activities would be short term, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions.

Operational Emissions

Once project construction is complete, the project would result in minimal maintenance activities consisting of use of equipment and worker vehicles. Because the proposed project would generate a minimal amount of vehicle trips, operational emissions would be less than significant.

As shown in Table 5, amortized project-generated construction emissions would not exceed the 3,000 SCAQMD threshold. Therefore, GHG emissions impacts would be less than significant.

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

Less-Than-Significant Impact. The project would result in less-than-significant impacts related to conflicts with GHG emission reduction plans, for the reasons described as follows.

Consistency with CARB's Scoping Plan

The CARB Scoping Plan, approved by CARB in 2008 and updated in 2014 and 2017, provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations.[9] Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others.

Consistency with the Southern California Association of Governments 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy

On September 3, 2020, the Regional Council of SCAG formally adopted the 2020–2045 RTP/SCS as a regional growth management strategy, which targets per-capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California Region pursuant Senate Bill (SB) 375. In addition to demonstrating the region's ability to attain the GHG emission-reduction targets set forth by CARB, the 2020–2045 RTP/SCS outlines a series of actions and strategies for integrating the transportation network with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands (SCAG 2020). Thus, successful implementation of the 2020–2045 RTP/SCS would result in more complete communities with various transportation and housing choices while reducing automobile use.

The 2020 RTP/SCS incorporates local land use projections and circulation networks in city and county general plans. The 2020 RTP/SCS is not directly applicable to the project because the purpose of the 2020 RTP/SCS is to provide direction and guidance by making the best transportation and land use choices for future development. Therefore, the project would not conflict with implementation of the strategies identified in the 2020 RTP/SCS that would reduce GHG emissions.

Consistency with Executive Order S-3-05 and Senate Bill 32

The project would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in Executive Order S-3-05 and SB 32. Executive Order S-3-05 establishes the following goals: GHG emissions should be reduced to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050. SB 32 establishes a statewide GHG emissions reduction target whereby CARB, in adopting rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions, shall ensure that statewide GHG emissions are reduced to at least 40% below 1990 levels by December 31, 2030. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

CARB has expressed optimism about both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014). Regarding the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update

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[9] The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

to the Climate Change Scoping Plan states that the level of reduction is achievable in California (CARB 2014). CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, SB 32, and Executive Order S-3-05. This is confirmed in the 2017 Scoping Plan, which states (CARB 2017b):

> The Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities.

The project would not interfere with implementation of any of the previously described GHG reduction goals for 2030 or 2050 because the project would not exceed the SCAQMD's recommended threshold of 3,000 MT CO_2e per year (SCAQMD 2008). Because the project would not exceed the threshold as presented in Table 5, this analysis provides support for the conclusion that the project would not impede the state's trajectory toward the previously described statewide GHG reduction goals for 2030 or 2050.

The project's consistency with the state's Scoping Plan would assist in meeting the City's contribution to GHG emission reduction targets in California. With respect to future GHG targets under SB 32 and Executive Order S-3-05, CARB has also made clear its legal interpretation that it has the requisite authority to adopt whatever regulations are necessary, beyond the AB 32 horizon year of 2020, to meet the SB 32 40% reduction target by 2030 and the Executive Order S-3-05 80% reduction target by 2050. This legal interpretation by an expert agency provides evidence that future regulations will be adopted to continue the trajectory toward meeting these future GHG targets.

Based on the considerations previously outlined, the project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be less than significant.

3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS – 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?	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

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

Less-Than-Significant Impact. Relatively small amounts of commonly used hazardous substances such as gasoline, diesel fuel, lubricating oil, adhesive materials, grease, solvents, and architectural coatings would be used during construction. These materials are not considered acutely hazardous and are used routinely throughout urban environments for both construction projects and structural improvements. Further, these materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials, including requirements to protect the Compton Creek waterway, such as Spill Prevention, Control, and Countermeasure Plans, and/or an NPDES water discharge permit. The City's Public Safety Element of the General Plan (City of Compton 2011), identifies four Public Safety Policies that minimize risks to health and safety associated with handling, transporting, treating, generating, and storing hazardous materials. These policies require adherence to, and are in support of, existing state and federal hazardous material handling laws and regulations. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or environment. Once construction has been completed, fuels and other petroleum products would no longer remain within the work area. Operation of the proposed project would not require the use, storage, or disposal of hazardous substances. Impacts would be less than significant.

b) ***Would the project 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 Impact With Mitigation Incorporated. During project construction, potentially hazardous materials are likely to be handled on the project site. Improper handling and/or use of these materials during construction would represent a potential threat to the public and the environment. All contractors are required to comply with applicable laws and regulations regarding hazardous materials and hazardous waste management and disposal. Examples of hazardous materials management include preventing the disposal or release of hazardous materials onto the ground or into groundwater or surface water during construction and ensuring the proper use and disposal of these materials would not pose a significant risk to the public and the environment.

Asbestos was widely used in a variety of building materials up until the 1980s. This includes components used for bridge construction, such as caulking, cement, fireproofing materials, and tar. Additionally, yellow traffic paint and yellow thermoplastic stripes contain lead chromate. The lead and chromium concentrations in older yellow paint and yellow thermoplastic stripes are high enough to make these materials hazardous wastes when they are removed (Caltrans 2015). Based on the age of the bridge (between 1938 and 1947), there is a potential for the building materials to contain asbestos and/or lead-based paint. If removed, these materials could be classified as hazardous waste. Construction of the proposed project would include pavement and superstructure removal, grading, and excavation; bridge replacement; and repaving, electrical, and restriping. MM-HAZ-1 requires a hazardous material survey be conducted to determine if hazardous materials are present in the existing building materials on the project site.

MM-HAZ-1 Prior to construction, a hazardous material building survey will be conducted to determine if asbestos-containing materials and lead-based paints are present on the project site. The survey will be conducted by a licensed contractor in accordance with local, state, and federal requirements. A report documenting material types, conditions and general quantities will be provided, along with photos of positive materials and diagrams. Should these materials be present, demolition plans and contract specifications shall incorporate any abatement procedures for the removal of materials containing asbestos or lead-based paint. Materials will be abated in accordance with local, state, and federal requirements by a licensed abatement contractor, or construction would be conducted in such a manner as to eliminate the potential to disturb the identified materials. Applicable regulations include, but are not limited to, those of the Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District.

Construction of the proposed project would remove the existing structure, thereby likely removing potential asbestos-containing materials and/or paints that contain lead and chromium. In the event some of these materials remain, operation of the proposed project would not disturb existing building materials. Therefore, potential risks associated with the above-mentioned potentially hazardous materials is limited to the construction phase. With implementation of MM-HAZ-1, impacts would be less than significant.

c) ***Would the project 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 Impact With Mitigation Incorporated. One school, Davis Middle School, 621 W Poplar Street, is located 0.12 miles north of the project site (CSCD 2019). As discussed in Section 3.9(a), hazardous materials used during construction would be handled and transported in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. These laws are also protective of the nearby school. Demolition of the existing bridge could result in a release of hazardous building materials, such as asbestos and lead, as discussed in Section 3.9(b). However, with implementation of MM-HAZ-1, these materials would be surveyed, abated, and managed in accordance with all appropriate laws and regulations, mitigating the risk of hazardous emissions near the school. Once construction is complete, operation of the proposed project would not require the use, storage, or disposal of hazardous substances. With implementation of MM-HAZ-1, and strict adherence to applicable regulations, the impacts would be less than significant.

d) ***Would the project be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

No Impact. Government Code Section 65962.5 requires the California Environmental Protection Agency to compile a list of hazardous waste and substances sites (Cortese List). While the Cortese List is no longer maintained as a single list, the following databases provide information that meet the Cortese List requirements:

- List of Hazardous Waste and Substances sites from Department of Toxic Substances Control (DTSC) Envirostor database (Health and Safety Codes 25220, 25242, 25356, and 116395)
- List of Open Active Leaking Underground Storage Tank (LUST) Sites from the State Water Resources Control Board (SWRCB) GeoTracker database (Health and Safety Code 25295)
- List of solid waste disposal sites identified by the SWRCB with waste constituents above hazardous waste levels outside the waste management unit (Water Code Section 13273(e) and California Code of Regulations Title 14 Section 18051)
- List of “active” Cease and Desist Orders and Cleanup and Abatement Orders from the SWRCB (Water Code Sections 13301 and 13304)
- List of hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code, identified by DTSC

The following Cortese List sites were identified within 0.5 miles of the project site.

- Former Juarez Carwash, 906 West Rosecrans Avenue, is located 0.36 miles north-northwest of the project site. The site is a former gasoline service station and carwash. The most recent environmental sampling report (Stantec 2018) indicated contamination in soil and groundwater from the former gasoline service station. It was noted that the groundwater contamination had migrated northward off site. The groundwater gradient at the former carwash is northward, away from the project site. Based on the distance from the project site and environmental conditions of the former carwash, it does not appear this site has impacted environmental conditions at the project site.

- Arco #1691, 740 Rosecrans Avenue, is located 0.30 miles north of the project site. The site is an active gasoline service station, with active underground storage tanks. Based on results of the most recent available environmental report (Arcadis 2018), contamination is limited to the former gasoline station, and is currently under remediation. Based on the distance from the project site and environmental conditions of the gasoline station, it does not appear this site has impacted environmental conditions at the project site.

No additional hazardous waste and substance sites, solid waste disposal sites, active Cease and Desist Order/Cleanup and Abatement Order sites, or hazardous waste facilities were identified within 0.5 miles of the project site. Three closed LUST sites were identified within 0.5 miles of the project site. Two of the sites reported contamination to soil only and are more than 0.25 miles from the project site. Based on this distance and characteristics of the contaminated sites, they are not likely to have impacted the project site. The third site was closed with residual contamination allowed to remain in the groundwater beneath the site. However, based on the characteristics of the remaining contamination (LARWQCB 2014) and the distance from the project site, it is unlikely that this closed LUST site has impacted the environmental conditions of the project site.

Dudek also conducted a search of environmental regulatory databases to further investigate potential hazardous materials on or near the project site. The project site was not identified in the California Environmental Protection Agency's Regulated Site Portal. Three sites were identified within one quarter mile of the project site. These listings are administrative in nature, identifying use, storage, and/or disposal of hazardous materials, and do not necessarily indicate a release to the environment. One site is located adjacent to the project site: T-Mobile West LLC, 127 N Wilmington Avenue, stores electrolyte/sulfuric acid batteries and hydrogen gas. There are no reported violations associated with this listing.

The National Pipeline Mapping System Public Map Viewer is a web-based application designed to assist the public with displaying and querying data related to gas transmission and hazardous liquid pipelines, liquefied natural gas plants, and breakout tanks under Department of Transportation Pipeline and Hazardous Material Safety Administration jurisdiction. An active non-highly volatile liquid (non-HVL) product (petroleum) pipeline runs north-south along Wilmington Avenue to the south of the project site, turns west on Compton Boulevard at the intersection of Wilmington Avenue and Compton Boulevard, then runs north-south along Kemp Avenue. The pipeline is owned by Shell Pipeline Co. L.P. The pipeline does not transect the project site but transects the intersection of N Wilmington Avenue and W Compton Boulevard, which is approximately 275 feet south of the project site.

The site is not located on a Cortese List site. There are two Cortese List sites located within one half mile; the impacts at these sites are unlikely to affect the environmental conditions of the project site. Additionally, there are no sites with reported hazardous material contamination not otherwise listed on the Cortese List that have likely impacted the project site. Therefore, the proposed project would not be located on a site that is included in the list of hazardous materials sites under Government Code Section 65962.5, and no impact would occur.

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. The Compton-Woodley Airport, 901 W Alondra Boulevard, is located approximately 0.40 miles south of the project site. The Airport Influence Area does not include the project site (LADRP 2004). No other airports are located within 2 miles of the project site, and the project site does not fall within any additional Airport Influence Areas. Under 14 CFR 77.9, the Federal Aviation Administration requires notification of construction or alteration if the construction rises above ground level as described in Part 77.9. As the construction and operation of the proposed project would not substantially change the existing height of the bridge, this notification is not required. Therefore, the project would not result in a safety hazard or excessive noise for people residing or working in the project area, and no impact would occur.

f) ***Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Less-Than-Significant Impact. The project site encompasses a portion of Wilmington Avenue, north of the intersection of Compton Boulevard and Wilmington Avenue. The project site is within the jurisdiction of the City of Compton Fire Department, which includes the Compton Office of Emergency Management. The Compton Office of Emergency Management is responsible for coordinating emergency mitigation, planning, response, and recovery efforts for all disasters or other major emergencies affecting the City. The nearest fire station is Compton Fire Station #1 (Headquarters), 201 S. Acacia Avenue, located 0.64 miles east of the project site.

Emergency response procedures are discussed as part of the Public Safety Element of the City's General Plan 2030 (City of Compton 2011). The Public Safety Element supports emergency preparedness by documenting City policies for responding to major emergencies that threaten life, safety, and property. The plan establishes a chain of command and outlines the responsibilities of various City departments in the event of an emergency. According to the Public Safety Element, "the City of Compton is an urban environment with little danger of wildfires. There are only three properties in the City that have over twenty acres of grass that can burn, leaving the City a low risk for any wildfires beyond a minor brush fire" (City of Compton 2011). The Public Safety Element designates Wilmington Avenue as an evacuation route, as well as Compton Boulevard to the south and Willowbrook Avenue to the east, Alondra Boulevard to the south, and Rosecrans Avenue to the north.

Proposed construction and operation of the proposed project are discussed in Sections 2.5 and 2.6 of this IS/MND, respectively. During construction, complete road closures over the Wilmington Avenue Bridge would occur for approximately 300 days and planned detour routes would be established via Rosecrans Avenue, Compton Boulevard and Alameda Street. Specifically, northbound traffic would be directed east on Compton Boulevard, north on Alameda Street, west on Rosecrans Avenue, and north back onto Wilmington Avenue. Southbound traffic would be directed east on Rosecrans Avenue, south on Alameda Street, west on Compton Boulevard, and south back onto Wilmington Avenue.

Additionally, a Traffic Control Plan would be developed to identify the duration of road closures, appropriate detour routes, and required signage. As part of the Traffic Control Plan, emergency service providers that serve the area would be notified of the closure and detour route so that service would not be disrupted.

Specifically, as explained in Section 3.17, incorporation of a Traffic Control Plan, as described in PDF-TRAF-1, would be included for all construction work within the road ROW that modifies vehicular, bicycle, pedestrian and/or transit traffic patterns and are necessary to ensure the safe and efficient movement of traffic through construction work zones. Implementation of PDF_TRAF-1 would avoid impacts to local emergency service providers and impacts to emergency response plans or emergency evacuation plans would be less than significant. Following construction, the roadway would be restored to existing conditions, and emergency access would not be affected during project operation. Therefore, impacts would be less than significant upon operation.

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

No Impact. As described in City Public Safety Element, "the City of Compton is an urban environment with little danger of wildfires. There are only three properties in the City that have over twenty acres of grass that can burn, making the City a low risk for any wildfires beyond a minor brush fire" (City of Compton 2011). As such, the construction and operation of the proposed project would not expose people or structures to a significant risk of wildland fires, and no impact would occur.

3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on or off site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;	☐	☐	☒	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less-Than-Significant Impact. Water quality standards in the project area are enforced by the RWQCB and are listed in the Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (LARWQCB 2014). Demolition of the existing bridge and installation of the new bridge could require work within the creek, which could result in a temporary increase in turbidity. In addition, bridge demolition and replacement, vegetation removal, and equipment storage and fueling would generate construction debris, wastes, loose soils, and fuels that could potentially enter the creek if not properly contained. If these pollutants were to enter the creek, they could impact water quality and violate existing standard discharge requirements.

During construction, erosion-control measures would be implemented by the contractor as part of their County-certified SWPPP for the proposed project. The SWPPP will identify the sources of pollutants that may affect the quality of stormwater and include BMPs to control the pollutants. All work shall conform to the site specific surface water diversion plan prepared for the project that will comply with the conditions included in the Water Quality Certification from the RWQCB and include pertinent BMPs from the Construction Site Best Management Practices (BMPs) Manual (Public Works 2010). These include, but are not limited to, temporary sediment control, temporary soil stabilization, waste management and materials pollution control, wind erosion control, and other non-stormwater BMPs. Upon implementation of BMPs, water quality impacts associated with project construction would be less than significant (Appendix E, Water Quality Assessment Report).

Once operational, the project could result in a slight increase in impervious surface area; however, the project would not result in direct permanent impacts to Compton Creek. Net impervious surface area increase would be minor and would not result in changes to water quality conditions. The project could result in a permanent minor increase in impervious surface area (approximately 0.05 acres), resulting from an access road (currently dirt) on the southwest corner of the bridge that would be reconstructed with a concrete slab. Impacts to drainage facilities would include the relocation of catch basins on private properties at some driveway entrances to accommodate the new geometry of the roadways. The new drainage inlets would be similar to existing facilities and would comply with community, regional, state, and federal objectives. Therefore, impacts would be less than significant.

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

Less-Than-Significant Impact. Project construction could require a temporary use of water supply. However, the required quantity of water would be negligible compared to the total water supply. Following project completion, the project would no longer require a long-term water supply.

The project would include removal and replacement of an existing bridge. No groundwater supplies are required for the operation of the bridge. However, the project could result in a slight increase of impervious surfaces in the project area. Increases to impervious surface area would be minor and would not significantly impact groundwater recharge in the project area. Therefore, impacts would be less than significant.

c) Would the project 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 Impact. Project construction would require ground disturbance, which could temporarily alter the existing drainage pattern in the project area. However, standard BMPs and requirements of the SWPPP would be implemented during construction to minimize soil erosion and siltation of local drainages and receiving waterways. Additionally, drainage facilities could be relocated during construction if existing facilities are unable to be protected in place. Facilities would be reinstalled following project construction. Changes to facilities would not affect the existing drainage (Appendix E).

The addition of impervious surface area could result in changes to the drainage patterns of a watershed and receiving water bodies, including erosion and siltation of local waterways. The project would include removal and replacement of an existing bridge. The project could result in a minor increase of impervious surface. Increases to impervious surface would result in negligible increases in discharge to the City’s storm drainage system and receiving waterways. Therefore, impacts would be less than significant.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off site;

Less-Than-Significant Impact. As discussed previously in Section 3.10(c)(i), the proposed project would require standard BMPs and requirements of the SWPPP would be implemented during construction to minimize surface runoff. Additionally, drainage facilities could be relocated during construction if existing facilities are unable to be protected in place. Facilities would be reinstalled following project construction. Changes to facilities would not affect the existing drainage (Appendix E).

The addition of impervious surface area could result in changes to the drainage patterns of a watershed and receiving water bodies, including erosion and siltation of local waterways. The project would include removal and replacement of an existing bridge. The project could result in a minor increase of impervious surface. Increases to impervious surface would result in negligible increases in discharge to the City's storm drainage system and receiving waterways. Therefore, impacts would be less than significant.

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

Less-Than-Significant Impact. Oils and fluids deposited by vehicles and roadside trash are primary sources of pollution within the project area. Stormwater washes pollutants from the roadways into local drainages that discharge into receiving waters. Construction activities would include the use of construction vehicles and equipment, staging, and vegetation removal. Approximately 1.72 acres of land would be disturbed because of the project. There is potential that exposed soils, construction debris, and other pollutants could enter stormwater runoff that discharges into the catch basin and local sewers. Project construction would include standard BMPs, including implementation of soil binders, silt fencing, straw mulch, and other approved standard practices. A SWPPP would also be prepared for the project to outline how project construction will minimize stormwater pollution (Appendix E).

The project would not be capacity increasing and would not influence growth in or around the project area. Therefore, traffic volume would not increase because of the project. Pollution sources during project operation would be consistent with existing conditions. Therefore, impacts would be less than significant.

iv) impede or redirect flood flows?

Less-Than-Significant Impact. The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. In addition, the proposed bridge structure is similar to the existing structure. Because proposed drainage conditions would be similar to existing conditions, stormwater runoff and creek flows would remain similar to existing flow conditions. Therefore, impacts would be less than significant.

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

No Impact. The project area is included in Panel 1815F of the Federal Emergency Management Agency Flood Insurance Risk Map for Los Angeles County, California (FEMA 2008). The project area is identified as Zone X, which is defined as an area determined to be outside of the 0.2% annual chance floodplain. The Los Angeles River floodplain is located approximately 0.4 miles to the east of the project area. Therefore, the project would not result in flood hazard risk that could lead to the release of pollutants due to project inundation.

A seiche is a temporary disturbance or oscillation in the water level of a lake or partially enclosed body of water. A tsunami is a long, high ocean wave caused by an earthquake, submarine landslide, or other disturbance. A mudflow is a fluid or hardened stream or avalanche of mud. The project area is not near a lake or ocean and therefore, is not susceptible to seiche or tsunami hazards. Therefore, the project would not result in seiche or tsunami risks that could lead to the release of pollutants due to project inundation.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No Impact. The project would include replacement of a structurally deficient bridge over Compton Creek. The project would not result in significant impacts on water quality, groundwater recharge, or the capacity of existing stormwater systems. Therefore, the project would be consistent with applicable water quality control plans and groundwater management.

3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – 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?	☐	☐	☐	☒

a) Would the project physically divide an established community?

No Impact. A significant impact would occur if the proposed project included the construction of buildings, roads, or other infrastructure that would physically divide an existing community. As stated in Section 2 of this IS/MND, the proposed project would include the replacement of the existing Wilmington Avenue Bridge over Compton Creek with a new, two-span concrete bridge, concrete pier and abutments. While the project would require temporary easements and partial ROW acquisition from surrounding residential properties, proposed easements and ROW acquisition would not create a physical barrier in/to the community nor would it physically divide the local neighborhood. Upon operation, the new bridge would function in much the same way than under existing conditions. Given this, the proposed project would not physically divide an established community, and no impact would occur.

b) Would the project 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 proposed project site is in a highly developed portion of the City in southern Los Angeles County. The project site is within the Wilmington Avenue ROW and is surrounded by residential land uses and City land use zones. The project would require temporary easements and partial ROW acquisition from surrounding residential properties; however, the proposed project's construction would not conflict with City zoning, land use plans, or regulations adopted for avoiding or mitigating an environmental effect. Upon operation, the proposed project would function in much the same way than under existing conditions. As such, no impact would occur.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – 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?	☐	☐	☐	☒

a) ***Would the project 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. According to the DOC's Division of Geologic Energy Management, there are no oil or natural gas wells on the project site or within the vicinity of the project site; the nearest well, which was abandoned in 1928 (DOC GEM 2012), is located approximately 0.55 miles south of the project site (DOC GEM 2019). The DOC, Division of Mines classifies the project site as Mineral Resource Zone- (MRZ) 1, which is considered an "area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence" (DOC and USGS 1982). Additionally, low-density residential, mixed use, general commercial, and medium-density residential land uses surround the project area (City of Compton 2011). The project site is occupied with an existing bridge. As such, the project site and area do not currently support mineral resource extraction activities. Therefore, the project would not result in temporary or permanent impacts to the availability of a known mineral resource. No impact would occur.

b) ***Would the project 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. The City of Compton does not identify any important mineral resource recovery sites in its General Plan (City of Compton 2011). As described above, the proposed project would include the replacement of an existing bridge in an urban area that is fully developed under existing conditions. The project site is not used for mineral resource extraction purposes. Moreover, the project site is designated as MRZ-1, which is an area, "where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence" (DOC and USGS 1982). Therefore, the proposed project would not result in the loss of availability of a locally important mineral resource recovery site. No impact would occur.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – 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?	☐	☐	☐	☒

a) Would the project result in 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?

Less-Than-Significant Impact With Mitigation Incorporated. Existing noise level measurements were taken on a single day (i.e., May 14, 2019) from three locations in proximity to the project area (see Figure 8, Noise Measurement Locations) and are provided in Table 6. The project area is surrounded by residential and commercial land uses. The nearest noise-sensitive land uses are residences immediately adjacent (less than 25 feet) to the project area to the west and east.

Table 6. Noise Level Measurements

Site Number	Monitoring Period	Primary Noise Source	L_{eq} (15 minutes [dBA])	L_{max} (15 minutes [dBA])
ST 1	9:16 – 9:31	Vehicle Traffic	75.4	90.2
ST 2	9:46 – 10:01	Vehicle Traffic	67.1	82.2
ST 3	10:08 – 10:23	Vehicle Traffic	60.7	73.9

Source: Appendix F, Field Noise Measurement Data.
Notes: Noise measurements were conducted on May 14, 2019, using a Piccolo SLM-3 sound level meter.
dBA = A-weighted decibels; L_{eq} = Energy-equivalent noise level; and L_{max} = Maximum sound level during a measurement period or a noise event.

Short-Term Construction Noise

The project would include demolition and replacement of Wilmington Avenue Bridge over Compton Creek. As shown in Table 7, equipment noise levels associated with the project would range from 75 to 90.3 dBA maximum noise level (L_{max}) at 50 feet.

Table 7. Typical Construction Equipment Noise

Equipment	Actual Measured L_{max} at 50 feet from Source (dBA)
Jackhammer	88.9
Backhoe	77.6
Dump Truck	76.5
Hoe Ram	90.3
Loader	79.1
Crane	80.6
Concrete Pump Truck	81.4
Dump Truck	76.5
Drill Rig Truck	79.1
Grader	85[1]
Roller	80
Paver	77.2
Pickup Truck	75
Sweeper	81.6

Source: FHWA 2008.
Notes: L_{max} based on noise levels stated in the CA/T Construction Noise Control Specification 721.560.
[1] Actual noise levels not available.

Noise levels associated with on-site construction activities at nearby noise-sensitive land uses were quantified based on the Federal Highway Administration's Roadway Construction Noise Model, version 1.1 (FHWA 2008) and are summarized in Table 8, Construction Noise Levels at Nearby Noise-Sensitive Land Use – Unmitigated. It is important to note that the predicted noise levels identified in Table 8 reflect the highest predicted construction noise levels anticipated to occur during project construction. Actual noise levels will vary depending on various factors, including the activities conducted, the type and number of pieces of equipment used, and duration of use.

Table 8. Construction Noise Levels at Nearby Noise-Sensitive Land Use – Unmitigated

	ST1				ST2				ST3			
	Calculated dBA		Noise Limit Exceedance (dBA)[1]		Calculated dBA		Noise Limit Exceedance (dBA)[1]		Calculated dBA		Noise Limit Exceedance (dBA)[1]	
Equipment	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}
Jackhammer	86.8	79.9	None	None	74.8	67.8	None	None	75.4	68.4	None	2.7
Backhoe	75.5	71.5	None	None	63.5	59.5	None	None	64	60.1	None	None
Hoe Ram	88.2	81.2	None	0.8	76.2	69.2	None	None	76.8	69.8	None	4.1
Front End Loader	83.1	79.1	None	None	75.1	71.2	None	None	65.6	61.6	None	None
Crane	78.5	70.6	None	None	66.5	58.5	None	None	67	59.1	None	None
Concrete Pump Truck	85.4	78.4	None	None	77.4	70.4	None	None	67.9	60.9	None	None
Dump Truck	74.4	70.4	None	None	62.4	58.4	None	None	62.9	58.9	None	None
Drill Rig Truck	77.1	70.1	None	None	65.1	58.1	None	None	65.6	58.6	None	None
Grader	89	85	None	4.6	81	77	None	4.9	71.5	67.5	None	1.8
Roller	84	77	None	None	76	69	None	None	66.5	59.5	None	None
Paver	81.2	78.2	None	None	73.2	70.2	None	None	63.7	60.7	None	None
Pickup Truck	73	69	None	None	60.9	56.9	None	None	61.5	57.5	None	None
Sweeper	85.6	75.6	None	None	77.6	67.6	None	None	68.1	58.1	None	None
Total[2]	**89**	**89.6**	**None**	**9.2**	**81**	**80.7**	**None**	**8.6**	**76.8**	**74.9**	**None**	**9.2**

Source: FHWA 2008.

Note: Construction noise levels were evaluated based on typical equipment noise levels derived from the Federal Highway Administration's Roadway Construction Noise Model, version 1.1 (2008). Includes up to 10 dB shielding provided by intervening structures (Department of Housing and Urban Development 2009). Assumes the above listed equipment was operating between 10 and 80 feet from the nearest residential property.

[1] The noise limit is equivalent to the baseline ambient noise levels at each receptor location plus 5 dBA (level at which a noticeable change in community response would be expected). An exceedance greater than 5 dBA would be considered adverse.

[2] The total L_{max} is equivalent to the maximum among individual equipment L_{max} values. Because decibels are logarithmic units, the total L_{eq} is calculated on a logarithmic scale and assumes that multiple pieces of equipment would be operating simultaneously.

A 10 dB change can correlate with an adverse change in community response. For the purposes of this analysis, the noise limit is equivalent to the baseline ambient noise levels at each receptor location plus 5 dB (i.e., the level at which a noticeable change in community response would be expected). Therefore, an exceedance up to 5 dB would be noticeable to the public and an exceedance greater than 5 dB would be considered adverse. As shown in Table 8, project construction would result in noise levels that would exceed the noise limit at the nearest noise-sensitive land uses. Exceedances could range from 8.6 to 9.2 dBA L_{eq} at the noise monitoring locations. Therefore, exceedances at ST 1, ST 2, and ST 3 would be considered potentially significant.

Construction activities would be limited to daytime hours, between 7:00 a.m. and 7:00 p.m. on Monday through Saturday, in compliance with the City’s Municipal Code. In addition, Section 12.08.440 of the Los Angeles County Code governs construction noise. According to the County Code, operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer, is prohibited. However, Section 12.08.570(H) states that public health and safety activities are exempt from the provisions of the County’s Noise Control Ordinance. Specifically, all transportation, flood control, and utility company maintenance and construction operations occurring at any time within the public ROW (and those situations that may occur on private real property) deemed necessary to serve the best interest of the public and to protect the public’s health and wellbeing are exempt. Exempt activities include (but are not limited to) street sweeping; debris and limb removal; removal of downed wires; restoring electrical service; repairing traffic signals; unplugging sewers; snow removal; house moving; vacuuming catch basins; removal of damaged poles and vehicles; and repair of water hydrants and mains, gas lines, oil lines, sewers, and other utilities. The proposed project would address existing bridge deficiencies and enhance vehicular safety on the bridge. As such, the proposed project would be considered exempt from the construction noise provisions of the County’s Noise Control Ordinance. Nevertheless, Public Works and its construction contractor would reduce construction noise levels associated with the project to the extent practicable. To further minimize noise impacts, the public would be notified of potential noise and vibration impacts from construction activities and would be provided procedures for registering complaints (MM-NOI-1). The project contractor would be responsible for responding to noise complaints and complaints would be reviewed and addressed as they are received.

Construction equipment would be equipped with mufflers in compliance with Section 14-8.02, Noise Control, of Caltrans Standard Specifications. The project would include implementation of abatement measures to reduce impacts on nearby noise-sensitive land uses (MM-NOI-2). Additionally, temporary sound barriers (e.g., a plywood wall or vinyl “curtains”) would be constructed between the project area and residences to the east (ST 1) and west (ST 2 and ST 3) as specified in MM-NOI-3. Based on the Caltrans Technical Noise Supplement, temporary noise curtains have been shown to reduce noise levels up to 15 dB (Caltrans 2013). The effectiveness of mitigation measures MM-NOI-2 would vary from several decibels (which in general is a relatively small change) to 10 or more decibels (which subjectively would be perceived as a substantial change), depending on the specific equipment, the original condition of that equipment, the specific locations of the noise sources and receivers, and other factors. Installation of more effective mufflers could range in a reduction of noise from several decibels to well over 10 decibels. Mitigation measure MM-NOI-3, which requires the construction of a temporary noise barrier in the form of a temporary wall or sound curtains adjacent to the nearest residences to the west and east during construction, would provide an additional noise reduction of approximately 10 dB or more. Cumulatively, these measures would result in substantial decreases of noise from construction, estimated to be approximately 15 dB at receiver ST1, and approximately 10 dB or more at receivers ST2 and ST3. With implementation of abatement measures, noise limit exceedances at ST 1, ST 2, and ST 3 would be reduced to less-than-significant levels, as shown in Table 9. Therefore, the project would not generate a substantial temporary 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. Therefore, with implementation of MM-NOI-1 through MM-NOI-3, construction impacts would be less than significant.

In regard to noise complaints, Public Works has agreed to hold a meeting with the local community prior to the start of construction wherein the duration and hours of construction, construction phasing, and Public Works contact information for noise complaints would be discussed.

MM-NOI-1 Nearby residents within 500 feet of construction activities shall be notified about the project and the potential noise and vibration effects resulting from construction activities. Residents shall be provided with procedures for registering complaints, including an appropriate contact person and phone number or email address, in the event that noise and vibration are found to be excessive by the public.

MM-NOI-2 Appropriate noise measures shall be implemented by the contractor, including, but not limited to, siting stationary construction equipment away from sensitive noise receptors to the greatest extent feasible, turning off idling equipment after no more than 5 minutes of inactivity, minimizing the simultaneous operation of multiple pieces of noisy equipment to the extent feasible, ensuring that construction equipment is properly maintained and fitted with state-of-the-art noise shielding and muffling devices (consistent with manufacturer’s specifications), and rescheduling construction activity to avoid noise-sensitive days (i.e., holidays) or times.

MM-NOI-3 Temporary sound barriers (e.g., plywood or loaded vinyl “curtains”) shall be placed between the project site and residences to the west and east (areas represented by ST 1, ST 2, and ST 3 on Figure 8). The noise barrier shall be a minimum of 8 feet in height, shall have a surface density of at least 4 pounds per square foot, and shall be free of openings and cracks.

With implementation of MM-NOI-1 through MM-NOI-3, construction noise impacts would be less than significant.

Table 9. Construction Noise Levels at Nearby Noise-Sensitive Land Use – With Mitigation[1]

Equipment	ST1				ST2				ST3			
	Calculated dBA		Noise Limit Exceedance (dBA)[2]		Calculated dBA		Noise Limit Exceedance (dBA)[2]		Calculated dBA		Noise Limit Exceedance (dBA)[2]	
	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}	L_{max}	L_{eq}
Jackhammer	71.8	64.9	None	None	64.8	57.8	None	None	65.4	58.4	None	None
Backhoe	60.5	56.5	None	None	53.5	49.5	None	None	54	50.1	None	None
Hoe Ram	73.2	66.2	None	None	66.2	59.2	None	None	66.8	59.8	None	None
Front End Loader	68.1	64.1	None	None	65.1	61.2	None	None	55.6	51.6	None	None
Crane	63.5	55.6	None	None	56.5	48.5	None	None	57	49.1	None	None
Concrete Pump Truck	70.4	63.4	None	None	67.4	60.4	None	None	57.9	50.9	None	None
Dump Truck	59.4	55.4	None	None	52.4	48.4	None	None	52.9	48.9	None	None
Drill Rig Truck	62.1	55.1	None	None	55.1	48.1	None	None	55.6	48.6	None	None
Grader	74	70	None	None	71	67	None	None	61.5	57.5	None	None
Roller	69	62	None	None	66	59	None	None	56.5	49.5	None	None
Paver	66.2	63.2	None	None	63.2	60.2	None	None	53.7	50.7	None	None
Pickup Truck	58	54	None	None	50.9	46.9	None	None	51.5	47.5	None	None
Sweeper	70.6	60.6	None	None	67.6	57.6	None	None	58.1	48.1	None	None
Total[3]	**74**	**74.6**	**None**	**None**	**71**	**70.7**	**None**	**None**	**66.8**	**64.9**	**None**	**None**

Source: FHWA 2008.

Note: Construction noise levels were evaluated based on typical equipment noise levels derived from the Federal Highway Administration's Roadway Construction Noise Model, version 1.1 (2008). Includes up to 10 dB shielding provided by intervening structures (HUD 2009). Assumes the above listed equipment was operating between 10 and 125 feet from the nearest residential property.

[1] Combined estimated noise reduction from mitigation measures MM-NOI-2 and MM-NOI-3 of 15 dB at ST1, and an estimated reduction from MM-NOI-2 of 5 dB at ST2 and ST3.

[2] The noise limit is equivalent to the baseline ambient noise levels at each receptor location plus 5 dBA (level at which a noticeable change in community response would be expected). An exceedance greater than 5 dBA would be considered adverse.

[3] The total L_{max} is equivalent to the maximum among individual equipment L_{max} values. Because decibels are logarithmic units, the total L_{eq} is calculated on a logarithmic scale and assumes that multiple pieces of equipment would be operating simultaneously.

Long-Term Operational Noise

Once operational, the project would not result in increased roadway capacity, and it would not change bridge or roadway alignment. Traffic noise would not change as a result of the project, and therefore, traffic noise levels would not be impacted. The project would not introduce new permanent sources of noise to the project area. Following project implementation, the acoustic setting would be similar to existing conditions, and the project would not result in increased exposure of persons to noise levels. The project would not generate a substantial 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. Therefore, there would be no impacts from project operation.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less-Than-Significant Impact With Mitigation Incorporated. The project would include demolition and replacement of Wilmington Avenue Bridge over Compton Creek. Project construction is anticipated to begin in spring 2026 and would last for approximately 300 working days. Project construction would include temporary construction activities that would generate groundborne vibration, such as auger drilling, excavation, and vibratory compaction. Project construction would use cast-in-place or auger cast piles instead of pile driving, which would limit vibration generation to the negligible amount generated by drilling (Caltrans 2013).

A summary of potential impacts from groundborne vibration levels are identified in Table 10. Based on Caltrans vibration criteria, construction-generated vibration levels would have a potentially significant impact if vibration levels at the nearest structures would exceed the minimum criteria of 0.2 inches per second (in/sec) peak particle velocity (ppv) at fragile structures, 0.3 in/sec ppv at residential dwellings, or 0.5 in/sec ppv at newer buildings, including non-residential structures (Caltrans 2013). This same level corresponds to the level at which vibrations typically become annoying to people in buildings.

Based on the typical construction equipment that would be used for this project, as shown in Table 11, the project could generate vibration levels up to 0.210 in/sec ppv at 25 feet. Therefore, the project could result in groundborne vibration levels that have potential to cause human annoyance and "architectural" damage.

Table 10. Summary of Groundborne Vibration Levels and Potential Effects

Vibration Level (in/sec ppv)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic but would cause "architectural" damage and possibly minor structural damage.

Source: Caltrans 2013.
Notes: The vibration levels are based on ppv in the vertical direction for continuous vibration sources, which includes most construction activities, except for transient or intermittent construction activities, such as pile driving. For pile driving, the minimum criterion level is typically considered to be 0.2 in/sec ppv.
in/sec = inches per second; ppv = peak particle velocity.

Table 11. Representative Vibration Levels for Construction Equipment

Equipment		Peak Particle Velocity at 25 Feet (inches per second)
Pile Driver (Impact)	Upper Range	1.518
	Typical	0.644
Vibratory Roller		0.210
Hoe Ram		0.089
Large Bulldozers		0.089
Loaded Trucks		0.076
Jackhammer		0.035
Small Bulldozers		0.003

Source: FTA 2018.

Construction activities would be limited to between 7:00 a.m. and 7:00 p.m. on Monday through Saturday in compliance with the City's Municipal Code. To minimize impacts from groundborne noise and vibration, the public would be notified of potential noise and vibration impacts from construction activities and would be provided procedures for registering complaints (MM-NOI-1). In addition, noise reduction measures listed in MM-NOI-2, would help reduce impacts from groundborne noise and vibration. Therefore, construction impacts would be less than significant with mitigation.

Once operational, the project would not result in increased roadway capacity, and it would not change bridge or roadway alignment. Groundborne noise and vibration levels associated with the project would be similar to existing conditions. The project would not introduce new permanent sources of groundborne noise or vibration to the project area. Therefore, there would be no impacts from project operation.

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?***

No Impact. The project area is approximately 0.45 miles northeast of the Compton/Woodley Airport. The project area is outside of the 70 Community Noise Equivalent Level noise contour area identified for the airport (LADRP 2004). Additionally, the project area is outside of the Airport Influence Area/Planning Boundary for the Compton/Woodley Airport. The project would comply with the Los Angeles County Airport Land Use Plan. Therefore, the project would not result in temporary or permanent exposure of people residing or working in the project area to excessive noise levels.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

a) ***Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

No Impact. The proposed project would include the replacement of an existing bridge. No new homes or businesses would be introduced to the project site under the proposed project. Construction workers would be hired from the local area and the greater Los Angeles metropolitan area and would commute to the job site, rather than relocate from more distant areas. As the proposed project would not result in the construction of new homes or businesses, the number of residents, employees, or visitors to the project area or surrounding community is not expected to increase. The project would not increase the capacity of existing roadways or extend existing roadways to undeveloped areas, such that indirect growth would be induced in the project area. Therefore, the project would not temporarily or permanently induce substantial population growth in the project area either directly or indirectly. No impact would occur.

b) ***Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

No Impact. The project area is primarily located within existing Los Angeles County ROW. The proposed project would require temporary easements and partial ROW acquisition from surrounding residential properties. However, the ROW acquisitions would not result in displacement of any residential properties. Therefore, the project would not result in displacement of existing housing or necessitate housing elsewhere. No impact would occur.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES				
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?	☐	☐	☐	☒

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:

Fire protection?

Less-Than-Significant Impact. The Compton Fire Department provides fire protection services to the City through operation of four fire stations. The nearest fire station to the project area is Fire Station 1, located at 201 S. Acacia Avenue, approximately 0.66 miles to the southeast of the project area. In the unlikely event of a fire in the project area, Fire Station 1 would respond.

The need for new or altered fire facilities is typically associated with a substantial increase in population such that existing facilities cannot meet the associated increase in demand for services. As described under Section 3.14, Population and Housing, the proposed project would not alter population in the project area. The proposed project would include the replacement of an existing bridge and associated improvements; the proposed project would not include any habitable structures or businesses that could result in direct or indirect population growth.

Construction of the proposed project could have the potential to temporarily reduce access for emergency vehicles near work areas. However, all construction activities and associated traffic control measures would be carried out in accordance with applicable City of Compton Fire Department emergency access standards and detours would be established per City and County requirements so that emergency access is maintained during construction of the proposed project. Operation of the proposed project would not require additional fire services. As such, the proposed project would not be anticipated to alter service ratios, response times, or other performance objectives to the extent that new or expanded fire protection facilities, equipment, or staff would be required. Impacts would be less than significant.

Police protection?

Less-Than-Significant Impact. The City of Compton's police protection services are provided by the Los Angeles County Sheriff's Department. The nearest police station to the project area is located at 200 W. Compton Boulevard #404, approximately 0.66 miles to the southeast of the project area (LASD 2019).

The need for new or altered police facilities is typically associated with a substantial increase in population such that existing facilities cannot meet the associated increase in demand for services. As described under Section 3.14, the proposed project would not alter population in the project area. The proposed project would include the replacement of an existing bridge and associated improvements; the proposed project would not include any habitable structures or businesses that could result in direct or indirect population growth.

Construction of the proposed project could have the potential to temporarily reduce access for emergency vehicles near the work areas. However, all construction activities would be carried out in accordance with all applicable Los Angeles County Sheriff's Department emergency access standards and detours would be established per City and County requirements so that emergency access is maintained during construction of the proposed project. Operation of the proposed project would be passive and would not require additional police protection. As such, the proposed project would not alter service ratios, response times, or other performance objectives to the extent that new or expanded police protection facilities, equipment, or staff would be required. Impacts would be less than significant.

Schools?

No Impact. The Compton Unified School District includes four high schools, seven middle schools, and 21 elementary schools (CUSD 2019). Additionally, the school district offers adult and alternative schooling at four campuses in the city. The nearest schools to the project area include General Benjamin O. Davis, Jr. Middle School (621 West Poplar Street), approximately 0.17 miles to the north, and Dickison Elementary School (905 N Aranbe Avenue), approximately 0.33 miles to the northeast. The need for new or altered school facilities is typically associated with an increase in population. As described under Section 3.14, the proposed project would not alter population in the project area and, as such, would not result in increased student enrollment at local schools. The proposed project would include the replacement of an existing bridge and associated improvements; the proposed project would not include any habitable structures or businesses that could result in direct or indirect population growth.

Although construction of the proposed project could have the potential to cause nuisance due to temporary road closures, access to these schools would not be directly restricted during construction as none of the planned detours would occur within the same block as any existing schools. Additionally, these effects would be temporary, and access to each school would be maintained throughout construction. Operation of the project would have no impact to local schools when compared to existing conditions. For these reasons, the proposed project would not alter the ability of existing schools to accommodate students to the extent that new or expanded school facilities, materials, or staff would be required. No impact would occur.

Parks?

No Impact. The City of Compton Parks and Recreation Department operates and maintains a total of 16 parks, which encompass approximately 118 acres of total parkland (City of Compton 2019a). Facilities include six community centers, seven neighborhood parks, two walking parks, two community competition-size swimming pools, three regulation size gymnasiums, a skate park, Jackie Robinson Baseball Stadium, Par 3 Golf Course, newly constructed Douglas F. Dollarhide Community Center, and Alondra Regional Park. The nearest park to the project area is Walter R. Tucker Park, which encompasses approximately 4 acres and is 0.34 miles to the southeast of the project area.

The need for new or altered parks is typically associated with an increase in population. As described under Section 3.14, the proposed project would not alter population in the project area. The proposed project would include the replacement of an existing bridge and associated improvements; the proposed project would not include any habitable structures or businesses that could result in direct or indirect population growth. Furthermore, there are no parks adjacent to the project site. As stated above, the nearest park is Walter R. Tucker Park, which encompasses approximately 4 acres and is 0.34 miles to the southeast of the project area. As such, project construction would not create temporary effects to nearby parks. For these reasons, the proposed project would not alter the ability of parks to serve the region to the extent that new or expanded parks would be required. No impact would occur.

Other public facilities?

No Impact. Other public facilities include libraries and government administrative services. The need for new or altered libraries or administrative services is typically associated with an increase in population. As described under Section 3.14, the proposed project would not result in an increase in population and, as such, would not result in the need for libraries or other government administrative services. The proposed project would include the replacement of an existing bridge and associated improvements; the proposed project would not include any habitable structures or businesses that could result in direct or indirect population growth. No new or expanded facilities would be required. No impact would occur.

3.16 Recreation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION				
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?	☐	☐	☐	☒

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 City of Compton Parks and Recreation Department operates and maintains a total of 16 parks, which encompass approximately 118 acres of total parkland (City of Compton 2019a). Facilities include six community centers, seven neighborhood parks, two walking parks, two community competition-size swimming pools, three regulation size gymnasiums, a skate park, Jackie Robinson Baseball Stadium, Par 3 Golf Course, newly constructed Douglas F. Dollarhide Community Center, and Alondra Regional Park. The proposed project would include the replacement of an existing bridge and would not be located within the immediate vicinity of an existing neighborhood or regional park. The nearest park to the project area is Walter R. Tucker Park, which encompasses approximately 4 acres and is 0.34 miles to the southeast of the project area. Proposed bridge improvements would not result in the physical deterioration of recreational facilities or cause an acceleration of deterioration. Additionally, as discussed in Section 3.14, the proposed project would not result in population increases resulting in an increased need for park facilities. No impact would occur.

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 proposed project would not include recreational facilities. As discussed in Section 3.14, the proposed project would not result in population increases resulting in a need for construction or expansion of recreational facilities. No impact would occur.

3.17 Transportation

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – 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 inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

This section analyzes the potential impacts of the proposed project based on CEQA Guidelines Section 15064.3(b), which focuses on newly adopted criteria (VMT) pursuant to SB 743 for determining the significance of transportation impacts. Pursuant to SB 743, the focus of transportation analysis has changed from level of service or vehicle delay to VMT. The Los Angeles County Public Works Transportation Impact Analysis Guidelines provide new transportation analysis criteria and thresholds (Public Works 2020), which include VMT analysis requirements per CEQA Guidelines Section 15064.3(b). Additionally, guidance provided in the California Governor's Office of Planning and Research Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018) is also used to determine a project's transportation impact.

The proposed project would include demolition and construction activities involving replacement of an existing steel girder bridge with a pre-cast concrete bridge in the City of Compton, where the Wilmington Avenue crosses Compton Creek, just north of the Compton Boulevard/Wilmington Avenue intersection.

The following describes the existing transportation setting.

Existing Roadway Network and Traffic Volumes

The City of Compton has a well-established grid network of roadways, which follows the classification system as shown in Table 12.

Table 12. City of Compton Roadway Classification

Functional Classification	Right of Way (Feet)	Number of Travel Lanes
Major Highway	100–106	6 lanes; divided roadway with a median; 3 lanes in each direction
Major Highway	100–106	4 lanes; divided roadway with a median; 2 lanes in each direction
Major Highway	100–106	4 lanes; left turn lane in median; two travel lanes in each direction
Secondary Highway	80–88	4 lanes; left turn lane in median; two travel lanes in each direction
Secondary Highway	80–88	4 lanes; undivided roadway with 2 lanes in each direction
Collector (Industry)	80–82	4 lanes; undivided roadway with 2 lanes in each direction
Collector	60	2 lanes; undivided roadway with 1 travel lane in each direction
Local (Residential Street)	40–60	2 lanes; undivided roadway with 1 travel lane in each direction

Source: City of Compton 2011 (Circulation Element).

Wilmington Avenue is classified as a Major Highway in the City of Compton General Plan Circulation Element. It is a north-south roadway and provides two travel lanes in each direction with a combination of a central left-turn median, raised median and double yellow lines along its stretch in the City of Compton. Wilmington Avenue provides access to State Route 91 via on- and off-ramps, approximately a mile and a half south of the Wilmington Avenue Bridge. The posted speed limit along Wilmington Avenue is 40 miles per hour. Parking is generally allowed along this roadway. The existing average daily traffic count along Wilmington Avenue between W School Street and W Magnolia Street was observed to be 22,607 vehicles during a typical non-holiday week in May 2019. The daily traffic volume, pedestrian counts, and bike counts at this location are included in Appendix G, Traffic Counts.

Compton Boulevard is classified as a Secondary Highway in the City of Compton General Plan Circulation Element. It is an east-west roadway and provides two travel lanes in each direction with a combination of central left-turn median, and double yellow lines along its stretch in the City of Compton. Approximately a mile and a quarter west of the Compton Creek Bridge, Compton Boulevard transitions into Redondo Beach Boulevard and provides access to Interstate 110. The posted speed limit along Compton Boulevard is 35 miles per hour. Parking is generally allowed along this roadway. The existing average daily traffic count along Compton Boulevard between S Matthisen

Avenue and N Paulsen Avenue was observed to be 23,877 vehicles during a typical non-holiday week in May 2019. The daily traffic volume, pedestrian and bike counts at this location are included in Appendix G.

Rosecrans Avenue is classified as a Major Highway in the City of Compton General Plan Circulation Element. It is an east-west roadway and provides two travel lanes in each direction with generally a divided median along most of its stretch in the City of Compton. It provides connections to Interstate 110 to the west and Interstate 710 to the east via on- and off-ramps. The posted speed limit along Rosecrans Avenue is 35 miles per hour and parking is generally allowed along this roadway.

Alameda Street (West) is classified as a Major Highway in the City of Compton General Plan Circulation Element. It is a four-lane north-south roadway bounded on the east by the Alameda Corridor freight rail expressway and on the west by industrial and commercial uses. The roadway segment has a right-of-way width of 65 feet and experiences heavy truck traffic. It provides connections to State Route 91 on the south and Interstate 105 on the north.

Local Residential Streets in Compton constitute the majority of the City's street network. These streets provide access to individual parcels and circulation within a neighborhood block. Per City's General Plan Circulation Element, although the standard for local streets is 60 feet (with a curb-to-curb pavement width of 36 feet, two lanes, and on-street parking on both sides), most local streets are generally 40 to 50 feet wide, with a pavement width between 24 to 30 feet.

In the vicinity of the project site, there are local residential streets such as W Palmer Street, W School Street, W Magnolia Street, N Kemp Avenue, N Paulsen Avenue and N Matthisen Avenue, generally in a grid layout.

Truck Routes

Wilmington Boulevard within the City boundary and Compton Boulevard west of Wilmington Avenue are designated truck routes.

Transit, Bike, and Pedestrian Facilities

Metro Blue Line Light Rail provides mass rail transit service near the project area. Compton Civic Center Station is located along Willowbrook Avenue. Martin Luther King Jr. Transit Center, in the vicinity, is a multi-modal terminal that serves light rail, urban, and intercity buses, local Dial-A-Ride services, taxicabs and Greyhound buses.

The Compton Renaissance Transit System provides daily local transit services throughout the City. Metro Bus Lines operated by Metropolitan Transportation Authority, Long Beach transit and Gardena Municipal Bus Lines also serve the Compton area. Routes 3, 51, and 351 operate along Compton Boulevard and the closest bus stop is located approximately 700 feet east of the Compton Creek Bridge. Routes 3 and 205 operate along Wilmington Boulevard and the closest bus stop is located approximately 1,100 feet north of the Wilmington Avenue Bridge.

Bicycle facilities are categorized per state-wise standards developed by Caltrans summarized below:

- **Class I (Bicycle Path) –** provides a completely separated ROW for the exclusive use of bicycles and pedestrians with cross flow minimized.
- **Class II Bikeway (Bike Lane) –** provides a striped lane for one-way bike travel on a street or highway.
- **Class III Bikeway (Bike Route) –** provides for shared use with pedestrian or motor vehicle traffic.

All bike facilities in the City of Compton are Class I or Class II bicycle routes. The City of Compton has a bikeway on the east side of Compton Creek and an equestrian trail on the west side of the Compton Creek.

Construction Detour Routes

Project construction is anticipated to last for approximately 300 working days. Construction-related traffic would be temporary, but it would require complete road closures over the Wilmington Avenue Bridge. Per County staff, the following planned detour routes would be established via Rosecrans Avenue, Compton Boulevard, and Alameda Street:

- Northbound traffic would be directed to head east on Compton Boulevard, north on Alameda Street, west on Rosecrans Avenue, and north back onto Wilmington Avenue.
- Southbound traffic would be directed to head east on Rosecrans Avenue, south on Alameda Street, west on Compton Boulevard, and south back onto Wilmington Avenue.

The approximately 300-foot approach roadways on either side of the bridge structure would be used as construction staging areas. In addition to the bridge replacement, construction would include private tree removal, relocation of the utilities, existing catch basins, driveways, and street lighting; and the reconstruction of the sidewalk, roadway, and bike paths along the channel. Regarding tree removal, commitments to replace fencing, landscaping and trees impacted during construction would be negotiated during the ROW acquisition process with property owners (including potentially, City of Compton) willing to grant the necessary temporary/permanent rights. The Public Works acquisition team will reach out to property owners during the ROW acquisition process to engage in negotiations.

The proposed project would temporarily decrease adjacent roadway capacities, generate additional traffic to adjacent roadways, and change traffic patterns that could cause an impact to the circulation system consisting of transit, roadway, bicycle, and pedestrian facilities. During construction and due to full closure of the bridge, some of the diverted traffic could potentially cut-through the adjacent neighborhoods. This would temporarily increase traffic along local residential streets and thereby a need for temporary traffic-calming measures on those streets. Traffic-calming measures, such as signage and speed radar warning signs, would be needed to manage cut-through traffic along local residential streets adjacent to Wilmington Avenue Bridge.

Public Works construction projects, such as the proposed project, implement traffic control plans for work within road ROWs (PDF-TRAF-1). Therefore, with implementation of PDF-TRAF-1, construction would not conflict with adopted policies, plans, or programs regarding transit, bicycle, or pedestrian facilities, and impacts would be less than significant.

PDF-TRAF-1 Traffic Control Plans (TCPs) shall be required for all construction work within the road right-of-way that modifies vehicular, bicycle, pedestrian, and/or transit traffic patterns, and are necessary to ensure the safe and efficient movement of traffic through construction work zones. The TCP shall be prepared by the project's contractor, reviewed and approved by the City of Compton and Public Works.

Elements of a TCP shall include, but are not necessarily limited to, the following:

a. Provision of public workshops and/or neighborhood meetings to notify and inform adjacent residents, impacted stakeholders and the general public regarding the schedule and duration of street closures, and implementation of detour routes and temporary traffic calming measures.

b. Develop detour plans to minimize impacts to local or residential streets, especially minimize truck traffic on local roadways to the extent possible and ensure least interference to pedestrians, bicyclists, transit and other vehicle users in the area. Develop traffic calming measures such as signage and speed radar warning signs needed to manage cut-through traffic along local residential streets adjacent to Wilmington Avenue and Compton Creek bridges.

c. Install temporary traffic control devices as specified in Part 6 of Caltrans' Manual of Uniform Traffic Control Devices (CAMUTCD) to maintain safe and effective movement of all road users (including pedestrians and bicyclists) through or around temporary traffic control zones while reasonably protecting from traffic incidents and equipment.

    - Use flaggers, signage, traffic control barricades, channelizing devices, pavement markings and/or work vehicles to safely direct traffic through construction work zones.
    - Use warning signs and plaques as specified in CAMUTCD for detours and temporary traffic control zones.

d. Coordinate with emergency service providers such as police, fire stations, hospitals as well as all stakeholders i.e. abutting property owners, residents and businesses and schools to ensure adequate accessibility to all road users during the construction period. Provide advance notification of the timing, location, and duration of construction activities and detour routes to residents, business or facility owners and administrators.

e. Coordinate with County and City officials, to obtain all necessary encroachment and trip permits.

f. To the extent feasible, schedule truck trips (equipment delivery and haul) outside of AM and PM peak commute hours. Encourage carpooling among workers to reduce worker commute trips.

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

Less-Than-Significant Impact. Construction activities would include demolition, grading, pile drilling, installation of metal beam guardrail system, construction of bridge abutments, bridge pier reconstruction, reconstruction of sidewalks, drainage improvements (catch basins at driveway entrances) bicycle path reconstruction, roadway reconstruction to accommodate and full road closures within project limits.

Project Trip Generation

The Institute of Transportation Engineers' Trip Generation manual does not contain trip rates for construction-related activities associated with the proposed project. Trip generation for construction projects is based on average or peak number of workers and trucks that would be required for the proposed construction activities. Construction traffic includes the number of workers and the amount of delivery (vendor) and haul truck traffic that would be generated to and from the site daily and during the AM and PM peak hours.

Per construction phasing and schedule, approximately 19 workers, 21 delivery (vendor) trucks, and 10 haul trucks would be required per day during peak construction-related activities. The construction activities would occur between 7:00 a.m. to 3:30 p.m. over the weekdays, Monday through Friday. Some nighttime construction work may be needed; however, would be subject to the City approval and permitting process. All workers and trucks were assumed to make two daily trips (one inbound and one outbound) to the project site. Based on the work schedule, workers would not be traveling during the AM or the PM peak periods, therefore approximately 20% workers were assumed to arrive during the AM peak hour and leave the site during the PM peak hour. All truck trips were averaged over the 8-hour workday to estimate peak hour trips with 50% inbound and 50% outbound. Passenger car equivalent (PCE) factors were used to account for the project's truck traffic and provide a more realistic measurement in terms of the impact of project-related truck traffic. All truck trips were converted to PCE trips using a factor of 2.0 or 3.0. Project trip generation estimates are shown in Table 13.

Table 13. Project Trip Generation

Vehicle Type	Daily Quantity	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Trip Generation								
Workers[1]	19 workers	38	4	0	4	0	4	4
Vendor Trucks[2]	21 Trucks	42	3	3	6	3	3	6
Haul Trucks[3]	10 Trucks	20	1	2	3	2	1	3
	Total Trips	**100**	**8**	**5**	**13**	**5**	**8**	**13**
Trip Generation w/PCE								
Workers[1] (1.0 PCE)	19 workers	38	4	0	4	0	4	4
Vendor Trucks[2] (2.0 PCE)	21 Trucks	84	6	6	12	6	6	12
Haul Trucks[3] (3.0 PCE)	10 Trucks	60	3	6	9	6	3	9
Total Trips (w/PCE)		**182**	**13**	**12**	**25**	**12**	**13**	**25**

Notes: PCE = passenger car equivalent.

[1] Workers as assumed to use passenger cars and no carpooling is assumed. Approximately 20% of the workers are anticipated to arrive and depart during the AM and PM peak hour.

[2] Vendor trucks are assumed to be distributed evenly across the 8-hour work shift to estimate AM and PM peak hour trips.

[3] Haul truck trips are distributed evenly over the duration of construction phase to estimate daily haul truck trips and across the 8-hour work shift to estimate AM and PM peak hour trips.

As shown in the Table 13, the project would generate 100 daily trips, 13 AM peak hour trips (8 inbound and 5 outbound), and 13 trips during the PM peak hour (5 inbound and 8 outbound). With the application of PCE factors to truck trips, the project would generate 182 total PCE daily trips, and 25 PCE trips during the AM peak hour (13 inbound and 12 outbound) and 25 PCE trips during the PM peak hour (12 inbound and 13 outbound).

The proposed project would not increase roadway capacity, generate a permanent increase in traffic or induce traffic, or change traffic patterns that could cause an impact to the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, the proposed project would not conflict with adopted policies, plans, or programs addressing the circulation system, and impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less-Than-Significant Impact. CEQA Guidelines Section 15064.3(b), focuses on specific criteria (VMT), for determining the significance of transportation impacts. It is further divided into four subdivisions: (1) land use projects, (2) transportation projects, (3) qualitative analysis, and (4) methodology. The proposed project is a bridge replacement project that would generate temporary construction-related traffic and nominal operations and maintenance traffic. This project would be categorized under subdivision (b)(2), transportation projects. Subdivision (b)(2) recognizes that transportation projects that reduce, or have no impact on, VMT should be presumed to cause a less-than-significant transportation impact. The Los Angeles County Public Works Transportation Impact Analysis Guidelines provide guidance for VMT screening and analysis of transportation projects (Public Works 2020). Transportation projects that increase vehicular capacity can lead to additional travel on the roadway network, which can include induced vehicle travel due to factors such as increased speeds and induced growth. Consistent with California Governor's Office of Planning and Research guidance, the Los Angeles County Public Works Transportation Impact Analysis Guidelines state that transportation projects, including rehabilitation, maintenance, replacement, safety, and repair projects, designed to improve the condition of existing transportation assets (e.g., highways, roadways, bridges, culverts) that are not likely to lead to a substantial or measurable increase in vehicle travel would not be required to prepare an induced travel analysis.

The proposed project would involve replacement of an existing bridge that would address existing bridge deficiencies and enhance vehicular safety on the bridge. However, the proposed project would not cause a permanent increase of traffic, or induce traffic, as it is not increasing the capacity of the roadway segment of Wilmington Avenue or providing an alternative route to the existing traffic.

Potential increases in vehicle trip generation as a result of project construction would be as shown in Table 13. Based on an average one-way trip length of 20 miles per worker, 8 miles for delivery and vendor trucks, and 30 miles for haul trucks, the maximum daily VMT generated by construction of the project was estimated to be 1,384 miles and a total of approximately 199,372 miles (refer to Appendix A). However, once construction is completed, construction-related traffic would cease and VMT levels would return to pre-project conditions. Therefore, vehicle miles generated from construction traffic would be temporary and short term. Since the proposed project would not cause a permanent increase of traffic or induce traffic, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). Impacts would be less than significant.

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

Less-Than-Significant Impact. The proposed replacement of the bridge would remediate an existing hazard and result in increased safety for all road users. At completion of the proposed project, no hazardous geometric design features; no sharp curves or dangerous roadway conditions would be introduced. Construction would occur within the existing ROW; and the travel lanes along Wilmington Avenue would be closed in either direction during construction activities. As such, all road users would not be able to travel along Wilmington Avenue Bridge and would need to follow the detour route. This could cause congestion and increase hazards due to a roadway design feature during the construction period. Further, some of the diverted traffic could potentially cut-through the adjacent neighborhoods and temporarily increase traffic along local residential streets. However, with the implementation of a PDF-TRAF-1, the proposed project impacts during construction would be less than significant.

d) Would the project result in inadequate emergency access?

Less-Than-Significant Impact. As noted in Section 2.5, Project Construction, complete road closures over the existing Wilmington Avenue Bridge would occur during construction activities. Therefore, construction of the project would potentially obstruct access to emergency vehicles. Construction occurring within the ROW would be required to implement appropriate construction traffic management measures to facilitate detour of all road users during the closure of the bridge. With implementation of PDF-TRAF-1, the project would not result in inadequate emergency access and impacts would be less than significant.

3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES				
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

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)?***

Less-Than-Significant Impact. As described in Section 3.5, Cultural Resources, of this IS/MND, a CHRIS records search and Sacred Lands File search was conducted for the project site. No tribal cultural resources (TCRs) were identified as a result of the records searches. Therefore, the proposed project would not adversely affect TCRs that are listed or eligible for listing in a state or local register. No mitigation is required.

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 Impact with Mitigation Incorporated. There are no resources in the project site that have been determined by the lead agency to be significant pursuant to the criteria set forth in PRC Section 5024.1. Further, no specific TCRs were identified in the project site by the Native American Heritage Commission, by California Native American tribes, or by Public Works as part of the AB 52 notification and consultation process.

Pursuant to AB 52, Public Works initiated consultation on April 4, 2019, and mailed notification letters to all contacts who have previously requested project notification about Public Works projects. To date, Public Works received one request to consult under AB 52 from the Gabrieleño Band of Mission Indians–Kizh Nation (Tribe).

An AB 52 consultation meeting between Public Works and Kizh-Nation tribal representatives, Chairman Andrew Salas and Tribal biologist Matthew Teutimez, was conducted on June 12, 2019. In summary, the Tribe informed Public Works that the project site is considered potentially sensitive due to its location adjacent to and near traditional trade routes and corridors, as well as Compton Creek's prevalence for movement. Further, the Tribe stated that individuals who perished while traveling on the trade routes were buried along the route or near-by creek. The Tribe referred to a project conducted in 2004 that resulted in the unanticipated discovery of human remains near the concrete-lined Compton Creek. This discovery was made outside of the current project site. Additionally, the Tribe suggested that the Tajauta village was possibly in the project site. Lastly, the Tribe was concerned that the fill used around new abutments may contain cultural resources.

In a follow-up email dated October 28, 2019, Public Works provided the Tribe with a newly acquired as-built engineering drawing for the Wilmington Avenue Bridge to help inform the Tribe on the depth of previous disturbance within the project site. Chairman Salas replied via email on December 5, 2019, indicating that the as-built did not provide information on the type of fill used near the abutments, and that the Tribe was still concerned about the potential for the fill to contain cultural resources. The Tribe also provided mitigation measures in which tribal monitoring was requested for ground-disturbing activities during project construction. Public Works responded via email on December 10, 2019, acknowledging receipt of the mitigation measures and requested clarification on the areas within the project site that the Tribe would like to monitor. Public Works sent an additional email to Chairman Salas on December 10, 2019, that included an excerpt of the geotechnical report summarized from the archaeological survey report prepared for the project (Confidential Appendix C). The geotechnical findings indicated that locations immediately abutting the bridge and creek are likely disturbed up to 75 feet below ground surface. In an email dated January 31, 2020, Chairman Salas reduced the scope of tribal monitoring from all ground-disturbing activities to monitoring within the abutments and in the creek at the center of the piers. No additional responses have been received by Public Works since.

Although the consultation did not result in the identification of any TCRs or other known cultural resources that could be directly impacted by the proposed project, Chairman Salas requested that monitoring be included for specific construction activities and provided mitigation measures to Public Works and requested the mitigation measures be incorporated into the environmental document.

No TCRs have been identified as present within the project site as a result of the NAHC SLF and a review of the California Register of Historical Resources and local register or through tribal consultation under AB 52. However, the AB 52 consultation between Public Works and Chairman Salas suggests that there is some potential for unknown subsurface TCRs to be impacted by the project, which could result in a significant impact. Therefore, mitigation measures have been included to provide for the development of a Construction Monitoring and Treatment Plan (CMTP) (MM-TCR-1) and tribal monitoring of ground-disturbing activities (MM-TCR-2). MM-TCR-1 incorporates requirements for addressing cultural resources that are included in MM-CUL-2 from Section 3.5, Cultural Resources, of this IS/MND. As stipulated within the analysis prepared for Section 3.5(c), appropriate handling of human remains would be completed in compliance with PRC 5097.98 and Health and Safety Code 7050.5. This includes establishing a process of respectful treatment through discussions with the identified most likely descendant. Therefore, implementation of MM-TCR-1 and MM-TCR-2 would ensure that potential construction impacts related to an unknown site, feature, place, cultural landscape, sacred place, or object with cultural value to a California Native American tribe would be reduced to less than significant.

MM-TCR-1 While no tribal cultural resources (TCRs) impacts have been identified, the following approach to address impacts based on the inadvertent discovery of TCRs has been prepared. Prior to commencement of earthmoving activities, Public Works shall prepare a Construction Monitoring and Treatment Plan (CMTP). This CMTP defines the process to be followed, upon discovery of archaeological resources or TCRs, to ensure the proper treatment, evaluation and management.

1. For purposes of CMTP implementation, the Project area subject to monitoring is defined as the areas of the proposed new abutments and center piers within the creek bed.
2. The CMTP shall include a requirement for all construction personnel to complete a Workers Environmental Awareness Program (WEAP) training prior to commencement of construction activities. The WEAP training shall be conducted by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards and provide the following: (1) explanation of types and characteristics of cultural materials that may be encountered during construction; (2) explanation of the importance of and legal basis for the protection of Tribal Cultural Resources; (3) proper procedures to follow in the event that cultural resources are uncovered during ground-disturbing activities, including procedures for work curtailment or redirection; and (4) protocols for contacting site supervisor and archaeological staff upon discovery of an archaeological or TCR.
3. The following protocols shall be included in the CMTP in addition to the measures provided in MM-CUL-2:
    a. Should a potential TCR be encountered, construction activities near the discovery shall be temporarily halted within 100 feet of the discovery and Public Works shall be notified. If Public Works determines that the potential resource is a TCR (as defined by California Public Resources Code, Section 21074), Tribal representatives from the Gabrieleño Band of Mission Indians - Kizh Nation shall

be provided a reasonable period of time, typically 5 days from the date that a new discovery is made, to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered TCRs. Depending on the nature of the resource and Tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations shall be made based on the determination of Public Works that the approach is reasonable and feasible. All activities shall be conducted in accordance with regulatory requirements. If the potential resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in Mitigation Measure for archaeological resources (see Section 3.5(b) for MM-CUL-2).

b. During construction, all discovered TCRs shall be temporarily curated at the offices of the Project archaeologist. Following the completion of the Project, all TCRs shall be catalogued before being relinquished to the Tribe during and/or at the completion of the Project.

c. Regardless of discovery, at the completion of all ground-disturbing activities, An archaeologist meeting the Secretary of the Interior's Professional Qualification Standards shall prepare a report, according to California Office of Historic Preservation guidelines, documenting all monitoring efforts, cultural resource discoveries with associated analysis and interpretations, including all necessary site records as well as daily monitoring logs completed by the Tribal monitor. The report shall be completed within 60 days of conclusion of all ground disturbing activities and a copy shall be submitted to Public Works, the Gabrieleño Band of Mission Indians - Kizh Nation Tribal Government, and the South Central Coastal Information Center located at California State University, Fullerton.

MM-TCR-2 A tribal monitor who is culturally affiliated with the Project area and/or otherwise approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government shall be retained by Public Works conduct periodic monitoring of ground-disturbing activities within the areas of the proposed new abutments and center piers within the creek bed. The tribal monitor shall have the authority to temporarily halt work to inspect areas as needed for potential cultural material or deposits. The tribal monitor shall complete daily monitoring logs providing descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-site tribal monitoring shall end when ground-disturbing activities within the areas of the proposed new abutments and center piers within the creek bed are completed, or when the Tribal Representatives and monitor have indicated that the site has a low potential for impacting TCRs. Should any TCRs be encountered, the tribal monitor(s) will have the authority to request construction to cease within 100 feet of the discovery to assess and document potential finds as outlined in mitigation measure MM-TCR-1(3)(a).

3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – 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?	☐	☐	☒	☐

a) Would the project 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?

Less-Than-Significant Impact. While bridge reconstruction would necessitate the relocation of existing water, gas, and telecommunication lines that are attached to the existing bridge, the proposed project would not require or result in the construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects for the following reasons:

Water

The City of Compton Water Utility Division is responsible for implementing the City's utility services and billing programs (City of Compton 2019b). The Water Utility Division constructs, inspects, maintains, and repairs water mains, gate valves, fire hydrants, and water services to provide adequate potable water to the citizens and businesses of Compton. The City's water system serves water to approximately 80,000 people through 15,000 residential, commercial, and industrial service connections, and 156 miles of pipe in length with includes pipe ranging in size from 2 inches to 24 inches (City of Compton 2019b). According to the City's Urban Water Management Plan, the City sources its water from groundwater purchased through the Metropolitan Water District of Southern California and from groundwater directly pumped from the Central Basin (City of Compton 2010).

During construction of the proposed project, small amounts of water would be required for activities such as cleaning surfaces, concrete (or other materials') mixing, and suppressing dust. However, water used during construction would be minimal and would represent a nominal proportion of the City's total annual water supply, which is projected to be approximately 9,484 acre-feet in 2020 (City of Compton 2010). The proposed project is a bridge reconstruction project and would not include the construction of any water-intensive land uses (e.g., housing, industrial, retail). As such, operation of the proposed project would not result in an increased demand for water at the project site, and, therefore, would not require or result in the relocation or construction of new or expanded water facilities. Impacts would be less than significant.

Wastewater

The City's wastewater is largely treated by the Joint Water Pollution Control Plant (JWPCP). The JWPCP is located at 24501 S. Figueroa Street in the City of Carson (LACSD 2019). The plant occupies approximately 420 acres to the east of the Harbor Freeway (Interstate 110). The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the Sanitation Districts' wastewater treatment plants. The facility provides both primary and secondary treatment for approximately 260 million gallons of wastewater per day (mgd) and has a total permitted capacity of 400 mgd (LACSD 2019).

The proposed project would include the reconstruction of an existing bridge and would not entail the construction of any habitable structures that would result in long-term sanitary sewer discharges. Non-stormwater discharges would be added to the local municipal sewer system during construction; however, such discharges would be nominal, temporary, and periodic in nature, and would comingle with wastewater in the municipal sewer collection system prior to being treated at the JWPCP. Upon operation, the proposed project would not require wastewater treatment services. As such, the project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities. Impacts would be less than significant.

Stormwater Drainage

Under existing conditions, stormwater runoff drains, via storm drain inlets on both sides on the existing Wilmington Avenue over Compton Creek Bridge, into the Compton Creek where it enters the Los Angeles River System (City of Compton 2019c).

During construction of the proposed project, activities, such as grading, excavation, and vegetation removal, could result in temporary changes to on-site drainage patterns, as well as increased erosion and sedimentation. Specifically, construction activities could contribute to increased stormwater runoff and stormwater contamination. However, these changes to stormwater drainage patterns during construction would be temporary in nature, and with incorporation of a project-specific SWPPP per the requirements of the Construction General Permit, impacts would be less than significant. Additionally, the proposed project would reconstruct an existing bridge, which, upon operation, would not substantially alter existing drainage patterns, and, as such, would not result in substantial changes to the rate and volume of stormwater runoff that leaves the project site when compared to existing conditions. As such, the proposed project would not require or result in the relocation or construction of new or expanded stormwater infrastructure. Impacts would be less than significant.

Electric Power/Natural Gas

Temporary electric power for as-necessary lighting and electronic equipment would be provided by SCE. The amount of electricity used during construction would be minimal because typical demand would stem from electrically powered hand tools. The electricity used for construction activities would be temporary and minimal; therefore, proposed project construction would not result in significant consumption of electricity such that new electricity generation facilities would be warranted. Natural gas is not anticipated to be required during construction and operation of the proposed project. The proposed project would involve the reconstruction of an existing bridge and would not include any habitable structures that would require new or expanded electric power and/or natural gas facilities. Impacts would be less than significant.

Telecommunications

The proposed project would include the reconstruction of the existing Wilmington Avenue over Compton Creek Bridge and would not involve the construction of any habitable structures that would require new or expanded telecommunications facilities. Furthermore, as explained in Section 3.14, the proposed project would not result in population growth. As such, the project would not require new or expanded telecommunications facilities. Therefore, no impacts related to the need for new or expanded telecommunication facilities would occur.

For the reasons described above, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Impacts would be less than significant.

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

Less-Than-Significant Impact. As stated above in Section 3.19(a), the City sources its water from water purchased through the Metropolitan Water District of Southern California and from groundwater directly pumped from the Central Basin (City of Compton 2010).

During construction of the proposed project, small amounts of water would be required for activities such as cleaning surfaces, concrete (or other materials') mixing, and suppressing dust. However, water used during construction would be minimal and would represent a nominal proportion of the City's total annual water supply, which is projected to be approximately 9,484 acre-feet in 2020 (City of Compton 2010). The proposed project is a bridge reconstruction project and would not include the construction of any water-intensive land uses (e.g., housing, industrial, retail). As such, long-term operation of the proposed project would not result in an increased demand for water at the project site and would not contribute to the City's water demand during normal, single-dry, and multiple-dry years; the City would have sufficient water supplies available to serve the minor water needs of the project during construction. As such, impacts would be less than significant.

c) Would the project 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?

Less-Than-Significant Impact. As stated in Section 3.19(a), the City's wastewater is largely treated by the JWPCP. The JWPCP is located at 24501 S. Figueroa Street in the City of Carson (LACSD 2019). The plant occupies approximately 420 acres to the east of Interstate 110. The JWPCP is one of the largest wastewater treatment plants in the world and is the largest of the Sanitation Districts' wastewater treatment plants. The facility provides both primary and secondary treatment for approximately 260 mgd of wastewater and has a total permitted capacity of 400 mgd (LACSD 2019).

The proposed project would include the reconstruction of an existing bridge and would not entail the construction of any habitable structures that would result in long-term sanitary sewer discharges. Non-stormwater discharges would be added to the local municipal sewer system during construction; however, such discharges would be nominal, temporary, and periodic in nature, and would comingle with wastewater in the municipal sewer collection system prior to being treated at the JWPCP. Upon operation, the proposed project would not require wastewater treatment services. Given the above, the Los Angeles County Sanitation District's JWPCP facility would have adequate capacity to serve the project. Impacts would be less than significant.

d) Would the project 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 Impact. Waste that would be generated during construction activities would include pavement removed during demolition of the existing bridge, vegetation cleared under the proposed project, and other construction debris. Project construction would be short-term, and the disposal of solid waste would be minimized through the recycling and reuse of construction materials, as legislated by the Integrated Waste Management Act (SB 1374) and the County Construction and Demolition Debris Recycling and Reuse Program, both of which require that 50% to 75% of construction demolition debris be diverted from landfills (Public Works 2019b). Savage Canyon Landfill, located approximately 14 roadway miles northeast of the project site, would be used to dispose materials. According to CalRecycle, Savage Canyon Landfill has a remaining capacity of 9,510,833 cubic yards and an anticipated closing date of 2055 (CalRecycle 2019). Project operation would not result in the production of waste and would not necessitate long-term solid waste disposal accommodations. Therefore, impacts would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less-Than-Significant Impact. As discussed above, solid waste that would be generated during construction activities would include pavement removed during demolition of the existing bridge, vegetation cleared under the proposed project, and other construction debris. Project construction would require minimal, short-term solid waste disposal because of construction activities, which would be conducted in compliance with federal, state, and local statutes and regulations including the Integrated Waste Management Act (SB 1374) and the County Construction and Demolition Debris Recycling and Reuse Program, both of which require that 50% to 75% of construction demolition debris be diverted from landfills (Public Works 2019b). Project operation would not generate notable waste. Therefore, impacts would be less than significant.

3.20 Wildfire

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Less-Than-Significant Impact. The proposed project would be located in an urbanized environment with little potential for wildland fires. The City of Compton is not mapped by the California Department of Forestry and Fire Protection as being within a Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2007). Compton Boulevard and Wilmington Avenue are both identified in the City's Evacuation Route Map that is provided in the City's General Plan (City of Compton 2011). The project would include demolition and replacement of an existing bridge. During construction, complete road closures over the Wilmington Avenue Bridge would occur for approximately 300 days and planned detour routes would be established via Rosecrans Avenue, Compton Boulevard and Alameda Street. Specifically, northbound traffic would be directed east on Compton Boulevard, north on Alameda Street, west on Rosecrans Avenue, and north back onto Wilmington Avenue. Southbound traffic would be directed east on Rosecrans Avenue, south on Alameda Street, west on Compton Boulevard, and south back onto Wilmington Avenue.

Additionally, a Traffic Control Plan would be developed to identify the duration of road closures, appropriate detour routes, and required signage. As part of the Traffic Control Plan, emergency service providers that serve the area would be notified of the closure and detour route so that service would not be disrupted. Specifically, as explained in Section 3.17, incorporation of a Traffic Control Plan would be required for all construction work within the road ROW that modifies vehicular, bicycle, pedestrian and/or transit traffic patterns and are necessary to ensure the safe and efficient movement of traffic through construction work zones. Implementation of the Traffic Control Plan would reduce impacts to local emergency service providers to less-than-significant levels. As such, with implementation of the Traffic Control Plan, impacts to emergency response plans or emergency evacuation plans would be less than significant. Following construction, the roadway would be restored to existing conditions, and emergency access would not be affected during project operation. Therefore, impacts would be less than significant upon operation.

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. Project activities would be limited to replacement of an existing bridge and bridge pier, the reconstruction of an existing bicycle pathway, sidewalks, and driveways, and the construction of a new access road and pier nose (see Section 2 for details). The project site is located in a developed, urban area on relatively flat terrain, and is not within a state-designated VHFHSZ (CAL FIRE 2007). Project construction and operation would not include any activities that would significantly exacerbate the risk of fire at the project site, thereby exposing people to pollutant concentrations from wildfire or the uncontrolled spread of wildfire. No impact would occur.

c) Would the project 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 proposed project would include the replacement of an existing bridge, bridge pier, the reconstruction of an existing bicycle pathway, sidewalks, and driveways, and the construction of a new access road and pier nose (see Section 2 for details). The project site is located in a developed, urban area on relatively flat terrain, and is not within a state-designated VHFHSZ (CAL FIRE 2007). Project construction and operation would not include the installation or maintenance of associated infrastructure that is likely to exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. No impact would occur.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less-Than-Significant Impact. The proposed project would include the replacement of an existing bridge and associated improvements. The proposed project would not involve construction or operation of occupiable structures, nor would it increase population such that the number of occupiable structures in the project area would increase. While additional workers would be temporarily present in the project area during construction, they would not be subject to undue risks associated with flooding or landslides, relative to other areas in the City or region. As explained in Section 3.7(a)(iv), the project is not located within a mapped landslide hazard zone and would not likely increase or exacerbate the potential for landslides to occur (DOC 2015). The nearest landslide area is located in the Whittier Hills approximately 14 miles northeast of the project site. As explained in Section 3.10, Hydrology and Water Quality, the proposed project would not result in permanent drainage changes or significant runoff with the potential to cause or exacerbate flooding or landslides. As explained in Section 3.20(b), the proposed project would not increase the risk of fire in the area. For these reasons, proposed project impacts involving exposure of people or structures to significant risks from flooding or landslides resulting from runoff, post-fire slope instability, and/or drainage changes would be less than significant.

3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects	☐	☒	☐	☐

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
on human beings, either directly or indirectly?				

a) ***Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?***

Less-Than-Significant Impact With Mitigation Incorporated. As discussed previously in Section 3.4, Biological Resources, the project site is entirely developed and characterized by disturbed areas. No natural vegetation communities are present within the impact footprint. In regard to migratory bird species, the proposed project would implement MM-BIO-1 to ensure potential impacts to nesting birds from construction-related activities would be less than significant.

Regarding impacts related to important examples of the major periods of California history or prehistory, as further discussed in Section 3.5, no impacts to historical resources would occur because of the proposed project. There is the potential for the proposed project to encounter previously undisturbed soils, which could uncover previously undiscovered intact archaeological deposits; thus, mitigation measure MM-CUL-2 is provided to address inadvertent discoveries during construction. Impacts related to archaeological resources would be less than significant with mitigation incorporated. Additionally, in the unexpected event that human remains are unearthed during construction activities, impacts would be potentially significant. However, through compliance with Section 7050.5 of the California Health and Safety Code and California PRC Section 5097.98, impacts would be less than significant.

b) ***Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?***

Less-Than-Significant Impact With Mitigation Incorporated. As analyzed in this IS/MND, project construction and operation could potentially result in individual-level environmental impacts that could be potentially significant without the incorporation of mitigation. Therefore, when coupled with impacts related to the implementation of other related projects throughout the broader geographic area, the project could potentially result in cumulative-level impacts if these significant impacts are left unmitigated. One Public Works project, the Compton Boulevard Bridge over Compton Creek Project, has been identified as a cumulative project located approximately 800 feet southeast of the project site where the Compton Boulevard ROW crosses Compton Creek. Construction of the Compton Boulevard Bridge over Compton Creek would not, however, occur concurrently with the proposed project, and similarly, would not change from existing conditions once completed.

However, with the incorporation of mitigation identified throughout this document, the project's potential impacts would be reduced to less than significant and would not considerably contribute to regional cumulative impacts in the greater project region. Additionally, these other related projects would presumably be required by the applicable lead agency to comply with all applicable federal, state, and local regulatory requirements, and incorporate all feasible mitigation measures to further ensure that their potentially cumulative impacts would be reduced to less than significant. Therefore, the project would not result in individually limited but cumulatively considerable impacts, and impacts would be less than significant with mitigation incorporated.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less-Than-Significant Impact With Mitigation Incorporated. As evaluated throughout this document, with mitigation measures, environmental impacts associated with the proposed project would be reduced to less-than-significant levels. Thus, the proposed project would not directly or indirectly cause substantial adverse effects on human beings.

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4 References and Preparers

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5 Response to Comments Received

This section includes a copy of each comment letter provided during the public review period of the IS/MND. The comment letters received have each been assigned a number (e.g., 1, 2, 3). The substantive points raised within each comment letter are bracketed and numbered (e.g., 1-1, 1-2). Comment letters are followed by responses, which are numbered to correspond with the bracketed comments. The comment letters and emails that were received by Public Works are listed in Table 5-1.

Public Works' responses to comments on the IS/MND represent a good-faith, reasoned effort to address the environmental issues identified by the comments. Pursuant to CEQA Guidelines Section 15074(b), decision makers will consider the proposed IS/MND together with the comments received during the public review process.

Table 5-1. Index of Commenters on the Initial Study/Mitigated Negative Declaration

Comment Letter	Date of Letter	Commenter	Response Nos.
1	April 11, 2023	California Department of Fish and Wildlife	1-1 through 1-12
2	April 5, 2023	California Department of Transportation (Caltrans)	2-1 through 2-5
3	March 20, 2023	Kwan Young Lee (email)	3-1 and 3-2

State of California – Natural Resources Agency
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Comment Letter 1

April 11, 2023

Reyna Soriano
Los Angeles County Public Works
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Subject: Comments on the Mitigated Negative Declaration for the Wilmington Avenue Bridge over Compton Creek, SCH #2023030480, Los Angeles County

Dear Ms. Soriano:

1-1 The California Department of Fish and Wildlife (CDFW) has reviewed the Initial Study/Mitigated Negative Declaration (MND) from the Los Angeles County Public Works (LACPW; Lead Agency; hereafter "County") for the Wilmington Avenue Bridge over Compton Creek Project (Project). Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW's Role

1-2 CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State [Fish & G. Code, §§ 711.7, subdivision (a) & 1802; Public Resources Code, § 21070; Guidelines, § 15386, subdivision (a)]. CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (Id., § 1802). Similarly, for purposes of California Environmental Quality Act (CEQA), CDFW is directed to provide biological expertise to lead agencies as part of environmental review, focusing on project activities that have the potential to adversely affect state fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Public Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration (LSA) regulatory authority (Fish & G. Code, § 1600 *et seq.*) and the California Endangered Species Act (CESA; Fish & G. Code, § 2050 *et seq.*). To the extent implementation of the Project as proposed may result in "take", as defined by State law, or CESA-listed rare plant pursuant to the Native Plant Protection Act (NPPA; Fish & G. Code, § 1900 *et seq.*), CDFW recommends the Project proponent obtain appropriate authorization under the Fish and Game Code.

Project Description and Summary

Objective: The County is proposing the implementation of the Project, which involves the replacement of the existing two-span, steel-girder Wilmington Avenue Bridge with a new two-span, precast concrete bridge. The Project includes the reconstruction of the sidewalks adjacent to the Project limits. The existing steel girder bridge and middle pier have been determined to be structurally deficient per the California Department of Transportation (Caltrans) Bridge Design Specification and Caltrans Seismic Design Criteria due to extensive cracking and delamination of the bridge deck. The Project would address structural deficiencies and improve vehicular safety and efficiency. The Project has been designed to be consistent with current Caltrans' adopted bridge design specifications regarding load carrying capacity.

1-3

Location: The Project is located in the City of Compton, southern Los Angeles County, California. The Project site is located in the northwest portion of the city where the Wilmington Avenue right-of-way (ROW) crosses Compton Creek, 500 feet north of the Compton Boulevard/Wilmington Avenue intersection. Wilmington Avenue is a large, north-south running road with two lanes in either direction. The Project site consists of 1.72 acres and includes the bridge and roadway approach. Within the Project area, Wilmington Avenue includes a central, 13-foot-wide raised median that divides northbound and southbound traffic over the bridge deck. Two 4.5-foot-wide public sidewalks extend on either side of Wilmington Avenue. Although there are no dedicated bikeways within the Wilmington Avenue ROW, an existing bikeway extends parallel to the Compton Creek channel's northern bank on either side of Wilmington Avenue. The Project site crosses Compton Creek, a major tributary of the Los Angeles River. Compton Creek drains a watershed area of approximately 42.1 square miles, and it travels south for 8.5 miles from South Main Street in the City of Los Angeles until it meets the Los Angeles River south of Del Amo Boulevard in the City of Carson. Compton Creek is encased within a concrete-lined flood control channel for most of its course, including where it runs underneath the Project site.

Comments and Recommendations

1-4

CDFW offers the comments and recommendations below to assist the County in adequately identifying, avoiding, and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources.

Comment #1: Impacts to Streams

Issue: CDFW is concerned that the Project would impact streams subject to Notification under Fish and Game Code section 1602 *et seq.*

1-5

Specific impacts: According to sections 2.4 and 2.5 of the MND, the Project would include demolition and construction activities within the stream channel. The existing bridge and proposed replacement bridge span the stream channel.

Why impacts would occur: Project activities include demolition of existing paved surfaces within the stream, demolition of existing bridge structures, excavation, grading, potential surface water diversion, augur drilling, bridge construction, and continued bridge operations. As stated in section 3.4 of the MND, these Project activities could result in temporary or permanent impacts to streams.

Evidence impacts would be significant: CDFW exercises its regulatory authority as provided by Fish and Game Code section 1600 et *seq.* to conserve fish and wildlife resources which includes rivers, streams, or lakes and associated plant communities. Fish and Game Code section 1602 requires any person, state or local governmental agency, or public utility to notify CDFW prior to beginning any activity that may do one or more of the following: divert or obstruct the natural flow of any river, stream, or lake; change the bed, channel, or bank of any river, stream, or lake; use material from any river, stream, or lake; or, deposit or dispose of material into any river, stream, or lake.

Recommended Potentially Feasible Mitigation Measure(s):

1-5

Mitigation Measure #1: The Project will result in the alteration of streams. As such, CDFW concurs with the Project's proposal to notify CDFW pursuant under Fish and Game Code section 1600 *et seq.* Based on this notification and other information, CDFW determines whether a Lake and Streambed Alteration (LSA) Agreement with the applicant is required prior to conducting the proposed activities. Please visit CDFW's Lake and Streambed Alteration Program webpage for information about the LSA Notification process and online submittal through the Environmental Permit Information Management System (EPIMS) Permitting Portal (CDFW 2023a).

Recommendation #1: CDFW's issuance of an LSA Agreement for a Project that is subject to CEQA will require CEQA compliance actions by CDFW as a Responsible Agency. As a Responsible Agency, CDFW may consider the CEQA document from the County for the Project. To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 *et seq.* and/or under CEQA, the CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement.

Any LSA Agreement issued for the Project by CDFW may include additional measures protective of streambeds on and downstream of the Project site. The LSA Agreement may include further erosion and pollution control measures. To compensate for any on- and off-site impacts to riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: avoidance of resources, on- or off-site habitat creation, enhancement or restoration, and/or protection, and management of mitigation lands in perpetuity.

Comment #2: Impacts on Bats

1-6

Issue: The Project includes activities that may remove or disturb roosting habitat for bats, including bat species that are California Species of Special Concern (SSC; CDFW 2023c).

Specific impacts: According to Section 3.4 of the MND and a review of the California Natural Diversity Database (CNDDB), the following bat species could occur in or near the Project site:

- Pallid bat (*Antrozous pallidus*);
- Western mastiff bat (*Eumops perotis californicus*);
- Silver-haired bat (*Lasionycteris noctivagans*);
- Western red bat (*Lasiurus frantzii*);
- Hoary bat (*Lasiurus cinereus*);
- Western yellow bat (*Lasiurus xanthinus*);

- Pocketed free-tailed bat (*Nyctinomops femorosaccus*); and
- Big free-tailed bat (*Nyctinomops macrotis*).

Several of these bat species are designated as SSC. However, there are many bat species that can be found year-round in urban areas throughout coastal southern California (Miner & Stokes 2005). Project activities may include removal or disturbance of structures that could provide roosting habitat for bats. Accordingly, the Project has the potential to injure, cause the mortality of, trap, and displace bats.

Why impacts would occur: The Project may result in direct impacts on bats (injury and mortality) by demolishing structures that may provide roosting habitat. Indirect impacts on bats and roosts could result from increased noise disturbances, human activity, dust, vegetation clearing, ground disturbing activities (e.g., staging, access, excavation, grading, drilling), and vibrations caused by heavy equipment. Extra noise, vibration, or the reconfiguration of large objects can lead to the disturbance of roosting bats which may have a negative impact on the animals. Modifications to roost sites can have significant impacts on the bats' usability of the roost and can impact the bats' fitness and survivability (Johnston *et al.* 2004). Human disturbance can lead to a change in humidity, temperatures, or the approach to a roost that could force the animals to change their mode of egress and/or ingress to a roost. Although temporary, such disturbance can lead to the abandonment of a maternity roost (Johnston *et al.* 2004). There is no indication in the MND that species-specific surveys for bats have been or will be conducted. Without focused surveys to detect bats, ground-disturbing, demolition, and construction activities associated with this Project may impact undetected bat species within the Project area. This may lead to a loss of occupied habitat, loss of juveniles in maternity roosts, or otherwise lead to roost abandonment or decreased feeding frequency in bat species. 1-6

Evidence impacts would be significant: Bats are considered non-game mammals and are afforded protection by state law from take and/or harassment (Fish & G. Code, § 4150; Cal. Code of Regs, § 251.1). Several bat species are considered SSC. CEQA provides protection not only for CESA-listed species, but for any species including but not limited to SSC which can be shown to meet the criteria for State listing. These SSC meet the CEQA definition of rare, threatened, or endangered species (CEQA Guidelines, § 15380). Therefore, take of SSC could require a mandatory finding of significance (CEQA Guidelines, § 15065). Inadequate avoidance and mitigation measures will result in the Project continuing to have a substantial adverse direct and cumulative effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species by CDFW.

Recommended Potentially Feasible Mitigation Measure(s):

Mitigation Measure #1 – Acoustic Surveys for Bats: Where Project-related implementation, construction, and activities would occur near potential roosting habitat for bats, CDFW recommends the County retain a qualified bat specialist to conduct bat surveys within these areas (plus a 100-foot buffer as access allows) in order to identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. CDFW recommends using acoustic recognition technology to maximize detection of bats. Depending on the survey results, a qualified bat specialist should discuss potentially significant effects of the Project on bats and include species specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125). Surveys, reporting, and preparation of robust mitigation measures by a qualified bat specialist should be completed and submitted to the

County prior to any Project-related ground-disturbing activities or vegetation removal at or near locations of roosting habitat for bats.

Mitigation Measure #2 – Maternity Roosts: If maternity roosts are found, to the extent feasible, work should be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are yet ready to fly out of the roost (March 1 to September 30).

1-6 **Mitigation Measure #3 – Maternity Roosts:** If maternity roosts are found and the County determines that impacts are unavoidable, a qualified bat specialist should conduct a preconstruction survey to identify those structures or trees proposed for disturbance that could provide hibernacula or nursery colony roosting habitat. Acoustic recognition technology should be used to maximize the detection of bats. Each structure or tree identified as potentially supporting an active maternity roost should be closely inspected by the bat specialist no more than 7 days prior to disturbance to determine the presence or absence of roost bats more precisely. If maternity roosts are detected, trees/structures determined to be maternity roosts should be left in place until the end of the maternity season. Work should not occur within 100 feet of or directly under or adjacent to an active roost. Work should also not occur between 30 minutes before sunset and 30 minutes after sunrise.

Additional Recommendations

Impacts to Nesting Birds. Migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act (MBTA) of 1918 (Code of Federal Regulations, Title 50, § 10.13). Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds (as listed under the Federal MBTA). It is unlawful to take, possess, or needlessly destroy the nest or eggs of any raptor. CDFW recommends that measures be taken to fully avoid impacts to nesting birds and raptors.

CDFW recommends avoiding habitat-disturbing construction activity during nesting season. If not feasible, CDFW recommends modifying MM BIO-1 by including the underlined language and excluding the ~~strikethrough~~ as follows: 1-7

> To avoid potential direct and indirect impacts to nesting birds protected by the Migratory Bird Treaty Act and California Fish and Game Code, project activities should avoid the general nesting season of February 1 through September 30. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species within a 500-foot radius of the proposed project work area including under the bridge deck and in vegetation within ~~300 feet (for non-raptor bird species) and 500 feet (for raptor species) of~~ the proposed work area. If project activities are delayed or suspended for more than 7 days during the nesting season, new nest surveys should be conducted. If an active bird nest is found within the bridge deck, work would not be able to proceed until the nest is determined to be inactive (fledged or failed) by a qualified biologist. If an active bird nest is found within portions of the survey area adjacent to the bridge, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into

1-7 the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.

It should be noted that the temporary halt of project activities within nesting buffers during nesting season does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss. Additional mitigation would be necessary to compensate for the removal of nesting habitat within the project site based on acreage of impact and vegetation composition. Mitigation ratios should increase with the occurrence of an SSC and should further increase with the occurrence of a CESA-listed species.

1-8 Scientific Collecting Permits. CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650). Please visit CDFW's Scientific Collection Permits webpage for information (CDFW 2023b). Pursuant to the California Code of Regulations, title 14, section 650, the County or its qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with construction activities.

1-9 Rodenticides. CDFW recommends preventing the use of second-generation anticoagulant rodenticides on site and over the life of the Project.

1-10 Data. CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database (i.e., California Natural Diversity Database) which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special status species detected by completing and submitting CNDDB Field Survey Forms (CDFW 2023d). The County should ensure the data has been properly submitted, with all data fields applicable filled out, prior to finalizing/adopting the environmental document. The County should provide CDFW with confirmation of data submittal.

1-11

Filing Fees

The Project, as proposed, could have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

1-12

Conclusion

CDFW appreciates the opportunity to comment on the Project to assist the County in identifying and mitigating potential impacts on biological resources. CDFW requests an opportunity to review and comment on any response that the County has to our comments and to receive notification of any forthcoming hearing date(s) for the Project [CEQA Guidelines; § 15073(e)]. If

1-12 you have any questions or comments regarding this letter, please contact David Lin, Senior Environmental Scientist (Specialist) at David.Lin@wildlife.ca.gov or (562) 619-0509.

Sincerely,

DocuSigned by:
5991E19EF8094C3...
Victoria Tang signing for

Erinn Wilson-Olgin
Environmental Program Manager I
South Coast Region

ec: CDFW
Victoria Tang, Seal Beach – Victoria.Tang@wildlife.ca.gov
David Lin, Seal Beach – David.Lin@wildlife.ca.gov
Cindy Hailey, San Diego – Cindy.Hailey@wildlife.ca.gov
CEQA Program Coordinator, Sacramento – CEQAcommentletters@wildlife.ca.gov

OPR
State Clearinghouse, Sacramento – State.Clearinghouse@opr.ca.gov

References

[CDFWa] California Department of Fish and Wildlife. 2023. Lake and Streambed Alteration Program. Available from: https://wildlife.ca.gov/Conservation/Environmental-Review/LSA.

[CDFWb] California Department of Fish and Wildlife. 2023. Scientific Collecting Permit. Available from: https://wildlife.ca.gov/Licensing/Scientific-Collecting.

[CDFWc] California Department of Fish and Wildlife. 2023. Species of Special Concern. Available from: https://wildlife.ca.gov/Conservation/SSC.

[CDFWd] California Department of Fish and Wildlife. 2023. Submitting Data to the CNDDB. Available from: https://wildlife.ca.gov/Data/CNDDB/Submitting-Data.

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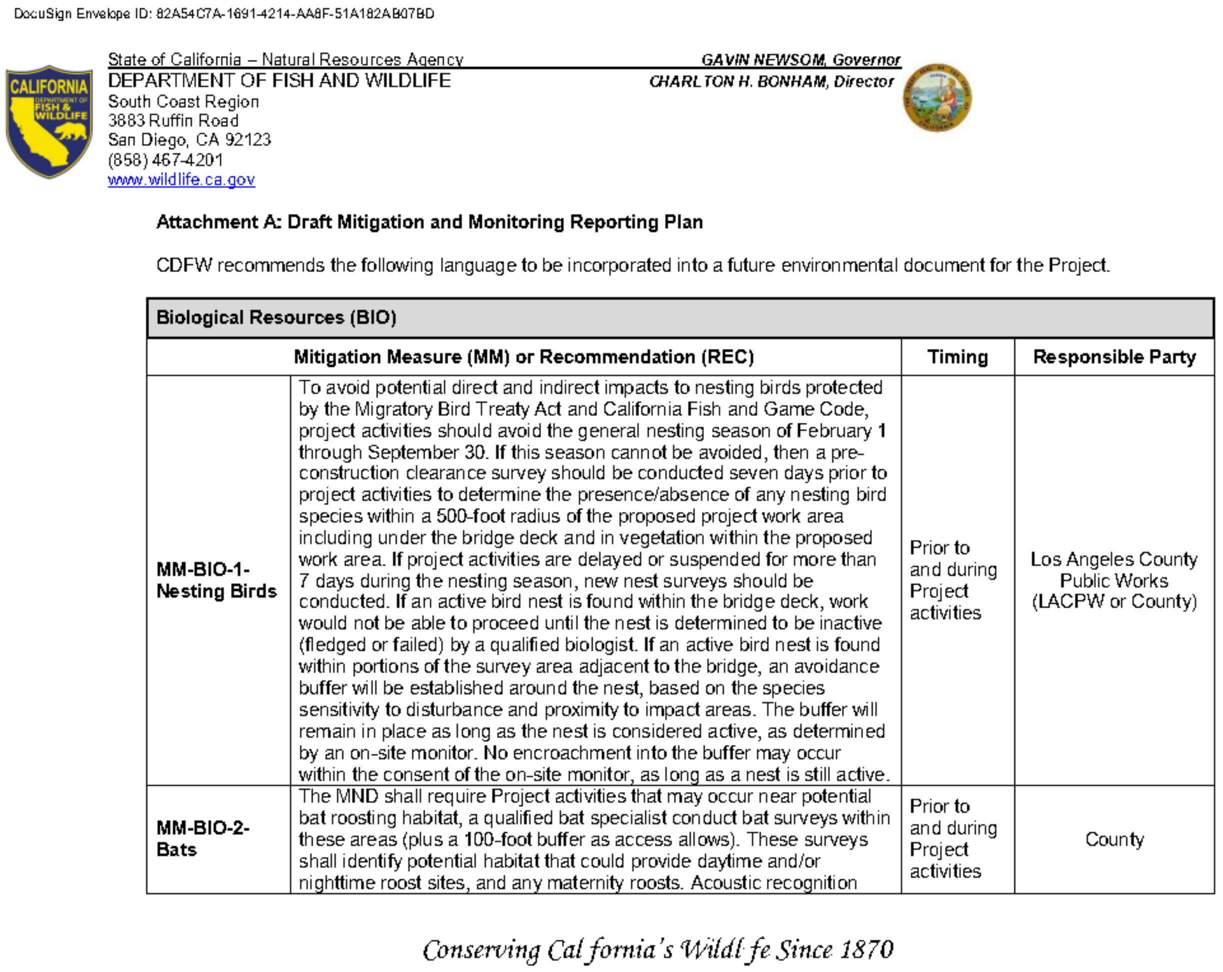


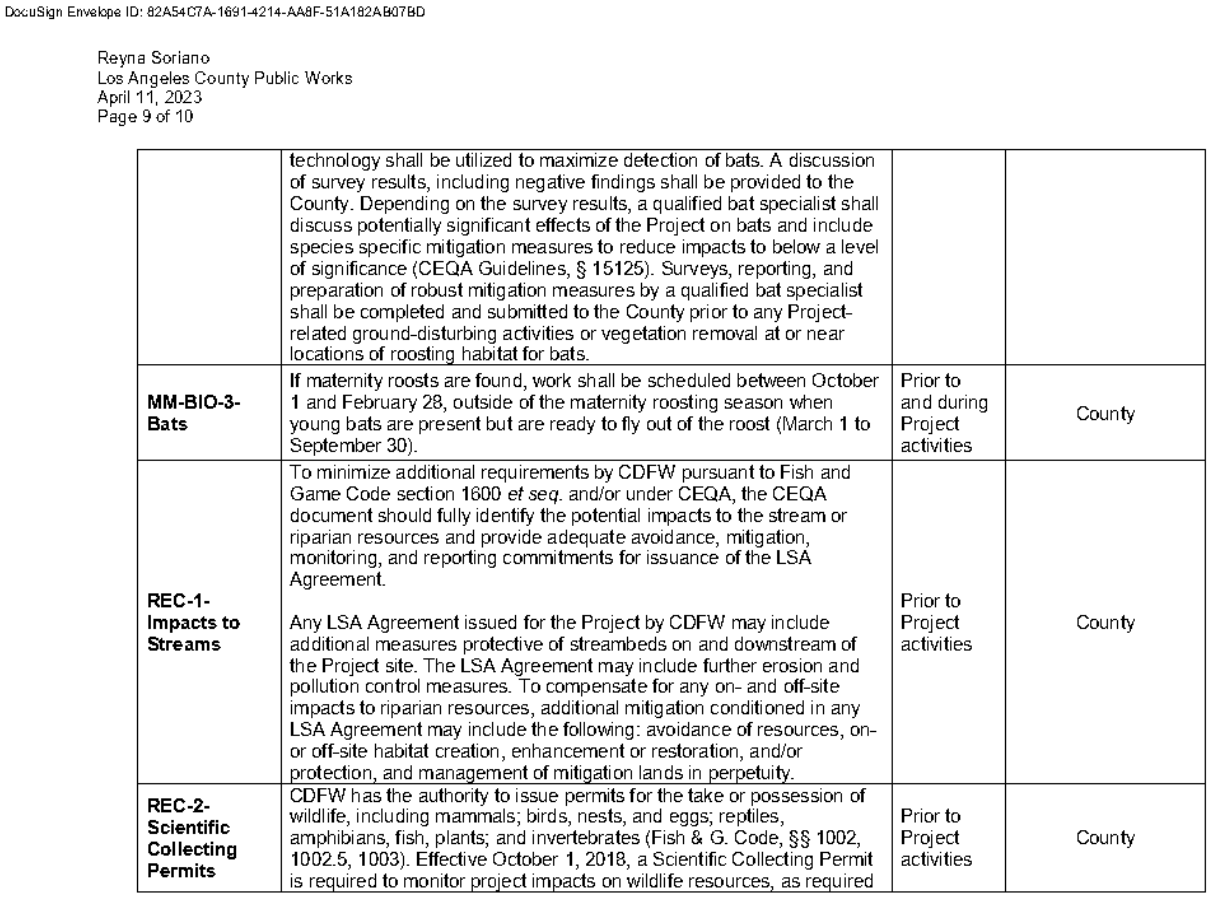
State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
South Coast Region
3883 Ruffin Road
San Diego, CA 92123
(858) 467-4201
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

Attachment A: Draft Mitigation and Monitoring Reporting Plan

CDFW recommends the following language to be incorporated into a future environmental document for the Project.

Biological Resources (BIO)			
Mitigation Measure (MM) or Recommendation (REC)		**Timing**	**Responsible Party**
MM-BIO-1-Nesting Birds	To avoid potential direct and indirect impacts to nesting birds protected by the Migratory Bird Treaty Act and California Fish and Game Code, project activities should avoid the general nesting season of February 1 through September 30. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species within a 500-foot radius of the proposed project work area including under the bridge deck and in vegetation within the proposed work area. If project activities are delayed or suspended for more than 7 days during the nesting season, new nest surveys should be conducted. If an active bird nest is found within the bridge deck, work would not be able to proceed until the nest is determined to be inactive (fledged or failed) by a qualified biologist. If an active bird nest is found within portions of the survey area adjacent to the bridge, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.	Prior to and during Project activities	Los Angeles County Public Works (LACPW or County)
MM-BIO-2-Bats	The MND shall require Project activities that may occur near potential bat roosting habitat, a qualified bat specialist conduct bat surveys within these areas (plus a 100-foot buffer as access allows). These surveys shall identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. Acoustic recognition	Prior to and during Project activities	County



	technology shall be utilized to maximize detection of bats. A discussion of survey results, including negative findings shall be provided to the County. Depending on the survey results, a qualified bat specialist shall discuss potentially significant effects of the Project on bats and include species specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125). Surveys, reporting, and preparation of robust mitigation measures by a qualified bat specialist shall be completed and submitted to the County prior to any Project-related ground-disturbing activities or vegetation removal at or near locations of roosting habitat for bats.		
MM-BIO-3-Bats	If maternity roosts are found, work shall be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are ready to fly out of the roost (March 1 to September 30).	Prior to and during Project activities	County
REC-1-Impacts to Streams	To minimize additional requirements by CDFW pursuant to Fish and Game Code section 1600 *et seq.* and/or under CEQA, the CEQA document should fully identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring, and reporting commitments for issuance of the LSA Agreement. Any LSA Agreement issued for the Project by CDFW may include additional measures protective of streambeds on and downstream of the Project site. The LSA Agreement may include further erosion and pollution control measures. To compensate for any on- and off-site impacts to riparian resources, additional mitigation conditioned in any LSA Agreement may include the following: avoidance of resources, on- or off-site habitat creation, enhancement or restoration, and/or protection, and management of mitigation lands in perpetuity.	Prior to Project activities	County
REC-2-Scientific Collecting Permits	CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required	Prior to Project activities	County

	by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650). Please visit CDFW's Scientific Collection Permits webpage for information (CDFW 2023b). Pursuant to the California Code of Regulations, title 14, section 650, the County or its qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with construction.		
REC-3-Rodenticides	CDFW recommends the Project prevent the use of second-generation anticoagulant rodenticides on site and over the life of the Project	During and after Project activities	County
REC-3-Data	CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database (i.e., California Natural Diversity Database) which may be used to make subsequent or supplemental environmental determinations [Pub. Resources Code, § 21003, subd. (e)]. Accordingly, please report any special status species detected by completing and submitting CNDDB Field Survey Forms (CDFW 2023d). The County should ensure the data has been properly submitted, with all data fields applicable filled out, prior to finalizing/adopting the environmental document. The County should provide CDFW with confirmation of data submittal.	Prior to and after Project activities	County

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

MARK PESTRELLA, Director

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

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

May 15, 2023

IN REPLY PLEASE
REFER TO FILE: TPP-3

Ms. Erinn Wilson-Olgin
Environmental Program Manager I
California Department of Fish and Wildlife
South Coast Region
3883 Ruffin Road
San Diego, CA 92123

Dear Ms. Wilson-Olgin:

WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK
RESPONSE TO COMMENTS

Thank you for your review and comments on the draft Initial Study/Mitigated Negative Declaration (IS/MND) for Wilmington Avenue Bridge over Compton Creek project. Following is our response to your April 11, 2023, letter and comments. A copy of the enclosed letter and response as shown below will be included as part of the final IS/MND.

1-1 The comment is introductory in nature and confirms California Fish and Wildlife's (CDFW's) review of the IS/MND for the project. Since the comment is introductory in nature and does not concern the adequacy of the analysis presented in the IS/MND, no additional response is provided.

1-2 This comment establishes CDFW's role as the State's Trustee Agency for fish and wildlife resources. In addition, CDFW discloses that they are submitting comments on the project as a responsible agency under California Environmental Quality A ct (CEQA) and recommends that Public Works obtain appropriate authorization under the Fish and Game Code should the project result in "take" as defined by State law, or CEQA listed rare plant pursuant to the Native Plant Protection Action.

CDFW's role as California's Trustee Agency for fish and wildlife resources, responsible agency under CEQA, and direction to provide biological expertise to lead agencies as part of environmental review, is noted, acknowledged, and appreciated. Public Works also acknowledges that CDFW is submitting comments as a responsible agency under CEQA and may exercise regulatory authority as provided by the Fish and Game Code, including lake and streambed alteration

(LSA) regulatory authority (Fish & G. Code, § 1600 et seq.) and the California Endangered Species Act (CESA; Fish & G. Code, § 2050 et seq.). Regarding CDFW's LSA regulatory authority and potential project impacts, Appendix B (Natural Environmental Study [Minimal Impacts]) of the IS/MND discloses that approximately 0.49 acres of temporary impacts and approximately 0.01 acres of permanent impacts to waters of the United States and State are anticipated to occur as a result of the proposed project. Therefore, a 1600 Streambed Alteration Agreement from CDFW would likely be required.

1-3 The comment summarizes information contained in Chapter 2, Project Description, of the IS/MND. Specifically, the comment summarizes project objectives, description, and location. The comment does not raise a specific issue related to the adequacy of the IS/MND; no further response is provided.

1-4 The comment introduces CDFW's comments and recommendations pertaining to biological resource impacts as reflected in the draft IS/MND. CDFW's comments and recommendations are acknowledge and appreciated and will be considered by Public Works during preparation of the final IS/MND. Please refer to Response to Comments 1-5 through 1-12 to determine Public Works intended approach to individual comments and recommendations.

1-5 The comment summarizes CDFW's concern that the project (specifically, demolition and construction activities within the stream channel) would temporarily and/or permanently impact streams. In addition, CDFW recommends potentially feasible mitigation for the potential stream impacts in the form of a Lake and Streambed Alteration Agreement. The comment also provides general information regarding LSA Agreements including additional conditional mitigation including avoidance of resources, on-or off-site habitat creation, enhancement, or restoration, and/or protection, and management of mitigation lands in perpetuity.

CDFW's comment regarding impacts to streams and related recommended mitigation measures are noted and appreciated. The IS/MND discloses that a 1600 Streambed Alteration Agreement from CDFW will likely be required due to the anticipated temporary and permanent impacts to Waters of the United States and State resulting from proposed project construction. However, as the IS/MND concluded that potential impacts would be less than significant, mitigation is not required and was not included. Further and consistent with the content of Mitigation Measure #1 and Recommendation #1, the IS/MND discloses potential impacts to streams and appropriate regulatory processes (i.e., the Streambed Alteration Agreement) to address the potential impacts. As a result, no changes have been made to the IS/MND.

Public Works understands that any LSA Agreement issued for the project by CDFW may include additional measures. Public Works looks forward to working with CDFW on the potential LSA Agreement.

1-6 This comment summarizes CDFW's concern that the project may remove or disturb roosting habitat for bats, including bat species that are California Species of Special Concern. The comment also provides CDFW's support for why impacts to bats would occur and identifies three mitigation measures to address the potential impacts.

CDFW's comments, mitigation, and recommendation concerning potential impacts to bats resulting from project construction are noted. However, as stated in Section 3.4, Biological Resources, of the IS/MND, no bats or signs of bats (i.e., urine staining and guano droppings) were visually observed at the time of the site visit. See IS/MND page 33. Since no diagnostic signs were observed, there was no indication that large maternal bat roosts were/are present. Further, no special-status bats were assessed as having a medium or high potential to occur/roost in the Wilmington Avenue bridge. As such, impacts to roosting bats and roosting habitat would be less than significant and as such, no mitigation is warranted. Therefore, none of the above-reference mitigation measures (i.e., Mitigation Measures #1 through #3) have been added to the Final IS/MND.

1-7 The comment reiterates that migratory nongame native bird species are protected by international treaty under the Federal Migratory Bird Treaty Act and that the California Fish and Game Code prohibit take of all birds and their active nests including raptors and other migratory nongame birds. In addition, CDFW recommends revisions to IS/MND Mitigation Measure BIO-1 to consolidate work area buffers to 500 feet and provides language requiring new nest surveys to be conducted should project activities be delayed or suspended for more than 7 days during the nesting season.

In response to this comment, Public Works has revised MM BIO-1 to incorporate CDFW's recommendations. Please note that MM BIO-1 has been revised for clarity and revisions do not constitute "significant new information" or other triggers for recirculation as identified in CEQA Guidelines Section 15088.5.

1-8 This comment discloses that CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates and reiterates that a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities.

CDFW's authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates is acknowledged. Should the need to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities arise during project construction, Public Works will ensure that a qualified biologist with appropriate handling permits is engaged to conduct said capture, temporarily possession, and relocation activities.

1-9 In this comment, CDFW recommends preventing the use of second-generation anticoagulant rodenticides on site and over the life of the project. Public Works appreciates CDFW's recommendation and will consider the recommendation during preparation of the Final MND. However, because the comment does not raise a specific issue related to the adequacy of the IS/MND, no further response is provided.

1-10 This comment reiterates that CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database (i.e., California Natural Diversity Database) which may be used to make subsequent or supplemental environmental determinations. Specifically, in this comment CDFW requests that Public Works provide CDFW with confirmation of data submittal to the California Natural Diversity Database.

As is customary with every applicable project, Public Works will report special status species and natural communities detected during project surveys to the CNDDB. Public Works will ensure that the data has been properly submitted and will provide CDFW with confirmation of data submittal.

1-11 This comment discloses that payment of filing fees are required to help defray the cost of environmental review by CDFW and are payable upon filing of the Notice of Determination by the Lead Agency. Public Works appreciates the reminder regarding payment of filing fees and will pay filing fees upon filing the Notice of Determination with the County Clerk/State Clearinghouse.

Ms. Erinn Wilson-Olgin
May 15, 2023
Page 5

1-12 The comment extends CDFW's appreciation for being provided the opportunity to comment on the project. In addition, a CDFW contact is identified and provided should Public Works have any questions or comments. Should the need for additional coordination with CDFW be required during finalization of the MND, Public Works will coordinate with Mr. Lin.

We anticipate certification of the final IS/MND by September 5, 2023.

If you have any questions or require additional information, please contact Ms. Reyna Soriano, Transportation Planning and Programs Division, at (626) 458-5192 or rsoriano@pw.lacounty.gov.

Very truly yours,

MARK PESTRELLA, PE
Director of Public Works

MARY E. REYES
Assistant Deputy Director
Transportation Planning and Programs Division

RS:sa
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Enc.

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 269-1124
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Making Conservation
a California Way of Life

Comment Letter 2

April 5, 2023

Reyna Soriano
Department of Public Works
County of Los Angeles
600 Winston Avenue
Bradbury, CA 91008

RE: Wilmington Avenue Bridge Over Compton Creek
SCH # 2023030480
Vic. LA-710/PM 14.4, LA-110/PM 11.3
LA-105/PM R9.8, LA-91/PM R9.2
GTS # LA-2023-04193-MND

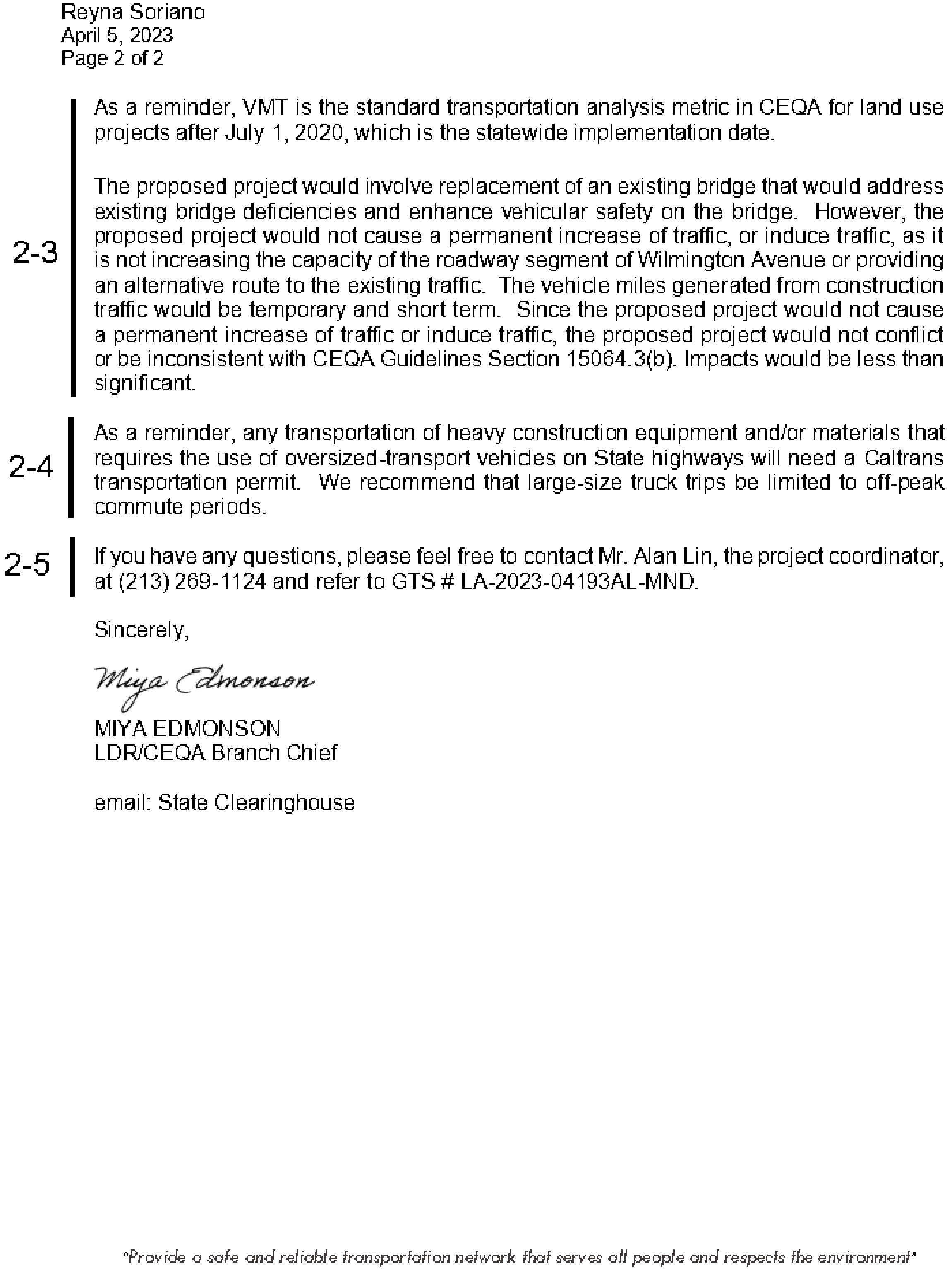
Dear Reyna Soriano:

2-1 Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced environmental document. The project would replace the existing two-span, steel-girder Wilmington Avenue Bridge with a new two-span, precast concrete bridge. The proposed project would address existing bridge deficiencies and enhance vehicular safety on the bridge. As proposed, the project would include demolition of the existing steel girder bridge, concrete piers, and bridge deck and construction of a new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, as well as a new pier, channel walls/abutments, and a new bridge deck. Minor modifications to the existing abutments and channel walls would also be required. The project is about 2 to 3 miles away from the State facilities.

2-2 The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. Senate Bill 743 (2013) has codified into CEQA law and mandated that CEQA review of transportation impacts of proposed development be modified by using Vehicle Miles Traveled (VMT) as the primary metric in identifying transportation impacts for all future development projects. You may reference the Governor's Office of Planning and Research (OPR) for more information:

http://opr.ca.gov/ceqa/updates/guidelines/

"Provide a safe and reliable transportation network that serves all people and respects the environment"



Reyna Soriano
April 5, 2023
Page 2 of 2

2-3 As a reminder, VMT is the standard transportation analysis metric in CEQA for land use projects after July 1, 2020, which is the statewide implementation date.

The proposed project would involve replacement of an existing bridge that would address existing bridge deficiencies and enhance vehicular safety on the bridge. However, the proposed project would not cause a permanent increase of traffic, or induce traffic, as it is not increasing the capacity of the roadway segment of Wilmington Avenue or providing an alternative route to the existing traffic. The vehicle miles generated from construction traffic would be temporary and short term. Since the proposed project would not cause a permanent increase of traffic or induce traffic, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). Impacts would be less than significant.

2-4 As a reminder, any transportation of heavy construction equipment and/or materials that requires the use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. We recommend that large-size truck trips be limited to off-peak commute periods.

2-5 If you have any questions, please feel free to contact Mr. Alan Lin, the project coordinator, at (213) 269-1124 and refer to GTS # LA-2023-04193AL-MND.

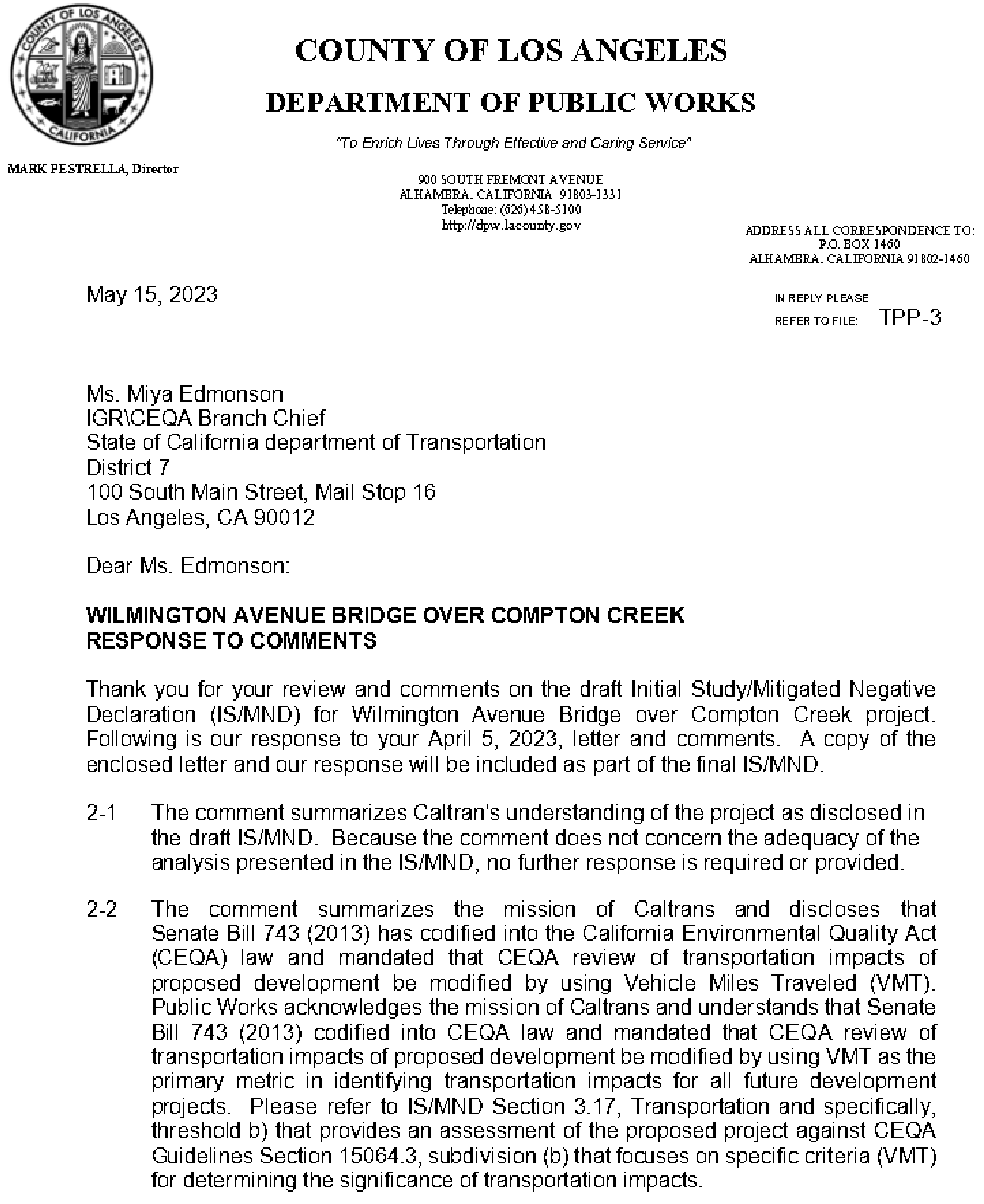
Sincerely,

Miya Edmonson

MIYA EDMONSON
LDR/CEQA Branch Chief

email: State Clearinghouse

"Provide a safe and reliable transportation network that serves all people and respects the environment"



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

MARK PESTRELLA, Director

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

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

May 15, 2023

IN REPLY PLEASE
REFER TO FILE: TPP-3

Ms. Miya Edmonson
IGR\CEQA Branch Chief
State of California department of Transportation
District 7
100 South Main Street, Mail Stop 16
Los Angeles, CA 90012

Dear Ms. Edmonson:

WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK
RESPONSE TO COMMENTS

Thank you for your review and comments on the draft Initial Study/Mitigated Negative Declaration (IS/MND) for Wilmington Avenue Bridge over Compton Creek project. Following is our response to your April 5, 2023, letter and comments. A copy of the enclosed letter and our response will be included as part of the final IS/MND.

2-1 The comment summarizes Caltran's understanding of the project as disclosed in the draft IS/MND. Because the comment does not concern the adequacy of the analysis presented in the IS/MND, no further response is required or provided.

2-2 The comment summarizes the mission of Caltrans and discloses that Senate Bill 743 (2013) has codified into the California Environmental Quality Act (CEQA) law and mandated that CEQA review of transportation impacts of proposed development be modified by using Vehicle Miles Traveled (VMT). Public Works acknowledges the mission of Caltrans and understands that Senate Bill 743 (2013) codified into CEQA law and mandated that CEQA review of transportation impacts of proposed development be modified by using VMT as the primary metric in identifying transportation impacts for all future development projects. Please refer to IS/MND Section 3.17, Transportation and specifically, threshold b) that provides an assessment of the proposed project against CEQA Guidelines Section 15064.3, subdivision (b) that focuses on specific criteria (VMT) for determining the significance of transportation impacts.

Because the comment does not concern the adequacy of the analysis presented in the IS/MND, no further response is required or provided.

2-3 This comment serves as a reminder that VMT is the standard transportation analysis metric in CEQA for land use projects after July 1, 2020. In addition, in this comment Caltrans' shares that the vehicle miles generated from construction traffic would be temporary and short term and that since the proposed project would not cause a permanent increase of traffic or induce traffic, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). Thus, project impacts would be less than significant.

Caltrans' reminder that VMT is the standard transportation analysis metric in CEQA for land use projects after July 1, 2020, is noted. Further, Public Works agrees that the proposed project would not cause a permanent increase of traffic or induce traffic, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). Refer to IS/MND Section 3.17, Transportation and specifically, threshold b) that provides an assessment of the proposed project against CEQA Guidelines Section 15064.3, subdivision (b). The IS/MND concluded that because the proposed project would not cause a permanent increase of traffic or induce traffic, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). Further, impacts would be less than significant.

2-4 In this comment Caltrans reminds Public Works that any transportation of heavy construction equipment and/or materials that requires the use of oversized-transport vehicles on state highways will need a Caltrans transportation permit. Further, Caltrans recommends that large-size truck trips be limited to off-peak commute periods. Caltrans' comments are noted; however, because the comments do not concern the adequacy of the analysis presented in the IS/MND, no further response is required or provided.

2-5 This comment provides contact information for the Caltrans contact should Public Works have any questions or comments regarding their comment letter. The comment closes the Caltrans letter and provides contact information for the commenter. However, because the comment does not concern the adequacy of the analysis presented in the IS/MND, no further response is required or provided

We anticipate certification of the final IS/MND by September 5, 2023.

If you have any questions or require additional information, please contact Ms. Reyna Soriano, Transportation Planning and Programs Division, at (626) 458-5192 or rsoriano@pw.lacounty.gov.

Very truly yours,

MARK PESTRELLA, PE
Director of Public Works

MARY E. REYES
Assistant Deputy Director
Transportation Planning and Programs Division

RS:sa
C230281
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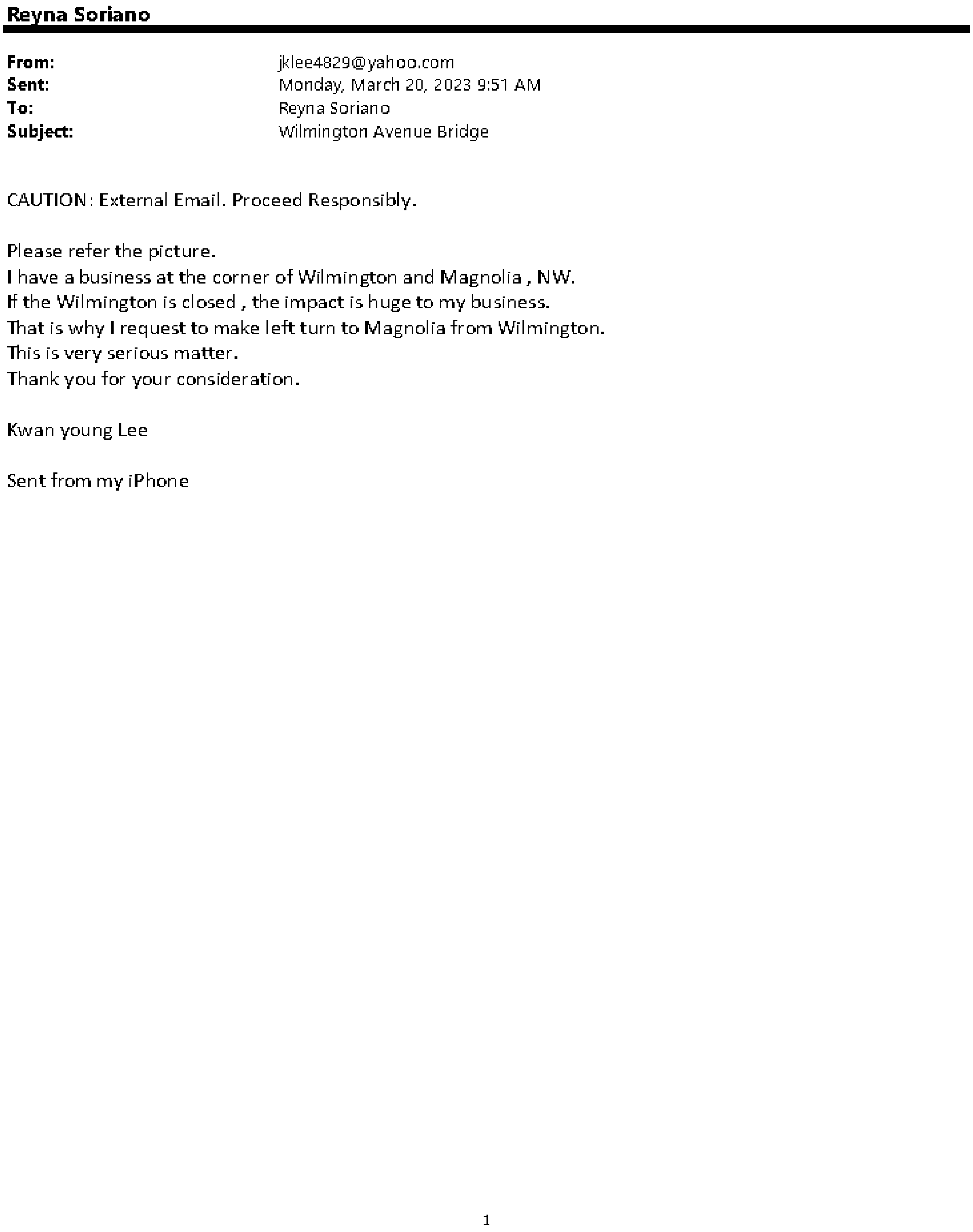
Enc.

Comment Letter 3



Reyna Soriano

From:	jklee4829@yahoo.com
Sent:	Monday, March 20, 2023 9:51 AM
To:	Reyna Soriano
Subject:	Wilmington Avenue Bridge

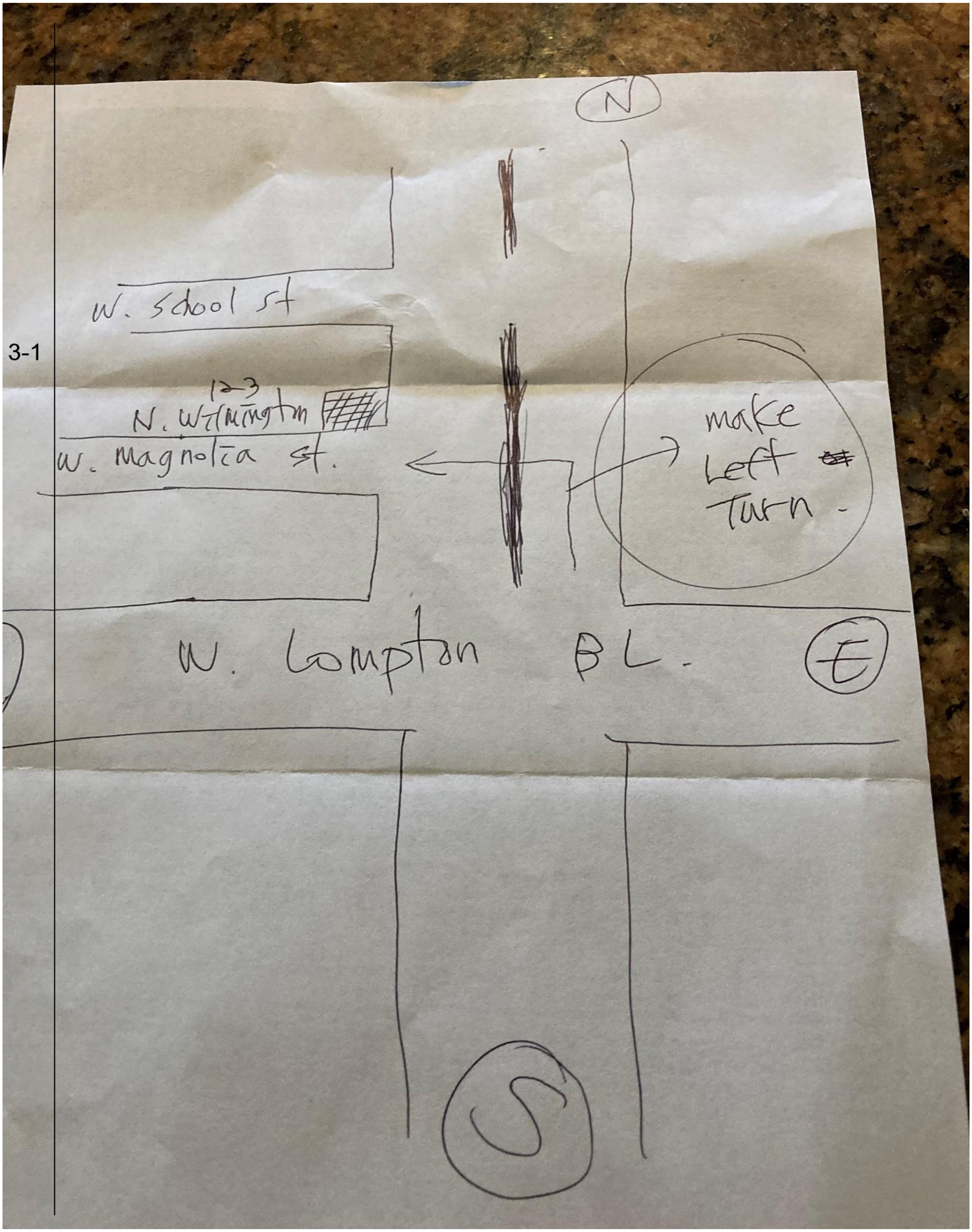
CAUTION: External Email. Proceed Responsibly.

Please refer the picture.
I have a business at the corner of Wilmington and Magnolia , NW.
If the Wilmington is closed , the impact is huge to my business.
3-1 That is why I request to make left turn to Magnolia from Wilmington.
This is very serious matter.
Thank you for your consideration.

Kwan young Lee

Sent from my iPhone

3-1


N
W. School St
12-3
N. Wilmington
W. Magnolia St.
make Left Turn.
W. Compton BL.
E
S

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

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

May 15, 2023

IN REPLY PLEASE
REFER TO FILE: TPP-3

Mr. Kwan Young Lee
4829 Carmelynn Street
Torrance, CA 90503

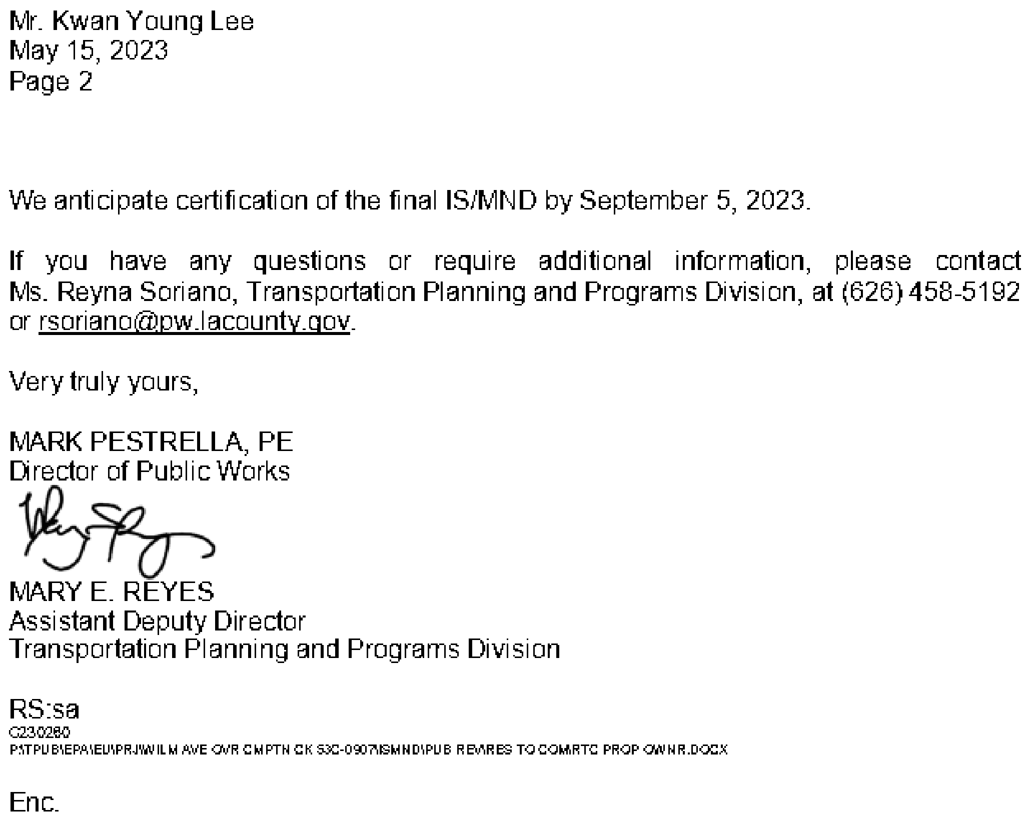
Dear Mr. Lee:

**WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK
RESPONSE TO COMMENTS**

Thank you for your review and comments on the Draft Initial Study/Mitigated Negative Declaration (IS/MND) for Wilmington Avenue Bridge over Compton Creek project. Following is our response to your March 20, 2023, e-mail and comments. A copy of the enclosed e-mail and our response will be included as part of the final IS/MND.

3-1 The comment discloses ownership of the business at the corner of Wilmington Avenue and Magnolia Street and expresses concerns that the business will be impacted if Wilmington Avenue is closed during constructions. In addition, commenter requests that left turns to Magnolia Street from Wilmington Avenue be provided during project construction to ensure limited impacts to the business.

Public Works understands commenters concerns regarding the planned closure of a portion of Wilmington Avenue during construction of the proposed project and potential effects on business. Public Works has reviewed the commenters request and has determined that is not feasible to route traffic from northbound Wilmington Avenue to turn left on westbound Magnolia Street. There is an existing raised concrete median in that location that would need to be removed and even without a raised median, any left turn movements onto Magnolia Street from this location would create a queue of vehicles that would interfere with the traffic signal at Wilmington Avenue and Compton Boulevard. Furthermore, there is no existing traffic control devices directly adjacent to the Fish Market on Magnolia Street and Wilmington Avenue (i.e., commenter's business) that would cause interference with business operations. Public Works is committed to working with property owners as plans are updated to ensure that access to and from private property is maintained during construction.



Mr. Kwan Young Lee
May 15, 2023
Page 2

We anticipate certification of the final IS/MND by September 5, 2023.

If you have any questions or require additional information, please contact Ms. Reyna Soriano, Transportation Planning and Programs Division, at (626) 458-5192 or rsoriano@pw.lacounty.gov.

Very truly yours,

MARK PESTRELLA, PE
Director of Public Works

MARY E. REYES
Assistant Deputy Director
Transportation Planning and Programs Division

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Enc.

6 Mitigation Monitoring and Reporting Program

CEQA requires that public agencies adopting MNDs take affirmative steps to determine that approved mitigation measures are implemented subsequent to project approval. The lead agency must adopt a reporting and monitoring program for the mitigation measures incorporated into a project or included as conditions of approval. The program must be designed to ensure compliance with the IS/MND during project implementation (California Public Resources Code, Section 21081.6(a)(1)).

The Mitigation Monitoring and Reporting Program (MMRP) will be used by Public Works as lead agency to ensure compliance with adopted mitigation measures identified in this IS/MND. Public Works, as lead agency pursuant to the CEQA Guidelines, will ensure that all mitigation measures are carried out.

Implementation of the mitigation measures would reduce impacts to below a level of significance for biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, and tribal cultural resources.

The remainder of this MMRP consists of a table that identifies the mitigation measures by resource area. Table 6-1 identifies the mitigation monitoring and reporting requirements, including the timing of verification (prior to, during, or after construction) and the responsible party. Space is provided for sign-off following completion/ implementation of the mitigation measure.

Table 6-1. Mitigation Monitoring and Reporting Program

Number	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
Biological Resources						
MM-BIO-1	To avoid potential direct and indirect impacts to nesting birds protected by the Migratory Bird Treaty Act and California Fish and Game Code, project activities should avoid the general nesting season of February 1 through September 30. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species within a 500-foot radius of the proposed project work area including under the bridge deck and in vegetation the proposed work area. If an active bird nest is found within the bridge deck, work would not be able to proceed until the nest is determined to be inactive (fledged or failed) by a qualified biologist. <u>If project activities are delayed or suspended for more than 7 days during the nesting season, new nest surveys should be conducted.</u> If an active bird nest is found within portions of the survey area adjacent to the bridge, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.	Prior to and during construction	Public Works	—	—	—
Cultural Resources						
MM-CUL-1	Public Works shall implement the Secretary of the Interior's Standards for the Treatment of Historic Properties Action Plan (SOIS Action Plan) prepared for the project as part of the Section 106 process to ensure that design documents and project construction	Prior to, during, and post-construction	Public Works	—	—	—

Table 6-1. Mitigation Monitoring and Reporting Program

Number	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	comply with the Rehabilitation Standards throughout the design and construction process. The SOIS Action Plan is included as Appendix C to this Mitigated Negative Declaration and details required tasks for responsible parties at each stage of project development and progress (i.e., plan development/construction documents, during construction, and post-construction).					
MM-CUL-2	In the event that archaeological resources (sites, features, or artifacts) are exposed during construction activities for the proposed project, all construction work occurring within 100 feet of the find shall immediately stop until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards, can evaluate the significance of the find and determine whether or not additional study is warranted. Depending upon the significance of the find under the California Environmental Quality Act (CEQA) (14 CCR 15064.5(f); California PRC Section 21082), the archaeologist may simply record the find and allow work to continue. If the discovery proves significant under CEQA, additional work, such as preparation of an archaeological treatment plan, testing, data recovery, and/or monitoring may be warranted.	During construction	Public Works	—	—	—
Geology and Soils						
MM-GEO-1	Prior to commencement of any grading activity on site that is greater than 5 feet below ground surface, the applicant shall retain a qualified paleontologist per the Society of Vertebrate Paleontology's 2010 Standard Procedures for the Assessment and Mitigation of Adverse	Prior to and during construction	Public Works	—	—	—

Table 6-1. Mitigation Monitoring and Reporting Program

Number	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	Impacts to Paleontological Resources. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the proposed project. The PRIMP shall be consistent with the Society of Vertebrate Paleontology's 2010 guidelines and should outline requirements for preconstruction meeting attendance and worker environmental awareness training, where monitoring is required within the proposed project area based on construction plans and/or geotechnical reports, procedures for adequate paleontological monitoring and discoveries treatment, and paleontological methods (including sediment sampling for microvertebrate fossils), reporting, and collections management. The qualified paleontologist shall attend the preconstruction meeting and a paleontological monitor shall be on site during all rough grading and other significant ground-disturbing activities in previously undisturbed, fine-grained older Quaternary alluvial deposits. These deposits may be encountered at depths as shallow as 5 feet below ground surface or below the depth of any artificial fill present on site. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontological monitor will temporarily halt and/or divert grading activity to allow recovery of paleontological resources. The area of discovery will be roped off with a 50-foot radius buffer. Once documentation and collection of the find is completed, the monitor will remove the rope and allow grading to recommence in the area of the find.					

Table 6-1. Mitigation Monitoring and Reporting Program

Number	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
Hazards and Hazardous Materials						
MM-HAZ-1	Prior to construction, a hazardous material building survey will be conducted to determine if asbestos-containing materials and lead-based paints are present on the project site. The survey will be conducted by a licensed contractor in accordance with local, state, and federal requirements. A report documenting material types, conditions and general quantities will be provided, along with photos of positive materials and diagrams. Should these materials be present, demolition plans and contract specifications shall incorporate any abatement procedures for the removal of materials containing asbestos or lead-based paint. Materials will be abated in accordance with local, state, and federal requirements by a licensed abatement contractor, or construction would be conducted in such a manner as to eliminate the potential to disturb the identified materials. Applicable regulations include, but are not limited to, those of the Environmental Protection Agency (which regulates disposal), Occupational Safety and Health Administration, California Occupational Safety and Health Administration (which regulates employee exposure), and the South Coast Air Quality Management District.	Prior to and during construction	Public Works	—	—	—
Noise						
MM-NOI-1	Nearby residents within 500 feet of construction activities shall be notified about the project and the potential noise and vibration effects resulting from construction activities. Residents shall be provided with procedures for registering complaints, including an appropriate contact person and phone number or email address, in the event	Prior to and during construction	Public Works	—	—	—

Table 6-1. Mitigation Monitoring and Reporting Program

Number	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	that noise and vibration are found to be excessive by the public.					
MM-NOI-2	Appropriate noise measures shall be implemented by the contractor, including, but not limited to, siting stationary construction equipment away from sensitive noise receptors to the greatest extent feasible, turning off idling equipment after no more than 5 minutes of inactivity, minimizing the simultaneous operation of multiple pieces of noisy equipment to the extent feasible, ensuring that construction equipment is properly maintained and fitted with state-of-the-art noise shielding and muffling devices (consistent with manufacturer's specifications), and rescheduling construction activity to avoid noise-sensitive days (i.e., holidays) or times.	During construction	Public Works	—	—	—
MM-NOI-3	Temporary sound barriers (e.g., plywood or loaded vinyl "curtains") shall be placed between the project site and residences to the west and east (areas represented by ST 1, ST 2, and ST 3 on Figure 8). The noise barrier shall be a minimum of 8 feet in height, shall have a surface density of at least 4 pounds per square foot, and shall be free of openings and cracks.	During construction	Public Works	—	—	—
Tribal Cultural Resources						
MM-TCR-1	While no tribal cultural resources (TCRs) impacts have been identified, the following approach to address impacts based on the inadvertent discovery of TCRs has been prepared. Prior to commencement of earthmoving activities, Public Works shall prepare a Construction Monitoring and Treatment Plan (CMTP). This CMTP defines the process to be followed, upon discovery of	Prior to and during construction	Public Works	—	—	—

Table 6-1. Mitigation Monitoring and Reporting Program

Number	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	archaeological resources or TCRs, to ensure the proper treatment, evaluation and management. 1. For purposes of CMTP implementation, the project area subject to monitoring is defined as the areas of the proposed new abutments and center piers within the creek bed. 2. The CMTP shall include a requirement for all construction personnel to complete a Workers Environmental Awareness Program (WEAP) training prior to commencement of construction activities. The WEAP training shall be conducted by a qualified archaeologist meeting the Secretary of the Interior's Professional Qualification Standards and provide the following: (1) explanation of types and characteristics of cultural materials that may be encountered during construction; (2) explanation of the importance of and legal basis for the protection of Tribal Cultural Resources; (3) proper procedures to follow in the event that cultural resources are uncovered during ground-disturbing activities, including procedures for work curtailment or redirection; and (4) protocols for contacting site supervisor and archaeological staff upon discovery of an archaeological or TCR. 3. The following protocols shall be included in the CMTP in addition to the measures provided in MM-CUL-2: a. Should a potential TCR be encountered, construction activities near the discovery shall be temporarily halted within 100 feet of the discovery and Public Works shall be notified. If Public Works determines that the potential resource is a TCR (as defined by PRC Section					

Table 6-1. Mitigation Monitoring and Reporting Program

Number	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	21074), Tribal representatives from the Gabrieleño Band of Mission Indians-Kizh Nation shall be provided a reasonable period of time, typically 5 days from the date that a new discovery is made, to conduct a site visit and make recommendations regarding future ground disturbance activities as well as the treatment and disposition of any discovered TCRs. Depending on the nature of the resource and Tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations shall be made based on the determination of Public Works that the approach is reasonable and feasible. All activities shall be conducted in accordance with regulatory requirements. If the potential resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in Mitigation Measure for archaeological resources (see Section 3.5(b) for MM-CUL-2). b. During construction, all discovered TCRs shall be temporarily curated or at the offices of the Project archaeologist. Following the completion of the Project, all TCRs shall be catalogued before being relinquished to the Tribe during and/or at the completion of the Project. c. Regardless of discovery, at the completion of all ground-					

Table 6-1. Mitigation Monitoring and Reporting Program

Number	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	disturbing activities, An archaeologist meeting the Secretary of the Interior's Professional Qualification Standards shall prepare a report, according to California Office of Historic Preservation guidelines, documenting all monitoring efforts, cultural resource discoveries with associated analysis and interpretations, including all necessary site records as well as daily monitoring logs completed by the Tribal monitor. The report shall be completed within 60 days of conclusion of all ground disturbing activities and a copy shall be submitted to Public Works, the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government, and the South Central Coastal Information Center located at California State University, Fullerton.					
MM-TCR-2	A tribal monitor who is culturally affiliated with the Project area and/or otherwise approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government shall be retained by Public Works conduct periodic monitoring of ground-disturbing activities within the areas of the proposed new abutments and center piers within the creek bed. The tribal monitor shall have the authority to temporarily halt work to inspect areas as needed for potential cultural material or deposits. The tribal monitor shall complete daily monitoring logs providing descriptions of the day's activities, including construction activities, locations, soil, and any cultural materials identified. The on-	During construction	Public Works	—	—	—

Table 6-1. Mitigation Monitoring and Reporting Program

Number	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
	site tribal monitoring shall end when ground-disturbing activities within the areas of the proposed new abutments and center piers within the creek bed are completed, or when the Tribal Representatives and monitor have indicated that the site has a low potential for impacting TCRs. Should any TCRs be encountered, the tribal monitor(s) will have the authority to request construction to cease within 100 feet of the discovery to assess and document potential finds as outlined in mitigation measure MM-TCR-1(3)(a).					

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SOURCE: Esri, Digital Globe 2017; Open Street Map 2019

DUDEK

FIGURE 1

Project Location

Wilmington Avenue Bridge Over Compton Creek

Date: 3/30/2022 - Last saved by: ochow - Path: Z:\Projects\LA_DeptPublicWorks\j1112504\MAPDOC\Project_Description\Wilmington_Ave\Fig_Wilmington_Project_Location.mxd

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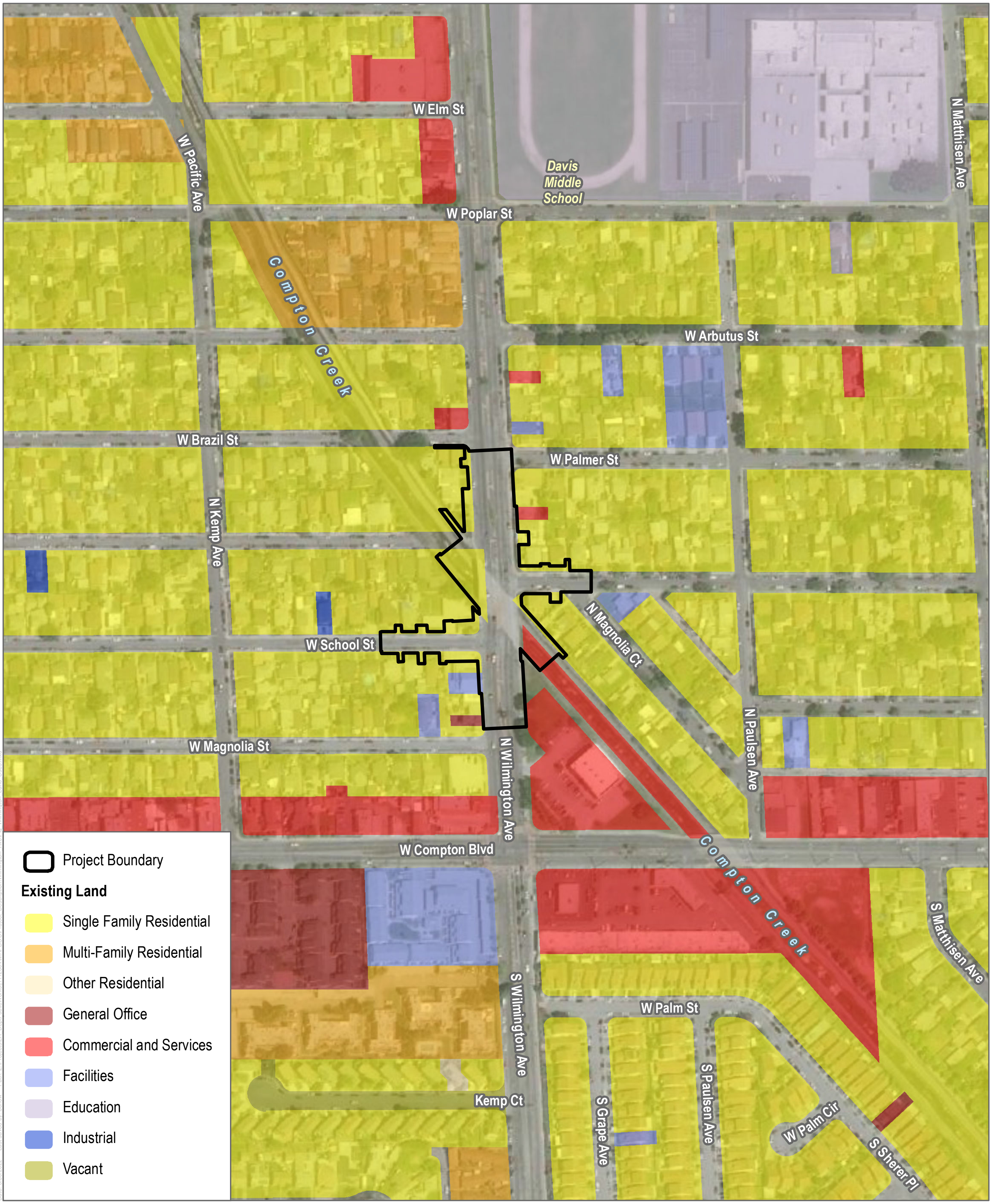

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SOURCE: Esri, Digital Globe 2017; Open Street Map 2019

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FIGURE 2

Surrounding Land Uses

Wilmington Avenue Bridge Over Compton Creek

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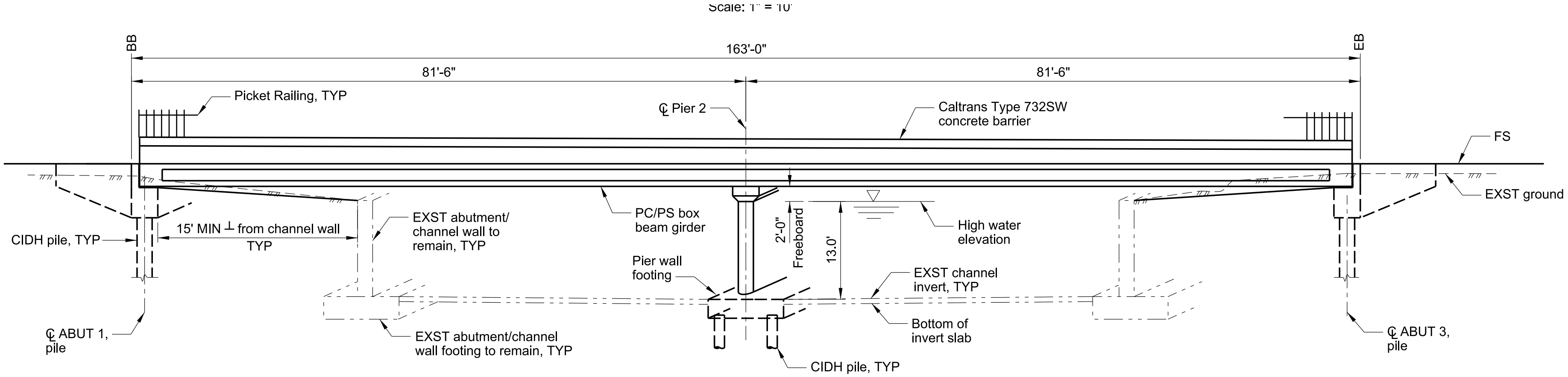

SOURCE: County of Los Angeles Department of Public Works, Aug. 2020

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FIGURE 3

Proposed Project (60% Elevation View)

Wilmington Avenue Bridge Over Compton Creek

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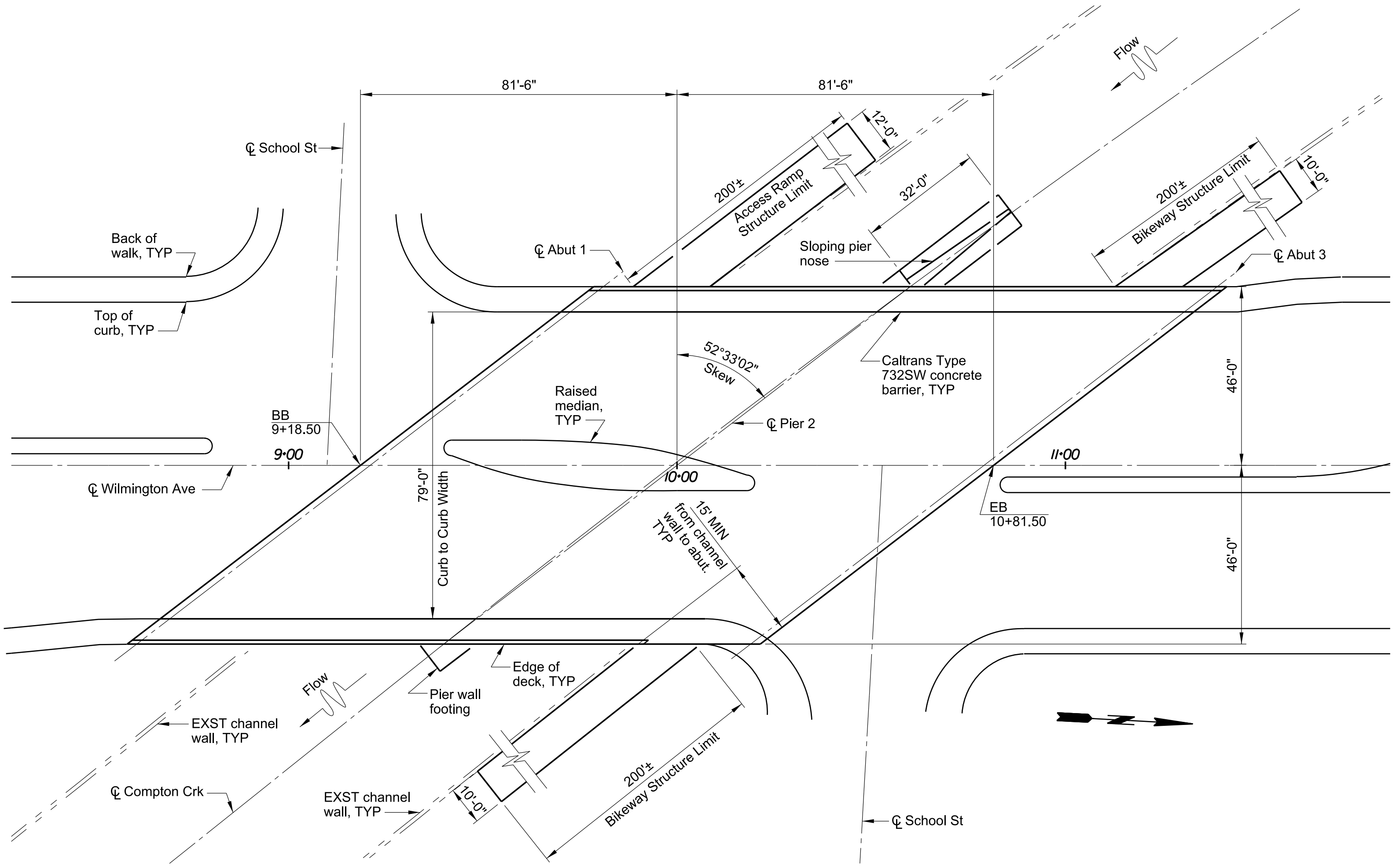

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SOURCE: County of Los Angeles Department of Public Works, Aug. 2020

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FIGURE 4

Proposed Project (60% Plan View)

Wilmington Avenue Bridge Over Compton Creek

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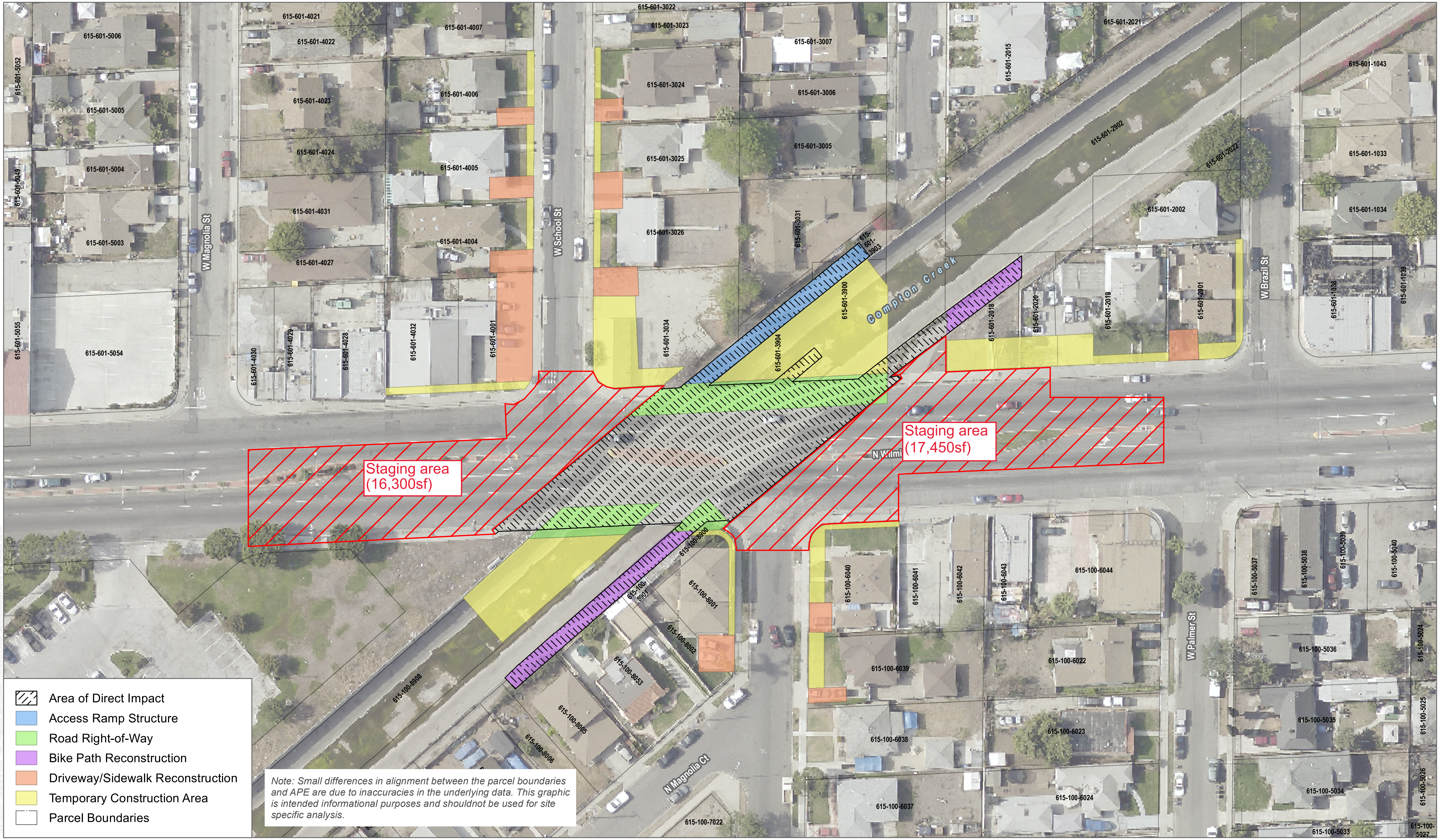

Note: Small differences in alignment between the parcel boundaries and APE are due to inaccuracies in the underlying data. This graphic is intended informational purposes and shouldnot be used for site specific analysis.

SOURCE: LARIAC 2014

DUDEK

0 30 60 Feet

FIGURE 5

Proposed Project Details

Wilmington Avenue Bridge Over Compton Creek

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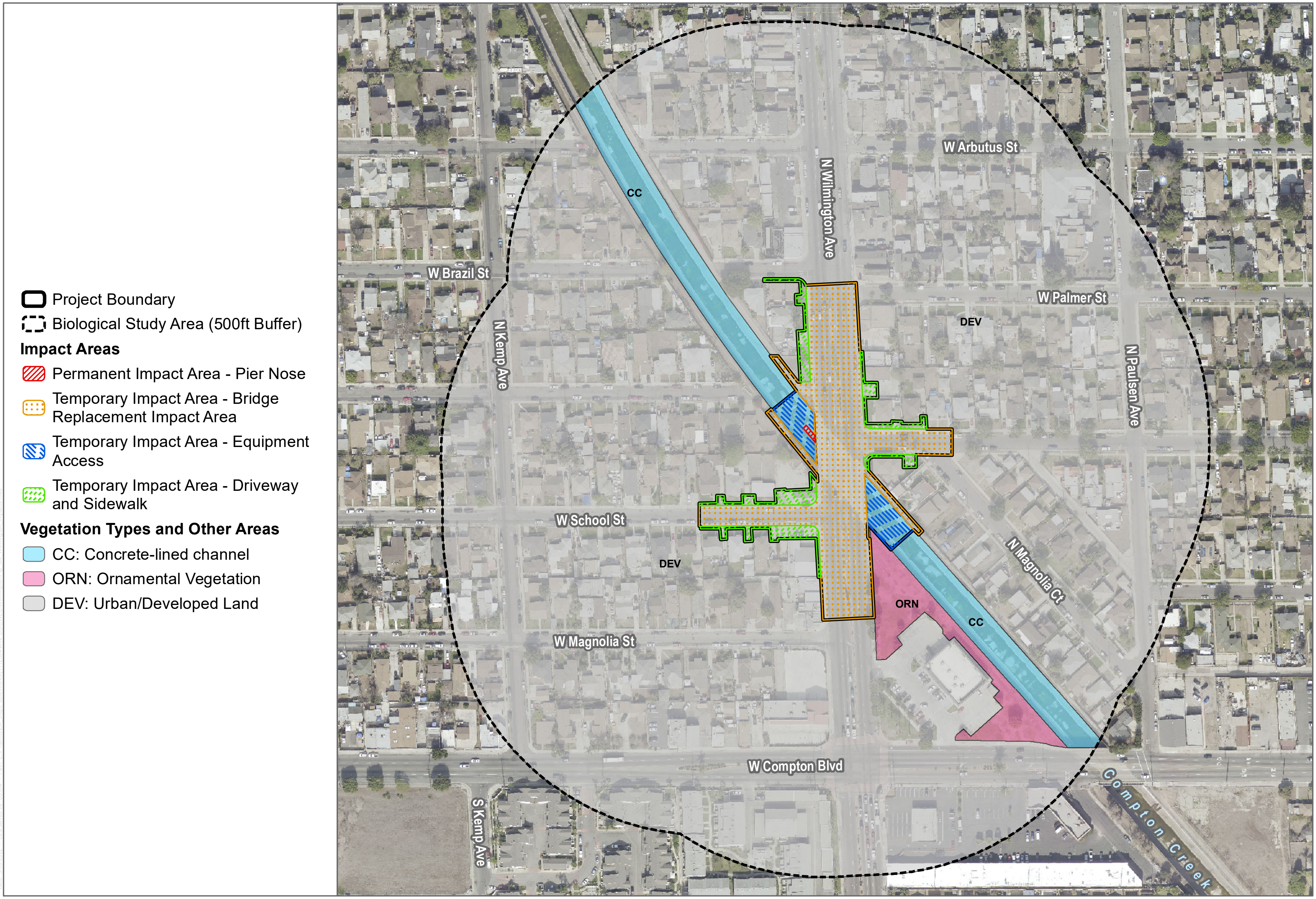

SOURCE: LAR-IAC 2014; Open Street Map 2019

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FIGURE 6

Vegetation Types and Impact Areas

Wilmington Avenue Bridge Over Compton Creek

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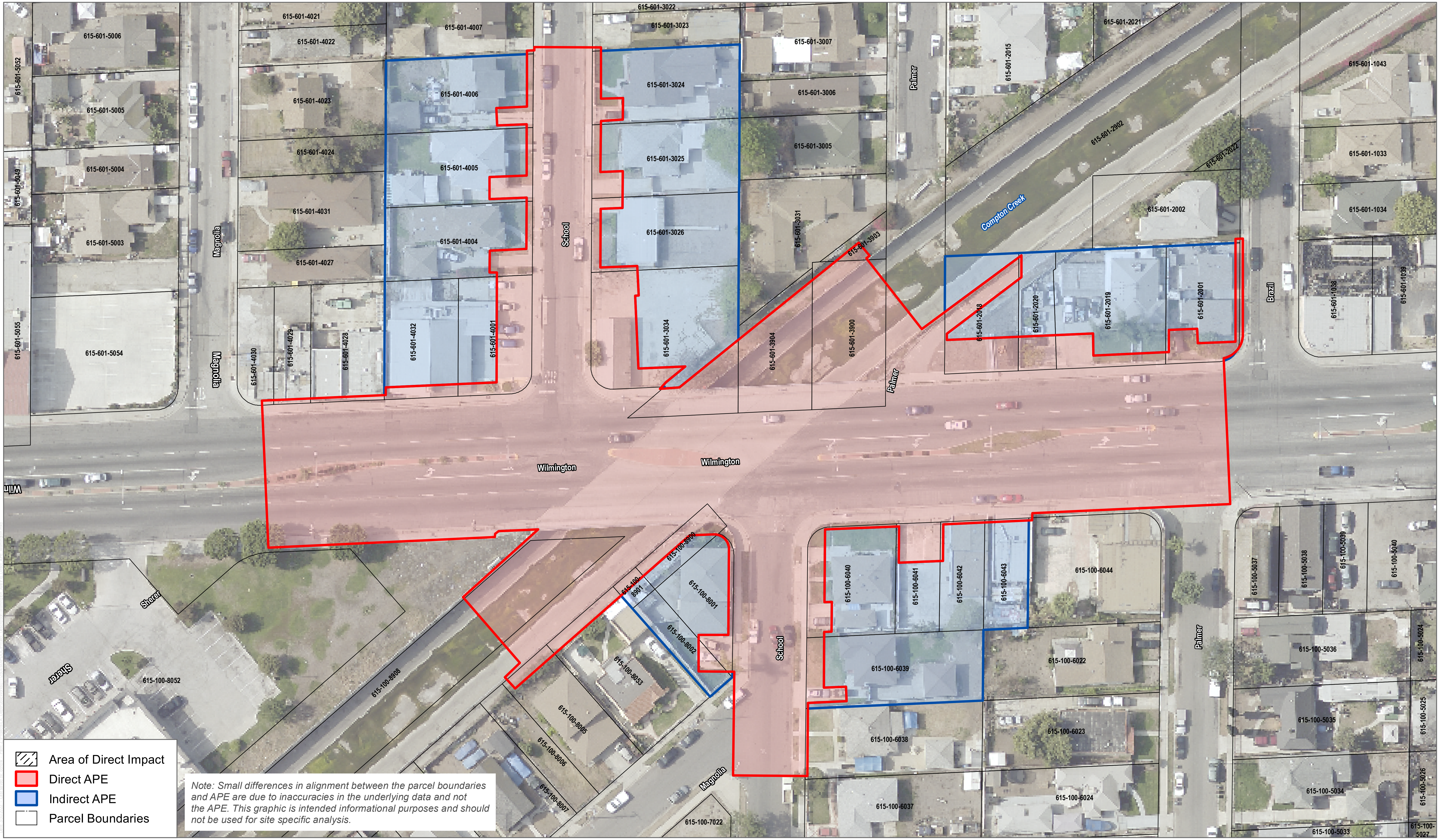

Note: Small differences in alignment between the parcel boundaries and APE are due to inaccuracies in the underlying data and not the APE. This graphic is intended informational purposes and should not be used for site specific analysis.

SOURCE: LARIAC 2014

DUDEK

0 30 60 Feet

FIGURE 7

Area of Potential Effects Map

Wilmington Avenue Bridge Over Compton Creek

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SOURCE: LAR-IAC 2014; Open Street Map 2019

FIGURE 8

Noise Measurement Locations

Wilmington Avenue Bridge Over Compton Creek

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Appendix A

CalEEMod Outputs

Wilmington Ave over Compton Creek Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wilmington Ave over Compton Creek
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	17.8
Location	Compton, CA, USA
County	Los Angeles-South Coast
City	Compton
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4266
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Asphalt Surfaces	2.00	Acre	2.00	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.18	1.83	17.4	23.8	0.04	0.64	1.53	1.95	0.58	0.25	0.73	—	5,080	5,080	0.21	0.44	7.07	5,109
Mit.	2.18	1.83	17.4	23.8	0.04	0.64	0.93	1.36	0.58	0.25	0.70	—	5,080	5,080	0.21	0.44	7.07	5,109
% Reduced	—	—	—	—	—	—	40%	31%	—	—	5%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
Mit.	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.62	0.50	5.22	6.67	0.02	0.17	0.34	0.51	0.15	0.08	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
Mit.	0.62	0.50	5.22	6.67	0.02	0.17	0.30	0.47	0.15	0.07	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
% Reduced	—	—	—	—	—	—	13%	9%	—	6%	2%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.09	0.95	1.22	< 0.005	0.03	0.06	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
Mit.	0.11	0.09	0.95	1.22	< 0.005	0.03	0.05	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
% Reduced	—	—	—	—	—	—	13%	9%	—	6%	2%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.18	1.83	17.4	23.8	0.04	0.64	1.53	1.95	0.58	0.25	0.73	—	5,080	5,080	0.21	0.44	7.07	5,109
2027	1.56	1.37	10.7	15.1	0.03	0.42	0.63	0.79	0.38	0.09	0.47	—	2,992	2,992	0.12	0.12	2.33	3,034
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
2027	1.35	1.12	10.9	13.5	0.03	0.35	0.63	0.91	0.32	0.14	0.46	—	3,915	3,915	0.15	0.12	0.07	3,956
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.62	0.50	5.22	6.67	0.02	0.17	0.34	0.51	0.15	0.08	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
2027	0.53	0.46	3.90	5.26	0.01	0.14	0.19	0.33	0.13	0.04	0.17	—	1,225	1,225	0.05	0.04	0.39	1,240
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.95	1.22	< 0.005	0.03	0.06	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
2027	0.10	0.08	0.71	0.96	< 0.005	0.03	0.03	0.06	0.02	0.01	0.03	—	203	203	0.01	0.01	0.06	205

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.18	1.83	17.4	23.8	0.04	0.64	0.93	1.36	0.58	0.25	0.70	—	5,080	5,080	0.21	0.44	7.07	5,109
2027	1.56	1.37	10.7	15.1	0.03	0.42	0.34	0.75	0.38	0.09	0.47	—	2,992	2,992	0.12	0.12	2.33	3,034
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.64	1.30	14.5	17.3	0.05	0.42	1.13	1.55	0.38	0.29	0.67	—	6,121	6,121	0.26	0.39	0.20	6,245
2027	1.35	1.12	10.9	13.5	0.03	0.35	0.56	0.91	0.32	0.14	0.46	—	3,915	3,915	0.15	0.12	0.07	3,956
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.62	0.50	5.22	6.67	0.02	0.17	0.30	0.47	0.15	0.07	0.23	—	1,889	1,889	0.08	0.09	0.75	1,920
2027	0.53	0.46	3.90	5.26	0.01	0.14	0.17	0.31	0.13	0.04	0.17	—	1,225	1,225	0.05	0.04	0.39	1,240
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.95	1.22	< 0.005	0.03	0.05	0.09	0.03	0.01	0.04	—	313	313	0.01	0.02	0.12	318
2027	0.10	0.08	0.71	0.96	< 0.005	0.03	0.03	0.06	0.02	0.01	0.03	—	203	203	0.01	0.01	0.06	205

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.2	83.2	< 0.005	0.01	0.08	87.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	0.01	14.5

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.51
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.10	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	83.2	83.2	< 0.005	0.01	0.08	87.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	0.01	14.5

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.7	27.7	< 0.005	< 0.005	0.03	29.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.59	4.59	< 0.005	< 0.005	< 0.005	4.82

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.7	27.7	< 0.005	< 0.005	0.03	29.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.59	4.59	< 0.005	< 0.005	< 0.005	4.82

3.5. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Site Preparation (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movemen	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.42	3.42	< 0.005	< 0.005	< 0.005	3.57
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.59
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.29	4.29	< 0.005	< 0.005	0.01	4.34
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.42	3.42	< 0.005	< 0.005	< 0.005	3.57
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.71	0.71	< 0.005	< 0.005	< 0.005	0.72
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.57	0.57	< 0.005	< 0.005	< 0.005	0.59
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.03	0.01	0.58	0.22	< 0.005	0.01	0.14	0.15	0.01	0.04	0.04	—	506	506	0.03	0.08	1.14	532
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	0.01	14.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.30	2.30	< 0.005	< 0.005	< 0.005	2.41

3.10. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728

Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.39	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	81.3	81.3	< 0.005	< 0.005	0.28	82.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.03	0.01	0.58	0.22	< 0.005	0.01	0.14	0.15	0.01	0.04	0.04	—	506	506	0.03	0.08	1.14	532

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.14	2.14	< 0.005	< 0.005	< 0.005	2.17
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.9	13.9	< 0.005	< 0.005	0.01	14.6
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.30	2.30	< 0.005	< 0.005	< 0.005	2.41

3.11. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.14

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.92
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.02	11.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.83	6.83	< 0.005	< 0.005	0.01	7.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	< 0.005	1.92
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	0.01	< 0.005	0.46	137
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.4	21.4	< 0.005	< 0.005	0.03	21.7
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.55	3.55	< 0.005	< 0.005	0.01	3.60
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.77
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.65	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	0.01	< 0.005	0.46	137
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	21.4	21.4	< 0.005	< 0.005	0.03	21.7
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	0.01	10.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.55	3.55	< 0.005	< 0.005	0.01	3.60
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	< 0.005	1.77
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861

Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.86	2.86	< 0.005	< 0.005	< 0.005	2.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	62.4	62.4	< 0.005	0.01	0.17	65.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.86	2.86	< 0.005	< 0.005	< 0.005	2.90
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.71	1.71	< 0.005	< 0.005	< 0.005	1.79

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.47	0.47	< 0.005	< 0.005	< 0.005	0.48
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.30
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.05	0.02	0.76	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	1.85	718
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.01	104
Vendor	0.05	0.02	0.79	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	0.05	716
Hauling	0.07	0.01	1.20	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	0.06	1,062

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.03	17.4
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	113	113	< 0.005	0.02	0.13	118
Hauling	0.01	< 0.005	0.20	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.16	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.88
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.02	19.5
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.5	27.5	< 0.005	< 0.005	0.03	28.9

3.18. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386

Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.52	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	< 0.005	< 0.005	0.37	110
Vendor	0.05	0.02	0.76	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	1.85	718
Hauling	0.07	0.01	1.16	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	2.29	1,064
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.03	0.44	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.01	104
Vendor	0.05	0.02	0.79	0.37	< 0.005	0.01	0.19	0.20	< 0.005	0.05	0.06	—	686	686	0.03	0.10	0.05	716
Hauling	0.07	0.01	1.20	0.43	0.01	0.01	0.28	0.29	0.01	0.08	0.09	—	1,012	1,012	0.05	0.16	0.06	1,062
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.03	17.4
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	113	113	< 0.005	0.02	0.13	118
Hauling	0.01	< 0.005	0.20	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.01	—	166	166	0.01	0.03	0.16	175
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.88
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.7	18.7	< 0.005	< 0.005	0.02	19.5
Hauling	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.5	27.5	< 0.005	< 0.005	0.03	28.9

3.19. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	75.6	75.6	< 0.005	< 0.005	0.01	76.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.2	61.2	< 0.005	0.01	< 0.005	63.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Grading (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	79.7	79.7	< 0.005	< 0.005	0.25	80.9

Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.1	61.1	< 0.005	0.01	0.16	63.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.31	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	75.6	75.6	< 0.005	< 0.005	0.01	76.5
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	61.2	61.2	< 0.005	0.01	< 0.005	63.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.20	4.20	< 0.005	< 0.005	0.01	4.26
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.35	3.35	< 0.005	< 0.005	< 0.005	3.50
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.70	0.70	< 0.005	< 0.005	< 0.005	0.70
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.55	0.55	< 0.005	< 0.005	< 0.005	0.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.13	1.65	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	385	385	0.02	0.01	0.04	390
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	624	624	0.03	0.09	0.04	651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	61.2	61.2	< 0.005	< 0.005	0.09	62.0
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	97.6	97.6	< 0.005	0.01	0.11	102
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.02	10.3
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	0.02	16.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.11	0.13	1.65	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	385	385	0.02	0.01	0.04	390
Vendor	0.04	0.02	0.72	0.34	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	624	624	0.03	0.09	0.04	651
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	61.2	61.2	< 0.005	< 0.005	0.09	62.0
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	97.6	97.6	< 0.005	0.01	0.11	102
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.02	10.3
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.2	16.2	< 0.005	< 0.005	0.02	16.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.13	1.53	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	378	378	0.01	0.01	0.03	382
Vendor	0.04	0.02	0.68	0.32	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	612	612	0.03	0.08	0.04	638
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.8	60.8	< 0.005	< 0.005	0.08	61.6
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.9	96.9	< 0.005	0.01	0.11	101
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.1	16.1	< 0.005	< 0.005	0.02	16.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.13	1.53	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	378	378	0.01	0.01	0.03	382
Vendor	0.04	0.02	0.68	0.32	< 0.005	< 0.005	0.17	0.18	< 0.005	0.05	0.05	—	612	612	0.03	0.08	0.04	638

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	60.8	60.8	< 0.005	< 0.005	0.08	61.6
Vendor	0.01	< 0.005	0.11	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	96.9	96.9	< 0.005	0.01	0.11	101
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.01	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.1	16.1	< 0.005	< 0.005	0.02	16.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380

Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.60	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	133	133	0.01	< 0.005	0.41	135
Vendor	0.05	0.02	0.79	0.38	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	734	734	0.03	0.10	1.91	767
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.8	22.8	< 0.005	< 0.005	0.03	23.1
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	131	131	0.01	0.02	0.15	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	0.01	3.82
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.6	21.6	< 0.005	< 0.005	0.02	22.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.60	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	133	133	0.01	< 0.005	0.41	135

Vendor	0.05	0.02	0.79	0.38	0.01	0.01	0.21	0.21	0.01	0.06	0.06	—	734	734	0.03	0.10	1.91	767
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.8	22.8	< 0.005	< 0.005	0.03	23.1
Vendor	0.01	< 0.005	0.15	0.07	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	131	131	0.01	0.02	0.15	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.77	3.77	< 0.005	< 0.005	0.01	3.82
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.6	21.6	< 0.005	< 0.005	0.02	22.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	7/21/2026	8/31/2026	5.00	30.0	Bridge Demolition
Site Preparation 1	Site Preparation	4/1/2026	4/14/2026	5.00	10.0	Clear and Grub and AC Removal
Site Preparation 2	Site Preparation	7/20/2027	8/16/2027	5.00	20.0	Electrical/Striping
Grading 1	Grading	4/8/2026	5/5/2026	5.00	20.0	Drainage/Sub-Grade
Grading 2	Grading	5/4/2026	5/15/2026	5.00	10.0	Grading/Excavation
Grading 3	Grading	5/18/2026	7/10/2026	5.00	40.0	Retaining Walls
Grading 4	Grading	6/2/2026	8/24/2026	5.00	60.0	Access Ramp
Grading 5	Grading	7/9/2026	7/22/2026	5.00	10.0	Diversion Structure/Excavation
Grading 6	Grading	8/27/2026	11/18/2026	5.00	60.0	Auger Drilling
Grading 7	Grading	3/23/2027	4/19/2027	5.00	20.0	Subgrade
Building Construction	Building Construction	10/13/2026	3/22/2027	5.00	115	Bridge Construction
Paving	Paving	4/20/2027	7/19/2027	5.00	65.0	Paving

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Site Preparation 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38

Paving	Tractors/Loaders/Backh	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50

Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation 1	—	—	—	—
Site Preparation 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 1	Hauling	10.0	30.0	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	18.5	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	30.0	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT
Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	10.2	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	10.2	HHDT,MHDT

Grading 2	Hauling	5.00	30.0	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	10.2	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	10.2	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	10.2	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—
Grading 6	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	10.2	HHDT,MHDT
Grading 6	Hauling	10.0	30.0	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	10.2	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	30.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	24.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation 1	—	—	—	—
Site Preparation 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 1	Hauling	10.0	30.0	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	18.5	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	30.0	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	10.2	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT

Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	10.2	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	10.2	HHDT,MHDT
Grading 2	Hauling	5.00	30.0	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	10.2	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	10.2	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	10.2	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—

Grading 6	Worker	8.00	18.5	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	10.2	HHDT,MHDT
Grading 6	Hauling	10.0	30.0	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	18.5	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	10.2	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	30.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	24.0	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation 1	0.00	1,000	5.00	0.00	—
Site Preparation 2	0.00	0.00	18.8	0.00	—
Grading 1	0.00	0.00	10.0	0.00	—
Grading 2	0.00	500	5.00	0.00	—
Grading 3	0.00	0.00	0.00	0.00	—
Grading 4	0.00	0.00	0.00	0.00	—
Grading 5	0.00	0.00	5.00	0.00	—
Grading 6	0.00	0.00	0.00	0.00	—
Grading 7	0.00	0.00	10.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	2.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005

2027	0.00	532	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project construction would occur April 2026 through August 2027.
Construction: Off-Road Equipment	Equipment adjusted based off information from applicant.
Construction: Trips and VMT	Updated worker, vendor, and haul trips, based on information from applicant. Distance disposal facility assumed to be 30 miles from project site (Whitter or Puente Landfills).
Construction: Dust From Material Movement	1,000 CY material exported during clearing and grubbing/AC pavement removal and 500 CY export during grading/excavation.

Wilmington Ave over Compton Creek - LST Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Wilmington Ave over Compton Creek - LST
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	17.8
Location	Compton, CA, USA
County	Los Angeles-South Coast
City	Compton
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4266
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Other Asphalt Surfaces	2.00	Acre	2.00	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.14	1.81	17.1	22.2	0.04	0.63	1.07	1.58	0.58	0.12	0.64	—	4,558	4,558	0.19	0.04	0.07	4,575
Mit.	2.14	1.81	17.1	22.2	0.04	0.63	0.42	0.93	0.58	0.05	0.61	—	4,558	4,558	0.19	0.04	0.07	4,575
% Reduced	—	—	—	—	—	—	61%	41%	—	60%	5%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.49	1.24	12.3	14.9	0.03	0.39	0.53	0.70	0.36	0.06	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
Mit.	1.49	1.24	12.3	14.9	0.03	0.39	0.21	0.40	0.36	0.02	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
% Reduced	—	—	—	—	—	—	61%	42%	—	61%	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.58	0.49	4.68	6.03	0.01	0.16	0.08	0.24	0.15	0.01	0.16	—	1,255	1,255	0.06	0.01	0.01	1,261
Mit.	0.58	0.49	4.68	6.03	0.01	0.16	0.03	0.19	0.15	< 0.005	0.15	—	1,255	1,255	0.06	0.01	0.01	1,261
% Reduced	—	—	—	—	—	—	59%	19%	—	56%	3%	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
Mit.	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.03	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
% Reduced	—	—	—	—	—	—	59%	19%	—	56%	3%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.14	1.81	17.1	22.2	0.04	0.63	1.07	1.58	0.58	0.12	0.64	—	4,558	4,558	0.19	0.04	0.07	4,575
2027	1.52	1.36	10.1	14.4	0.02	0.41	0.53	0.70	0.38	0.06	0.38	—	2,166	2,166	0.10	0.02	0.04	2,176
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.49	1.24	12.3	14.9	0.03	0.39	0.01	0.40	0.36	< 0.005	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
2027	1.30	1.09	10.3	12.1	0.03	0.34	0.53	0.70	0.32	0.06	0.32	—	2,966	2,966	0.13	0.03	< 0.005	2,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.58	0.49	4.68	6.03	0.01	0.16	0.08	0.24	0.15	0.01	0.16	—	1,255	1,255	0.06	0.01	0.01	1,261
2027	0.52	0.45	3.68	4.88	0.01	0.14	0.03	0.17	0.13	< 0.005	0.13	—	913	913	0.04	0.01	0.01	917
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
2027	0.09	0.08	0.67	0.89	< 0.005	0.03	0.01	0.03	0.02	< 0.005	0.02	—	151	151	0.01	< 0.005	< 0.005	152

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.14	1.81	17.1	22.2	0.04	0.63	0.42	0.93	0.58	0.05	0.61	—	4,558	4,558	0.19	0.04	0.07	4,575
2027	1.52	1.36	10.1	14.4	0.02	0.41	0.21	0.42	0.38	0.02	0.38	—	2,166	2,166	0.10	0.02	0.04	2,176
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.49	1.24	12.3	14.9	0.03	0.39	0.01	0.40	0.36	< 0.005	0.36	—	3,413	3,413	0.17	0.04	< 0.005	3,430
2027	1.30	1.09	10.3	12.1	0.03	0.34	0.21	0.37	0.32	0.02	0.32	—	2,966	2,966	0.13	0.03	< 0.005	2,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.58	0.49	4.68	6.03	0.01	0.16	0.03	0.19	0.15	< 0.005	0.15	—	1,255	1,255	0.06	0.01	0.01	1,261
2027	0.52	0.45	3.68	4.88	0.01	0.14	0.01	0.15	0.13	< 0.005	0.13	—	913	913	0.04	0.01	0.01	917
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11	0.09	0.85	1.10	< 0.005	0.03	0.01	0.03	0.03	< 0.005	0.03	—	208	208	0.01	< 0.005	< 0.005	209
2027	0.09	0.08	0.67	0.89	< 0.005	0.03	< 0.005	0.03	0.02	< 0.005	0.02	—	151	151	0.01	< 0.005	< 0.005	152

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.90	1.90	< 0.005	< 0.005	< 0.005	2.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.33

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.28	2.53	3.74	0.01	0.07	—	0.07	0.07	—	0.07	—	534	534	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	43.9	43.9	< 0.005	< 0.005	—	44.1
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.27	7.27	< 0.005	< 0.005	—	7.30
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.15	0.15	< 0.005	< 0.005	< 0.005	0.16
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.90	1.90	< 0.005	< 0.005	< 0.005	2.01
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.33

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movemen	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	4.77	7.45	0.01	0.22	—	0.22	0.20	—	0.20	—	1,149	1,149	0.05	0.01	—	1,153
Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	31.5	31.5	< 0.005	< 0.005	—	31.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.21	5.21	< 0.005	< 0.005	—	5.23
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.11

3.5. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179

Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Site Preparation (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.11	1.50	< 0.005	0.03	—	0.03	0.02	—	0.02	—	178	178	0.01	< 0.005	—	179
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.75	9.75	< 0.005	< 0.005	—	9.79
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.61	1.61	< 0.005	< 0.005	—	1.62
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.20	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.0	47.0	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.81

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.19
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.01	12.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.34
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.06

3.10. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.55	11.3	0.02	0.33	—	0.33	0.30	—	0.30	—	1,722	1,722	0.07	0.01	—	1,728

Dust From Material Movemen	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.21	0.31	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.2	47.2	< 0.005	< 0.005	—	47.4
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.81	7.81	< 0.005	< 0.005	—	7.84
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.84	1.84	< 0.005	< 0.005	< 0.005	1.99
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.01	< 0.005	0.07	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.5	11.5	< 0.005	< 0.005	0.01	12.2

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.32	0.32	< 0.005	< 0.005	< 0.005	0.34
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.06

3.11. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	5.90	6.46	0.01	0.19	—	0.19	0.18	—	0.18	—	1,577	1,577	0.06	0.01	—	1,583
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.65	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	173	173	0.01	< 0.005	—	173
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	28.6	28.6	< 0.005	< 0.005	—	28.7
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.27	0.27	< 0.005	< 0.005	< 0.005	0.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.35	0.35	< 0.005	< 0.005	< 0.005	0.37
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.05
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.06	0.06	< 0.005	< 0.005	< 0.005	0.06
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.07	3.07	< 0.005	< 0.005	< 0.005	3.32
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.56
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	7.41	9.97	0.02	0.25	—	0.25	0.23	—	0.23	—	2,105	2,105	0.09	0.02	—	2,112
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.22	1.64	< 0.005	0.04	—	0.04	0.04	—	0.04	—	346	346	0.01	< 0.005	—	347
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.22	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	57.3	57.3	< 0.005	< 0.005	—	57.5
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.07	3.07	< 0.005	< 0.005	< 0.005	3.32
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.54
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.56
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.08	0.08	< 0.005	< 0.005	< 0.005	0.09
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861

Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.44	3.74	5.54	0.01	0.19	—	0.19	0.17	—	0.17	—	858	858	0.03	0.01	—	861
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	23.5	23.5	< 0.005	< 0.005	—	23.6
Dust From Material Movemen	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.89	3.89	< 0.005	< 0.005	—	3.91
Dust From Material Movemen	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.21	3.21	< 0.005	< 0.005	< 0.005	3.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	0.02	0.01	0.22	0.17	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.3	35.3	0.01	0.01	0.03	37.3
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.62
Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.7	35.7	0.01	0.01	< 0.005	37.6
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.3	23.3	0.01	< 0.005	< 0.005	24.7

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.43
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.83	5.83	< 0.005	< 0.005	< 0.005	6.14
Hauling	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.81	3.81	< 0.005	< 0.005	< 0.005	4.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	1.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67

3.18. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	1.20	2.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	384	384	0.02	< 0.005	—	386

Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.20	0.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.2	63.2	< 0.005	< 0.005	—	63.4
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.04	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Dust From Material Movemen	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.45	2.45	< 0.005	< 0.005	< 0.005	2.66
Vendor	0.02	0.01	0.22	0.17	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.3	35.3	0.01	0.01	0.03	37.3
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.0	23.0	0.01	< 0.005	0.01	24.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.62
Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	35.7	35.7	0.01	0.01	< 0.005	37.6
Hauling	0.01	0.01	0.15	0.11	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	23.3	23.3	0.01	< 0.005	< 0.005	24.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.43
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.83	5.83	< 0.005	< 0.005	< 0.005	6.14
Hauling	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.81	3.81	< 0.005	< 0.005	< 0.005	4.03
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	1.02
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	< 0.005	0.67

3.19. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.93
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.19	3.19	< 0.005	< 0.005	< 0.005	3.37
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Grading (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.44	5.56	0.01	0.17	—	0.17	0.15	—	0.15	—	859	859	0.03	0.01	—	862
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.19	0.30	< 0.005	0.01	—	0.01	0.01	—	0.01	—	47.1	47.1	< 0.005	< 0.005	—	47.2
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.79	7.79	< 0.005	< 0.005	—	7.82
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.96

Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.16	3.16	< 0.005	< 0.005	< 0.005	3.33
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	< 0.005	0.05	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.78	1.78	< 0.005	< 0.005	< 0.005	1.93
Vendor	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.19	3.19	< 0.005	< 0.005	< 0.005	3.37
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.10	0.10	< 0.005	< 0.005	< 0.005	0.11
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.02	0.02	< 0.005	< 0.005	< 0.005	0.02
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.03	0.03	< 0.005	< 0.005	< 0.005	0.03
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.02	0.27	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	9.07	9.07	0.01	< 0.005	< 0.005	9.84
Vendor	0.02	0.01	0.21	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	32.4	32.4	0.01	0.01	< 0.005	34.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.55
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.05	5.05	< 0.005	< 0.005	< 0.005	5.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.26
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	1.02	10.5	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	2,926	2,926	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.64	1.83	< 0.005	0.06	—	0.06	0.05	—	0.05	—	458	458	0.02	< 0.005	—	460
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.30	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	75.8	75.8	< 0.005	< 0.005	—	76.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.09	0.09	0.02	0.27	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	9.07	9.07	0.01	< 0.005	< 0.005	9.84
Vendor	0.02	0.01	0.21	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	32.4	32.4	0.01	0.01	< 0.005	34.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.55
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.05	5.05	< 0.005	< 0.005	< 0.005	5.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.26
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.84	0.84	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.02	0.26	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	8.88	8.88	0.01	< 0.005	< 0.005	9.64
Vendor	0.02	0.01	0.20	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.9	31.9	0.01	0.01	< 0.005	33.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.54
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.03	5.03	< 0.005	< 0.005	< 0.005	5.31
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.25
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.00	10.1	11.7	0.03	0.34	—	0.34	0.32	—	0.32	—	2,925	2,925	0.12	0.02	—	2,936
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.60	1.85	< 0.005	0.05	—	0.05	0.05	—	0.05	—	464	464	0.02	< 0.005	—	465
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.29	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	76.8	76.8	< 0.005	< 0.005	—	77.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.02	0.26	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	8.88	8.88	0.01	< 0.005	< 0.005	9.64
Vendor	0.02	0.01	0.20	0.16	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.9	31.9	0.01	0.01	< 0.005	33.7

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.04	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.41	1.41	< 0.005	< 0.005	< 0.005	1.54
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.03	5.03	< 0.005	< 0.005	< 0.005	5.31
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.23	0.23	< 0.005	< 0.005	< 0.005	0.25
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.88
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380

Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.01	3.01	< 0.005	< 0.005	< 0.005	3.26
Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.9	37.9	0.01	0.01	0.04	40.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.58
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.79	6.79	< 0.005	< 0.005	< 0.005	7.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.47	1.24	9.84	14.2	0.02	0.41	—	0.41	0.38	—	0.38	—	2,125	2,125	0.09	0.02	—	2,133
Paving	—	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.75	2.52	< 0.005	0.07	—	0.07	0.07	—	0.07	—	379	379	0.02	< 0.005	—	380
Paving	—	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.32	0.46	< 0.005	0.01	—	0.01	0.01	—	0.01	—	62.7	62.7	< 0.005	< 0.005	—	62.9
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.01	3.01	< 0.005	< 0.005	< 0.005	3.26

Vendor	0.02	0.01	0.23	0.18	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.9	37.9	0.01	0.01	0.04	40.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.53	0.53	< 0.005	< 0.005	< 0.005	0.58
Vendor	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.79	6.79	< 0.005	< 0.005	< 0.005	7.15
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.10
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.12	1.12	< 0.005	< 0.005	< 0.005	1.18
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	7/21/2026	8/31/2026	5.00	30.0	Bridge Demolition
Site Preparation 1	Site Preparation	4/1/2026	4/14/2026	5.00	10.0	Clear and Grub and AC Removal
Site Preparation 2	Site Preparation	7/20/2027	8/16/2027	5.00	20.0	Electrical/Striping
Grading 1	Grading	4/8/2026	5/5/2026	5.00	20.0	Drainage/Sub-Grade
Grading 2	Grading	5/4/2026	5/15/2026	5.00	10.0	Grading/Excavation
Grading 3	Grading	5/18/2026	7/10/2026	5.00	40.0	Retaining Walls
Grading 4	Grading	6/2/2026	8/24/2026	5.00	60.0	Access Ramp
Grading 5	Grading	7/9/2026	7/22/2026	5.00	10.0	Diversion Structure/Excavation
Grading 6	Grading	8/27/2026	11/18/2026	5.00	60.0	Auger Drilling
Grading 7	Grading	3/23/2027	4/19/2027	5.00	20.0	Subgrade
Building Construction	Building Construction	10/13/2026	3/22/2027	5.00	115	Bridge Construction
Paving	Paving	4/20/2027	7/19/2027	5.00	65.0	Paving

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Site Preparation 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38

Paving	Tractors/Loaders/Backh	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation 1	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 1	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 1	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 2	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 2	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading 4	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50

Grading 4	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 4	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 5	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 5	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 7	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading 7	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Building Construction	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Building Construction	Cranes	Diesel	Average	2.00	8.00	367	0.29
Building Construction	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Building Construction	Rough Terrain Forklifts	Diesel	Average	2.00	8.00	96.0	0.40
Paving	Graders	Diesel	Average	1.00	8.00	148	0.41
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Paving	Rollers	Diesel	Average	3.00	8.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading 2	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Grading 3	Aerial Lifts	Diesel	Average	1.00	8.00	46.0	0.31
Grading 3	Cranes	Diesel	Average	1.00	8.00	367	0.29
Grading 3	Pumps	Diesel	Average	1.00	8.00	11.0	0.74
Grading 3	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Rough Terrain Forklifts	Diesel	Average	1.00	8.00	96.0	0.40
Grading 4	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading 6	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Paving	Sweepers/Scrubbers	Diesel	Average	1.00	8.00	36.0	0.46
Site Preparation 2	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation 1	—	—	—	—
Site Preparation 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 1	Hauling	10.0	0.19	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	0.19	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	0.19	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT
Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	0.19	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	0.19	HHDT,MHDT

Grading 2	Hauling	5.00	0.19	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	0.19	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	0.19	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	0.19	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	0.19	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—
Grading 6	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	0.19	HHDT,MHDT
Grading 6	Hauling	10.0	0.19	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	0.19	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT

Building Construction	—	—	—	—
Building Construction	Worker	30.0	0.19	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	0.19	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	0.19	LDA,LDT1,LDT2
Paving	Vendor	24.0	0.19	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation 1	—	—	—	—
Site Preparation 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 1	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 1	Hauling	10.0	0.19	HHDT
Site Preparation 1	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	6.00	0.19	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	10.0	0.19	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT
Site Preparation 2	—	—	—	—
Site Preparation 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Site Preparation 2	Vendor	2.00	0.19	HHDT,MHDT
Site Preparation 2	Hauling	0.00	20.0	HHDT

Site Preparation 2	Onsite truck	0.00	0.00	HHDT
Grading 1	—	—	—	—
Grading 1	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 1	Vendor	2.00	0.19	HHDT,MHDT
Grading 1	Hauling	0.00	20.0	HHDT
Grading 1	Onsite truck	0.00	0.00	HHDT
Grading 2	—	—	—	—
Grading 2	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 2	Vendor	2.00	0.19	HHDT,MHDT
Grading 2	Hauling	5.00	0.19	HHDT
Grading 2	Onsite truck	0.00	0.00	HHDT
Grading 3	—	—	—	—
Grading 3	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 3	Vendor	2.00	0.19	HHDT,MHDT
Grading 3	Hauling	0.00	20.0	HHDT
Grading 3	Onsite truck	0.00	0.00	HHDT
Grading 4	—	—	—	—
Grading 4	Worker	10.0	0.19	LDA,LDT1,LDT2
Grading 4	Vendor	2.00	0.19	HHDT,MHDT
Grading 4	Hauling	0.00	20.0	HHDT
Grading 4	Onsite truck	0.00	0.00	HHDT
Grading 5	—	—	—	—
Grading 5	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 5	Vendor	2.00	0.19	HHDT,MHDT
Grading 5	Hauling	0.00	20.0	HHDT
Grading 5	Onsite truck	0.00	0.00	HHDT
Grading 6	—	—	—	—

Grading 6	Worker	8.00	0.19	LDA,LDT1,LDT2
Grading 6	Vendor	22.0	0.19	HHDT,MHDT
Grading 6	Hauling	10.0	0.19	HHDT
Grading 6	Onsite truck	0.00	0.00	HHDT
Grading 7	—	—	—	—
Grading 7	Worker	6.00	0.19	LDA,LDT1,LDT2
Grading 7	Vendor	2.00	0.19	HHDT,MHDT
Grading 7	Hauling	0.00	20.0	HHDT
Grading 7	Onsite truck	0.00	0.00	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	30.0	0.19	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	0.19	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	10.0	0.19	LDA,LDT1,LDT2
Paving	Vendor	24.0	0.19	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	—	—
Site Preparation 1	0.00	1,000	5.00	0.00	—
Site Preparation 2	0.00	0.00	18.8	0.00	—
Grading 1	0.00	0.00	10.0	0.00	—
Grading 2	0.00	500	5.00	0.00	—
Grading 3	0.00	0.00	0.00	0.00	—
Grading 4	0.00	0.00	0.00	0.00	—
Grading 5	0.00	0.00	5.00	0.00	—
Grading 6	0.00	0.00	0.00	0.00	—
Grading 7	0.00	0.00	10.0	0.00	—
Paving	0.00	0.00	0.00	0.00	2.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Other Asphalt Surfaces	2.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	532	0.03	< 0.005

2027	0.00	532	0.03	< 0.005

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project construction would occur April 2026 through August 2027.
Construction: Off-Road Equipment	Equipment adjusted based off information from applicant.
Construction: Trips and VMT	Updated worker, vendor, and haul trips, based on information from applicant. Distance disposal facility assumed to be 30 miles from project site (Whitter or Puente Landfills). Assumed trip length of 0.19 miles for LST.
Construction: Dust From Material Movement	1,000 CY material exported during clearing and grubbing/AC pavement removal and 500 CY export during grading/excavation.

Appendix B

Natural Environment Study (Minimal Impacts)

Natural Environment Study

(Minimal Impacts)

Wilmington Avenue Bridge Replacement Over Compton Creek Project

City of Compton, California

District No. 7

Federal Project No.: BRLS-5953(615)

May 2020

STATE OF CALIFORNIA
Department of Transportation

LOS ANGELES COUNTY
Department of Public Works

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Summary

This Natural Environment Study-Minimal Impacts report was prepared for Los Angeles County Department of Public Works for the proposed Wilmington Avenue Bridge over Compton Creek Project (proposed project), located within the City of Compton in southern Los Angeles County. Specifically, the proposed project would be located along the Wilmington Avenue right-of-way (ROW) where it crosses over Compton Creek, 500 feet north of the Compton Boulevard/Wilmington Avenue intersection. Los Angeles County Department of Public Works is proposing to replace an existing two-span steel girder bridge with a new two-span precast, pre-stressed concrete box beam structure bridge to remedy structural deficiencies associated with the existing bridge and to improve vehicular safety and transportation efficiency over Compton Creek. A Biological Study Area (BSA), encompassing 45.08 acres, was established around the impact area for the propose project to document existing conditions and determine the potential for project-related impacts to occur.

The BSA is largely developed or disturbed in nature with existing residential and commercial developments, ROWs, as well as a concrete-lined flood control channel (i.e., Compton Creek). The BSA does not contain suitable habitat for any federal or state listed plant or wildlife species. However, the BSA is centered on Compton Creek, a major tributary to the Los Angeles River, which likely contains jurisdictional waters of the U.S. and State. Although temporary and permanent impacts to waters of the U.S. and State are anticipated to occur as a result of the proposed project, these impacts are considered less than significant.

No special-status plant or wildlife species were detected within the BSA during the biological resource survey conducted on August 1, 2019. Based on the review of current state and federal databases, including the California Natural Diversity Database and U.S. Fish and Wildlife Service (USFWS) Information Planning and Conservation System, no special-status plant or wildlife species have a moderate or higher potential to occur in the BSA. In addition, the BSA is not located within any USFWS-designated critical habitat or a designated wildlife movement corridor. The BSA also does not reside within any approved or proposed Habitat Conservation Plans or Natural Community Conservation Plans.

The BSA does contain the underside of the bridge and ornamental vegetation that could provide suitable nesting habitat for resident and migratory bird species protected under the Migratory Bird Treaty Act and California Fish and Game Code. As such, avoidance and minimization measures would be required to minimize impacts to migratory birds if construction activities take place during the general avian nesting season from February 1st through September 1st.

1. Introduction

This Natural Environment Study-Minimal Impacts (NES-MI) report has been prepared for the Wilmington Avenue Bridge over Compton Creek Project (proposed project). The Los Angeles County Department of Public Works (LADPW) is proposing to replace an existing two-span steel girder bridge with a new two-span precast, pre-stressed concrete box beam structure bridge to remedy structural deficiencies associated with the existing bridge and to improve vehicular safety and transportation efficiency over Compton Creek.

1.1 History

The existing two-span steel girder bridge was built in 1938 and is currently supported by abutments and a middle pier. The existing bridge includes two 11-foot wide travel lanes, one 11-foot wide shoulder, and a 13-foot wide raised median.

1.2 Project Purpose and Need

The proposed project would correct existing bridge deficiencies, enhance vehicular safety on the bridge and improve transportation efficiency by enabling larger trucks to utilize the bridge. The project is being proposed because the existing steel girder bridge and middle pier have been determined to be structurally deficient due to extensive cracking and delamination of the bridge deck. The proposed project would include replacing the existing, steel girder bridge and pier with a new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, a new pier and new abutments.

1.3 Project Description

The proposed project would be located at Wilmington Avenue where it crosses over Compton Creek within the City of Compton (City) in southern Los Angeles County (County) (Figure 1). The bridge replacement would be located within the South Gate U.S. Geological Survey (USGS) 7.5-minute quadrangle in Section 22, Township 3 South, Range 13 West. The area surrounding the existing bridge is largely developed with existing land uses comprised of residential and commercial development, existing right-of-ways (ROWs), as well as a concrete-lined flood control channel.

The proposed project would include demolition and construction activities. Generally, construction activities would include demolition, grading, pile drilling, installation of metal beam guardrail system, construction of bridge abutments, bridge pier reconstruction, reconstruction of sidewalks, drainage improvements (catch basins at driveway entrances) bicycle path reconstruction, roadway reconstruction to accommodate the raise in bridge elevation, and full road closures within project limits.

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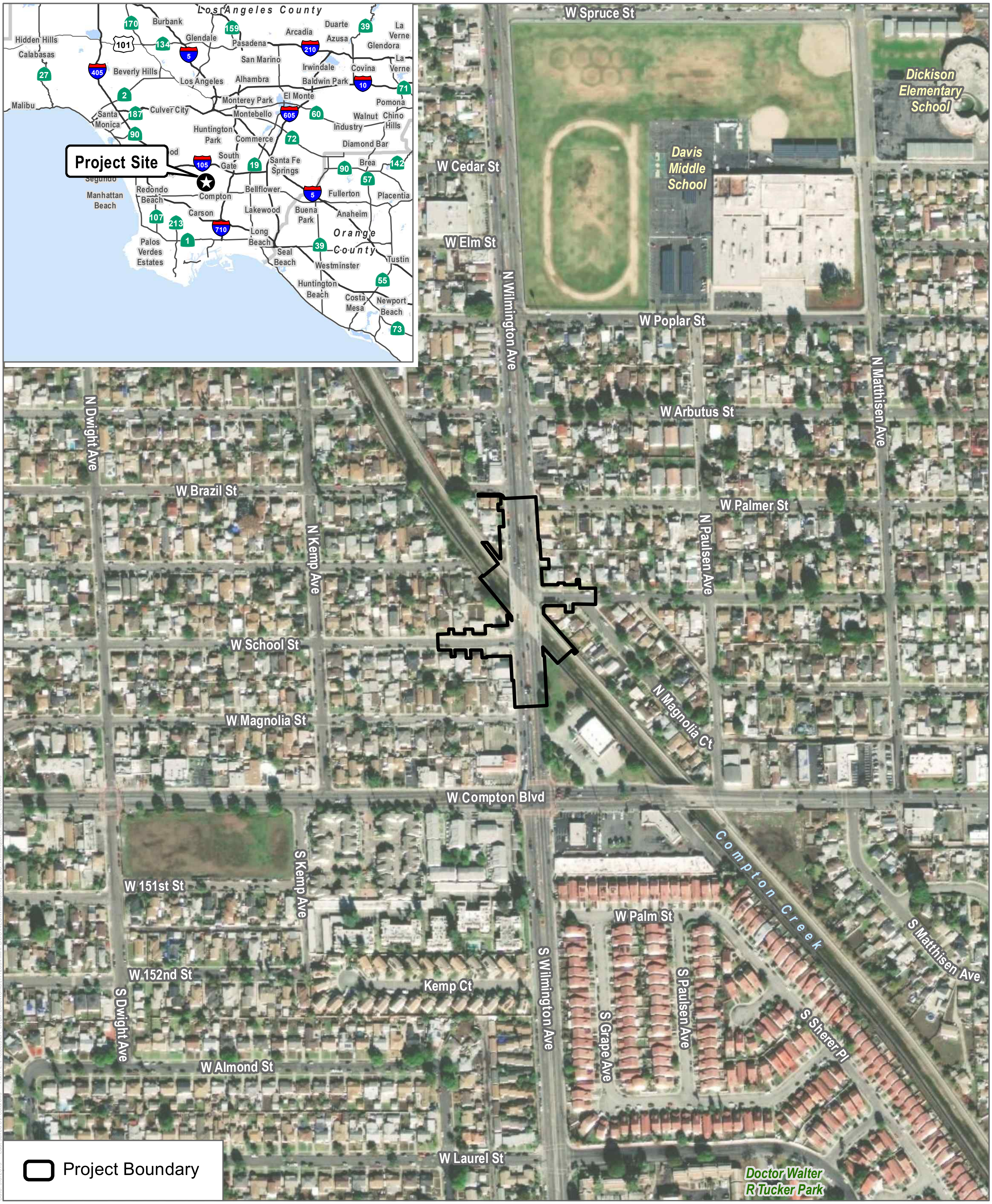


SOURCE: Esri, Digital Globe 2017; Open Street Map 2019

FIGURE 1

Project Location

The Wilmington Avenue Bridge Over Compton Creek

Under the proposed project, the existing two-span Wilmington Avenue Bridge over Compton Creek would be demolished. Specifically, the existing pier timber piles would be removed three feet below the finished grade of the channel, followed by the removal of the existing steel girders, cross brace members, reinforced concrete, asphalt pavement (bridge deck), and any excavated soil within the project limits of work. Specifically, the concrete bridge deck would be demolished by saw cutting and the steel girders would be removed by torch cutting before the transporting the fragmented pieces to the dump trucks using a crane. Once the bridge deck has been removed, all existing bridge bearing components would also be removed, including the concrete pier nose and abutments, which would be demolished using hoe rams and jackhammers,

The new concrete bridge pier would be constructed in the Compton Creek channel, at the same location as the existing pier. A new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. Bridge pier construction would involve the installation of cast-in-drilled-hole (CIDH) concrete piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations), construction of concrete pier footings and the stem wall. Specifically, a hydraulic crane and drill rig would be utilized to drill the holes and install the rebar cages, while a concrete truck, concrete pump, fork lifts and loaders would be needed to fill the drilled holes and construct the footings and stem wall. Cast-in-drilled-hole (CIDH) piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations) would support the new box beam structure. This stage would require pile driving, grading, construction of the bridge abutments and bridge pier construction.

The new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place to accommodate clearance for the new bridge structure. The new bridge soffit (underside) would be raised approximately two feet higher than the existing bridge in order to meet the freeboard requirement. Similar to the construction of the bridge pier, the construction of the bridge abutments would involve the installation of CIDH concrete piles, pile caps, and backwalls, which would utilize a drill rig and hydraulic crane, while an excavator and crane would be utilized to install the formwork and the reinforcement for the pile caps. Additional equipment needed to install the pile caps and backwall includes forklifts, loaders, concrete pumps, and a concrete truck.

The construction of the bridge superstructure would involve the installation of precast/pre-stressed adjacent concrete box beams, a cast-in-place reinforced concrete deck, sidewalks, and bridge barriers. Installation of these superstructure components would utilize a hydraulic crane, concrete slipform machine, concrete truck, and concrete pump. After the superstructure has been constructed, the bike paths, and access ramp would be reconstructed and the roadway would be paved and restriped.

Project construction would also include the reconstruction of the sidewalks adjacent to the project limits. Furthermore, drainage improvements, such as catch basins, would occur on several private property driveways.

Project construction would also include the replacement of the bike paths along the Compton Creek channel. Specifically, reconstruction of the bike paths would include 400 feet of bike path along the north side of the channel along Wilmington Avenue, where the bike path would be supported on a concrete slab structure with CIDH piles. An access road, approximately 150 feet long, would be reconstructed along the channel at the southwest corner to accommodate the two-foot change in bridge elevation.

Construction Schedule

Project construction is anticipated to occur between January 2021 and May 2022, and would last for approximately 300 working days. Construction would occur Monday through Friday from 7:00am to 3:30pm.

2. Study Methods

2.1 Regulatory Requirements

The following federal, state, and local regulations provide legal coverage for biological resources that could potentially occur in the BSA.

2.1.1 Federal

Federal Endangered Species Act

The federal Endangered Species Act (FESA) of 1973 (16 U.S.C. 1531 et seq.), as amended, is administered by the U.S. Fish and Wildlife Service (USFWS) for most plant and animal species and by the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) for certain marine species. FESA is intended to provide a means to conserve the ecosystems upon which endangered and threatened species depend, and to provide programs for the conservation of those species, preventing extinction of plants and wildlife. FESA defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range” (16 U.S.C. 1531 et seq.). A threatened species is defined as “any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range” (16 U.S.C. 1531 et seq.). Under FESA, it is unlawful to take any listed species; “take” is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16 U.S.C. 1531 et seq.). FESA allows for the issuance of incidental take permits for listed species under Section 7, which is generally available for projects that also require other federal agency permits or other approvals, and under Section 10, which provides for the approval of habitat conservation plans on private property without any other federal agency involvement. Upon development of a habitat conservation plan, USFWS can issue incidental take permits for listed species.

Clean Water Act

Pursuant to Section 404 of the Clean Water Act, Army Corps of Engineers (ACOE) regulates the discharge of dredged and/or fill material into waters of the United States. The term “wetlands” (a subset of waters) is defined in Title 33, Section 328.3(b), of the Code of Federal Regulations as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” In the absence of wetlands, the limits of ACOE jurisdiction in non-tidal waters, such as intermittent streams, extend to the ordinary high water mark, as defined in Title 33, Section 328.3(e), of the Code of Federal Regulations. Pursuant to Section 10 of the Rivers and Harbors Act of 1899, ACOE regulates any potential obstruction or alteration of any navigable water of the United States.

Migratory Bird Treaty Act

The MBTA was originally passed in 1918 as four bilateral treaties, or conventions, for the protection of a shared migratory bird resource. The primary motivation for the international negotiations was to stop the "indiscriminate slaughter" of migratory birds by market hunters and others (16 U.S.C. 703–712). Each of the treaties protects selected species of birds and provides for closed and open seasons for hunting game birds. The MBTA protects more than 800 species. Two species of eagles that are native to the United States—bald eagle (*Haliaeetus leucocephalus*) and golden eagle (*Aquila chrysaetos*)—were granted additional protection within the United States under the Bald and Golden Eagle Protection Act (16 U.S.C. 668–668d) to prevent these species from becoming extinct.

2.1.2 State

California Endangered Species Act

The California Department of Fish and Wildlife (CDFW) administers the California Endangered Species Act (CESA), which prohibits the take of plant and animal species designated by the California Fish and Game Commission as endangered or threatened in California. Under CESA Section 86, "take" is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (California Fish and Game [CFG] Code, Section 86). CESA Section 2053 stipulates that state agencies may not approve projects that will "jeopardize the continued existence of any endangered species or threatened species, or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy" (CFG Code, Section 2053).

CESA defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease" (CFG Code, Section 2050 et seq.). CESA defines a threatened species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the [California Fish and Game] Commission as rare on or before January 1, 1985, is a threatened species" (California Fish and Game Code, Section 2050 et seq.). A candidate species is defined as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the Commission has published a notice of proposed regulation to add the species to either list" (CFG Code, Section 2050 et seq.). CESA does not list invertebrate species.

California Fish and Game Code, Sections 3503, 3511, 3513, 4700, 5050, and 5515

Section 2081(b) and (c) of the CFG Code authorizes take of endangered, threatened, or candidate species if take is incidental to otherwise lawful activity and if specific criteria are met. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed species that are also state-listed species. In certain circumstances, Section 2080.1 of CESA allows CDFW to adopt a federal incidental take statement or a 10(a) permit as its own, based on its findings that the federal permit adequately protects the species and is consistent with state law. A Section 2081(b) permit may not authorize the take of "fully protected" species, nest and eggs of birds, any birds in the orders Falconiformes or Strigiformes, migratory nongame bird as designated in the federal Migratory Bird Treaty Act (CFG Code, Sections 3505, 3511, 4700, 5050, and 5515). If a project is planned in an area where a fully protected species or a specified bird occurs, an applicant must design the project to avoid take.

California Fish and Game Code, Sections 1600–1602

Pursuant to Section 1602 of the CFG Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. A streambed alteration agreement is required for impacts to jurisdictional wetlands in accordance with Section 1602 of the CFG Code.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires identification of a project's potentially significant impacts on biological resources and ways that such impacts can be avoided, minimized, or mitigated. CEQA also provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts.

Special-Status Plants and Wildlife

The CEQA Guidelines define endangered animals or plants as species or subspecies whose "survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors" (14 CCR 15380(b)(1)). A rare animal or plant is defined in CEQA Guidelines, Section 15380(b)(2), as a species that, although not currently threatened with extinction, exists "in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or . . . [t]he species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered 'threatened' as that term is used in the federal Endangered Species Act" (14 CCR 15380(b)(2)). Additionally, an animal or plant may be presumed to be endangered, rare, or threatened if it meets the criteria for listing as defined further in CEQA Guidelines, Section 15380(c).

Endangered, rare, or threatened plant species as defined in Section 15380(b) of the CEQA Guidelines (14 CCR 15000 et seq.) are referred to as "special-status plant species" in this report and include endangered or threatened plant species recognized in the context of CESA and

FESA (CDFW 2019ba) and plant species with a CRPR 1 through 4 (CNPS 2019). Species with CRPR 3 or 4 may, but generally do not, qualify for protection under this provision. Species with CRPR 3 and 4 are those that require more information to determine status and plants of limited distribution. Thus, CRPR 3 and 4 plant species are not analyzed further.

Endangered, rare, or threatened wildlife species as defined in CEQA Guidelines, Section 15380(b) (14 CCR 15000 et seq.), are referred to as "special-status wildlife species" and, as used in this report, include (1) endangered or threatened wildlife species recognized in the context of CESA and FESA (CDFW 2019b); (2) California Species of Special Concern (SSC) and Watch List species as designated by CDFW (2019c); (3) mammals and birds that are fully protected species as described in the CFG Code, Sections 4700 and 3511; and (4) Birds of Conservation Concern as designated by USFWS (2008).

Natural Communities of Special Concern

Sensitive natural communities, as defined in Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines (14 CCR 15000 et seq.), are referred to as "natural communities of special concern" and, as used in this report, include communities identified as high priority for inventory in the California Natural Community List (CDFW 2018b) by a state rarity ranking of S1, S2, or S3.

2.2 Studies Required

A Biological Study Area (BSA) consisting of the proposed project impact area and a 500-foot buffer (Figure 2) was created to determine the biological resources within and near the proposed project that could potentially be affected by project implementation. Data regarding biological and jurisdictional resources present within the BSA was obtained through a review of pertinent literature and field reconnaissance, and impacts to these resources were analyzed pursuant to relevant regulatory requirements, described in detail below.

A literature search was conducted to determine what biological resources have previously been mapped in the project vicinity and provided a focus for the field effort. The biological resources observed during the field survey were mapped and noted to establish the baseline conditions of the BSA.

2.2.1 Literature Search

The following data sources were reviewed to assist with biological assessment efforts:

- USFWS Critical Habitat Mapper (USFWS 2019a);
- USFWS Information Planning and Conservation (IPaC) System (USFWS 2019b);
- National Marine Fisheries Service (NMFS) Species List (NMFS 2016);
- California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB; CDFW 2019d); and

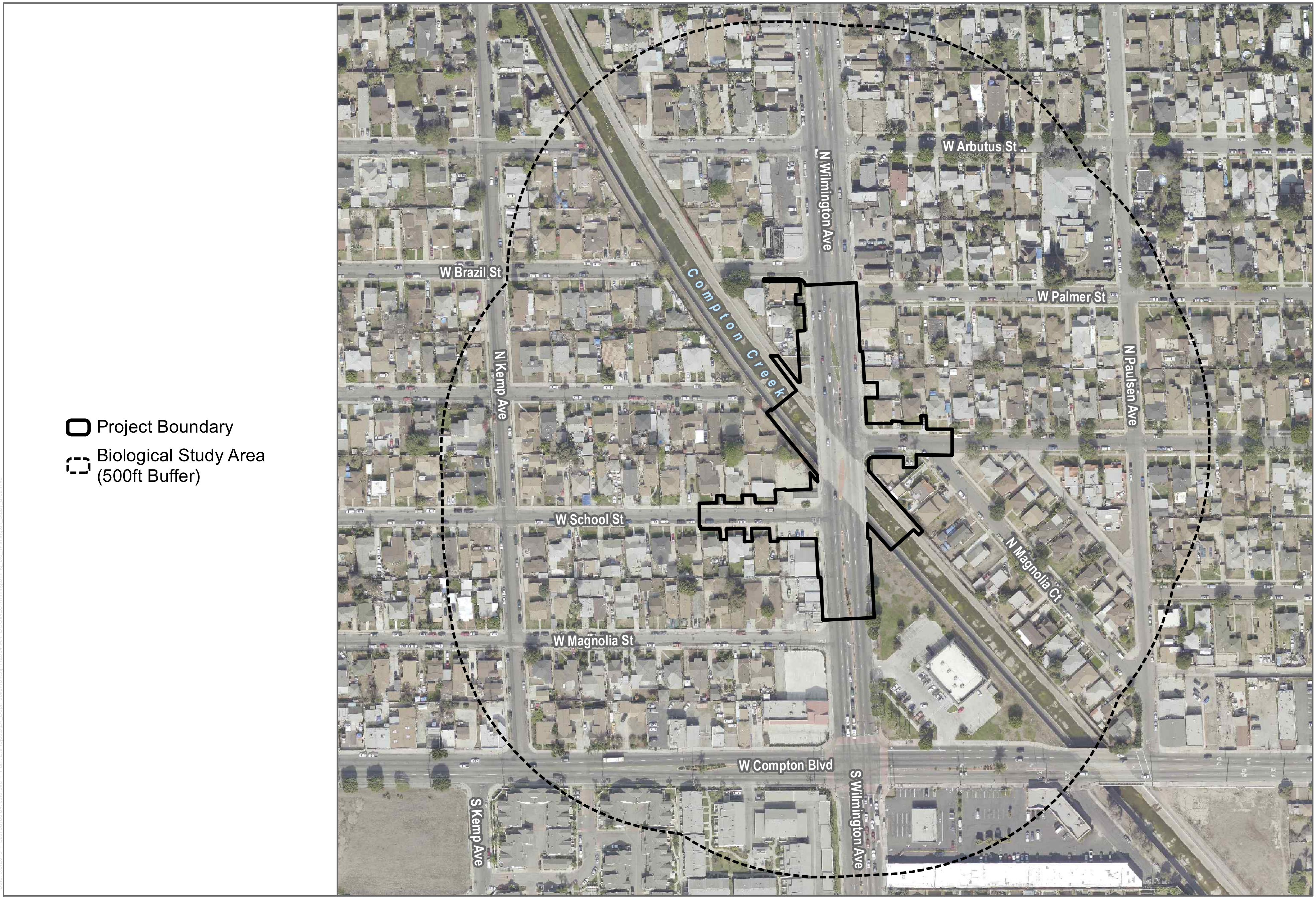
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (CNPS 2019).

2.2.2 Field Review

Dudek biologist Tracy Park conducted a field survey of the project site and surrounding BSA under the supervision of senior biologist Michael Cady. The biological reconnaissance-level survey included the mapping of the vegetation communities and land covers present within the BSA, mapping of potential jurisdictional wetlands or waters, identification of invasive plants, and an evaluation of the potential for special-status species to occur in the BSA.

Survey Methods

All plant and wildlife species observed during the field survey by sight, calls, tracks, scat, or other signs were recorded. Binoculars (10x42 magnification) were used to aid in the identification of wildlife. Typically, vegetation communities are mapped following *A Manual of California Vegetation, 2nd Edition* (Sawyer et al. 2009). However due to the heavy urban development occurring throughout the BSA, no natural vegetation communities were observed, so communities and land cover types were mapped according to their dominant characteristics. Plant species were identified to species, including invasive plants. The California Invasive Plant Council (Cal-IPC) maintains the Cal-IPC Inventory, which presents the best available knowledge of invasive plant experts in California and species categorization is based on an assessment of ecological impacts (Cal-IPC 2019).



SOURCE: Esri, Digital Globe 2017; Open Street Map 2019

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FIGURE 2

Biological Study Area

The Wilmington Avenue Bridge Over Compton Creek

The potential for special-status plant and wildlife species to occur with the BSA was evaluated based on the vegetation communities and soils available, if present. Where applicable, Dudek used the CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018a).

Personnel Survey Dates

Dudek biologist Tracy Park conducted a biological reconnaissance-level field survey of the BSA for Wilmington Avenue Bridge over Compton Creek on August 1, 2019 (Table 1).

Table 1: Biological Reconnaissance-Level Survey

Date	Hours	Personnel	Focus	Conditions
8/1/2019	1205-1235	TP	General biological reconnaissance level survey, vegetation mapping, resources mapping, habitat assessment	80-81°F, 0% cc, 2-5 mph wind

TP = Tracy Park; °F = degrees Fahrenheit; cc = cloud cover; mph = miles per hour

Ms. Park has over three years' experience as a field technician and biologist conducting biological surveys throughout Southern California. Her experience includes conducting various wildlife and botanical surveys, habitat assessments, vegetation mapping, and wetland delineations, as well as reporting for projects requiring CEQA compliance. She has conducted focused protocol surveys for a variety sensitive plant and wildlife species.

Michael Cady is the supervising biologist for this project. He has over 15 years' professional experience as a biologist specializing in technical surveys and reporting in support of projects requiring CEQA/NEPA compliance. His field experience includes conducting rare plant surveys, general flora and fauna surveys, oak and general tree surveys, vegetation mapping, and nesting bird surveys. Additionally, he has conducted protocol surveys and habitat assessments for a variety of special-status wildlife species. He holds a current California Department of Fish and Wildlife (CDFW) Scientific Collecting Permit, as well as a CDFW State-Listed Plant Voucher Collection Permit.

Agency Coordination and Professional Contacts

No agency coordination has occurred to date.

Limitations That May Influence Results

Limitations of the survey include seasonal constraints, a diurnal bias, the absence of focused protocol surveys, and the biologist was not able to go within the Compton Creek channel to check the underside of the bridge. The survey was completed to assess habitat and the potential for special-status species to occur within the BSA. Focused rare plant surveys were not conducted for the proposed project. In addition, the list of plant species observed within the BSA includes those species observed during general biological reconnaissance survey conducted in August, when many botanical resources would have been limited. Therefore, this list is not comprehensive and does not include plant species that may have been present but were not blooming at the time of the survey. No wildlife trapping was conducted for small mammals, reptiles, and amphibians. Based on the diurnal nature of the survey, most wildlife species observed were birds. Most urban-adapted mammals are nocturnal and would not be observed during the survey.

3. Results: Environmental Setting

3.1 Description of the Existing Biological and Physical Conditions

The proposed project involves the replacement of the existing Wilmington Avenue Bridge over Compton Creek in the City of Compton, Los Angeles County (Figure 1). The impact area for the replacement project would include the existing bridge deck, abutment walls, and concrete channel bottom, as well as the roadway approach to the north and south (Figure 1). Appendix A contains representative photographs of the BSA.

3.1.1 Physical Conditions

According to the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), the BSA supports two soil types/mapping units which are described below: Urban land-Biscailuz-Hueneme, drained complex, 0 to 2 percent slopes; and Urban land-Windfetch-Centinela complex, 0 to 5 percent slopes (USDA NRCS 2019).

The project site and surrounding BSA occurs within the Urban land-Biscailuz-Hueneme, drained complex, 0 to 2 percent slopes, soil-mapping unit. This mapping unit is primarily composed of urban land covered by roads, parking lots, and buildings, under which extensive cutting and filling has occurred during urban development. This mapping unit also supports the Biscailuz and Hueneme soil series, both of which are somewhat poorly drained fine to coarse loams or loam sands formed from discontinuous human-transported materials over mixed alluvium (USDA NRCS 2017). The bridge site and much of the surrounding BSA occurs within this soil-mapping unit.

The Urban land-Windfetch-Centinela complex, 0 to 5 percent slopes, soil-mapping unit is primarily composed of urban land covered by roads, parking lots, and buildings, under which extensive cutting and filling has occurred during urban development. This mapping unit also supports the Windfetch and Centinela soil series, both of which are well drained loams formed in human-transported material overlying alluvium from marine or mixed rock sources (USDA NRCS 2017). This soil-mapping unit occurs along the southwestern extent of the BSA.

Topography within the BSA is generally flat with elevations on site ranging from 59 to 81 feet above mean sea level, gently sloping in the southerly direction (Google 2019), and vegetation is limited to ornamental or ruderal vegetation associated with surrounding urban development.

The area surrounding the existing bridge is largely developed or disturbed in nature with existing land uses comprised of residential and commercial, the existing ROWs, as well as a concrete-lined flood control channel.

The project site occurs within the Los Angeles River Watershed (USGS HUC 8: 18070105) and crosses over Compton Creek (USGS HUC 12: 180701050402) (USGS 2019).

3.1.2 Biological Conditions in the Study Area

Vegetation communities and land covers found within the BSA are entirely non-native and non-natural land covers comprised of urban/developed land, ornamental vegetation, and concrete-lined channels associated with Compton Creek (Figure 3). The vegetation communities and land covers identified within the BSA are discussed in further detail below. The BSA is generally situated in a heavily urbanized setting with vegetation limited to ornamental plantings or ruderal vegetation. One plant species was found in the BSA that is rated as "Moderate" by Cal-IPC (2019): shortpod mustard (*Hirschfeldia incana*). Species rated as "Moderate" have substantial and apparent-but generally not severe-ecological impacts on physical processes, plant and animal communities, and vegetation structure (Cal-IPC 2019).

Prominent features within the BSA include major thoroughfares such as Compton Boulevard and Wilmington Avenue; Compton Creek, a north-south trending channelized watercourse; and the Compton Creek bike path, which runs adjacent to the Compton Creek channel. The Los Angeles River is located approximately 2.82 miles east of the BSA.

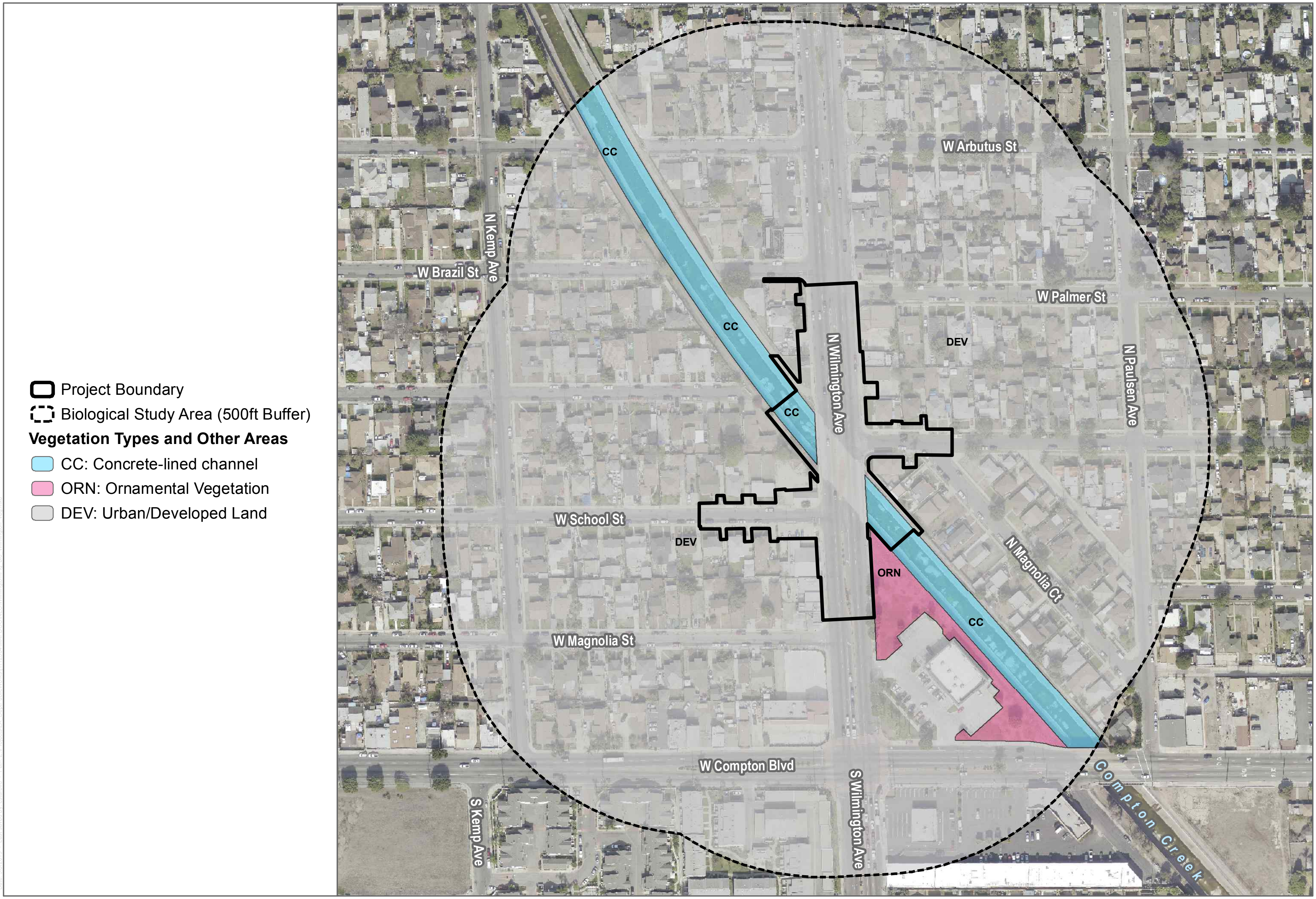
3.1.3 Habitat Connectivity

The BSA is surrounded by urban, developed land uses, and does not contain any greenbelts for wildlife movement, or native vegetation and undeveloped land capable of facilitating the movement of species between large tracts of native habitat. The Compton Creek watershed is entirely urban, so the channel does not connect any large natural areas upstream with the Los Angeles River and Pacific Ocean downstream. On a local level, urban-adapted wildlife, such as coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), and raccoon (*Procyon lotor*), may use the below grade Compton Creek Channel to move within the urban environment and as a source of water.

3.1.4 Regional Species and Habitats and Natural Communities of Concern

Special-Status Plants

Thirty-eight special-status plant species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, Los Alamitos) (CDFW 2019d; CNPS 2019) or included within the USFWS IPaC Trust Resource List for the proposed project (USFWS 2019b) (Appendix B). Eleven of these species are federal- and/or State-listed as endangered or threatened species; however, none of these species are listed in the USFWS IPaC Trust Resource List for the proposed project (USFWS 2019b). Potential habitat was determined to be absent for all of the thirty-eight species due to the heavily urbanized nature of the BSA. Additionally, these species are not expected to occur within the BSA due to extirpation of nearby occurrences, lack of known populations within five miles of the BSA, or absence during the field survey. All thirty-eight special-status plant species, their habitat requirements, regulatory status, presence of habitat within the BSA, and their potential to occur are discussed in Table 2.



SOURCE: LAR-IAC 2014; Open Street Map 2019

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FIGURE 3

Biological Resources

The Wilmington Avenue Bridge Over Compton Creek

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
aphanisma	*Aphanisma blitoides*	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub; sandy or gravelly/annual herb/Feb–June/0–1000	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
marsh sandwort	*Arenaria paludicola*	FE/SE/1B.1	Marshes and swamps (freshwater or brackish); sandy, openings/perennial stoloniferous herb/May–Aug/5–560	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Braunton's milk-vetch	*Astragalus brauntonii*	FE/None/1B.1	Chaparral, Coastal scrub, Valley and foothill grassland; recent burns or disturbed areas, usually sandstone with carbonate layers/perennial herb/Jan–Aug/10–2100	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Ventura marsh milk-vetch	*Astragalus pycnostachyus* var. *lanosissimus*	FE/SE/1B.1	Coastal dunes, Coastal scrub, Marshes and swamps (edges, coastal salt or brackish)/perennial herb/(June)Aug–Oct/0–115	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
coastal dunes milk-vetch	*Astragalus tener* var. *titi*	FE/SE/1B.1	Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie (mesic); often vernally mesic areas/annual herb/Mar–May/0–165	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Coulter's saltbush	*Atriplex coulteri*	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland; alkaline or clay/perennial herb/Mar–Oct/5–1510	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
South Coast saltscale	*Atriplex pacifica*	None/None/ 1B.2	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas/annual herb/Mar–Oct/0–460	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
Parish's brittlescale	*Atriplex parishii*	None/None/ 1B.1	Chenopod scrub, Playas, Vernal pools; alkaline/annual herb/June–Oct/80–6235	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Davidson's saltscale	*Atriplex serenana* var. *davidsonii*	None/None/ 1B.2	Coastal bluff scrub, Coastal scrub; alkaline/annual herb/Apr–Oct/30–655	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Nevin's barberry	*Berberis nevinii*	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; sandy or gravelly/perennial evergreen shrub/(Feb)Mar–June/225–2705	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
intermediate mariposa lily	*Calochortus weedii* var. *intermedius*	None/None/ 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; rocky, calcareous/perennial bulbiferous herb/May–July/340–2805	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
lucky morning-glory	*Calystegia felix*	None/None/ 1B.1	Meadows and seeps (sometimes alkaline), Riparian scrub (alluvial); Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline/annual rhizomatous herb/Mar–Sep/95–705	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
southern tarplant	*Centromadia parryi* ssp. *australis*	None/None/ 1B.1	Marshes and swamps (margins), Valley and foothill grassland (vernally mesic), Vernal pools/annual herb/May–Nov/0–1575	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
smooth tarplant	*Centromadia pungens* ssp. *laevis*	None/None/ 1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; alkaline/annual herb/Apr–Sep/0–2100	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
salt marsh bird's-beak	*Chloropyron maritimum* ssp. *maritimum*	FE/SE/1B.2	Coastal dunes, Marshes and swamps (coastal salt)/annual herb (hemiparasitic)/May–Oct(Nov)/0–100	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Peruvian dodder	*Cuscuta obtusiflora* var. *glandulosa*	None/None/ 2B.2	Marshes and swamps (freshwater)/annual vine (parasitic)/July–Oct/45–920	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
many-stemmed dudleya	*Dudleya multicaulis*	None/None/ 1B.2	Chaparral, Coastal scrub, Valley and foothill grassland; often clay/perennial herb/Apr–July/45–2590	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
San Diego button-celery	*Eryngium aristulatum* var. *parishii*	FE/SE/1B.1	Coastal scrub, Valley and foothill grassland, Vernal pools; mesic/annual / perennial herb/Apr–June/65–2035	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Los Angeles sunflower	*Helianthus nuttallii* ssp. *parishii*	None/None/ 1A	Marshes and swamps (coastal salt and freshwater)/perennial rhizomatous herb/Aug–Oct/30–5005	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
mesa horkelia	*Horkelia cuneata* var. *puberula*	None/None/ 1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub; sandy or gravelly/perennial herb/Feb–July(Sep)/225–2655	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
decumbent goldenbush	*Isocoma menziesii* var. *decumbens*	None/None/ 1B.2	Chaparral, Coastal scrub (sandy, often in disturbed areas)/perennial shrub/Apr–Nov/30–445	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
Coulter's goldfields	*Lasthenia glabrata* ssp. *coulteri*	None/None/ 1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/Feb–June/0–4005	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
mud nama	*Nama stenocarpa*	None/None/ 2B.2	Marshes and swamps (lake margins, riverbanks)/annual / perennial herb/Jan–July/15–1640	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Gambel's water cress	*Nasturtium gambelii*	FE/ST/1B.1	Marshes and swamps (freshwater or brackish)/perennial rhizomatous herb/Apr–Oct/15–1085	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
spreading navarretia	*Navarretia fossalis*	FT/None/1B.1	Chenopod scrub, Marshes and swamps (assorted shallow freshwater), Playas, Vernal pools/annual herb/Apr–June/95–2150	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
prostrate vernal pool navarretia	*Navarretia prostrata*	None/None/ 1B.1	Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools; Mesic/annual herb/Apr–July/5–3970	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
coast woolly-heads	*Nemacaulis denudata* var. *denudata*	None/None/ 1B.2	Coastal dunes/annual herb/Apr–Sep/0–330	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
California Orcutt grass	*Orcuttia californica*	FE/SE/1B.1	Vernal pools/annual herb/Apr–Aug/45–2165	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Lyon's pentachaeta	*Pentachaeta lyonii*	FE/SE/1B.1	Chaparral (openings), Coastal scrub, Valley and foothill grassland; rocky, clay/annual herb/(Feb)Mar–Aug/95–2265	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
Brand's star phacelia	*Phacelia stellaris*	None/None/ 1B.1	Coastal dunes, Coastal scrub/annual herb/Mar–June/0–1310	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
white rabbit-tobacco	*Pseudognaphalium leucocephalum*	None/None/ 2B.2	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland; sandy, gravelly/perennial herb/(July)Aug–Nov(Dec)/0–6890	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Nuttall's scrub oak	*Quercus dumosa*	None/None/ 1B.1	Closed-cone coniferous forest, Chaparral, Coastal scrub; sandy, clay loam/perennial evergreen shrub/Feb–Apr(May–Aug)/45–1310	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Parish's gooseberry	*Ribes divaricatum* var. *parishii*	None/None/ 1A	Riparian woodland/perennial deciduous shrub/Feb–Apr/210–985	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
southern mountains skullcap	*Scutellaria bolanderi* ssp. *austromontana*	None/None/ 1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest; mesic/perennial rhizomatous herb/June–Aug/1390–6560	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
salt spring checkerbloom	*Sidalcea neomexicana*	None/None/ 2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar–June/45–5020	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
estuary seablite	*Suaeda esteroa*	None/None/ 1B.2	Marshes and swamps (coastal salt)/perennial herb/(May)July–Oct(Jan)/0–15	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2: Listed, Proposed, and Other Specials-status Plant Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State/ CRPR)	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Habitat Present/ Absent	Rationale
San Bernardino aster	*Symphyotrichum defoliatum*	None/None/ 1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland (vernally mesic); near ditches, streams, springs/perennial rhizomatous herb/July–Nov(Dec)/5–6695	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Greata's aster	*Symphyotrichum greatae*	None/None/ 1B.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Riparian woodland; mesic/perennial rhizomatous herb/June–Oct/980–6595	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 2 Key:

Status: Federal Endangered (FE); Federal Threatened (FT); State Endangered (SE); State Threatened (ST)

California Rare Plant Rank (CRPR):
1A: Plants presumed extirpated in California and either rare or extinct elsewhere
1B: Plants rare, threatened, or endangered in California and elsewhere
2B: Plants rare, threatened, or endangered in California, but more common elsewhere

Threat Ranks:
1 Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
2 Moderately threatened in California (20% to 80% of occurrences threatened/moderate degree and immediacy of threat)
3 Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Habitat Present / Absent: Absent [A] - no habitat present and no further work needed.

Special-Status Wildlife

Forty-seven special-status wildlife species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, Los Alamitos) (CDFW 2019d; USFWS 2019a, NMFS 2016). Thirteen of these species are federally- and/or State-listed (or proposed for listing) as endangered or threatened species, including one species from the USFWS IPaC Trust Resource List (USFWS 2019b): federally threatened coastal California gnatcatcher (*Polioptila californica californica*). Potential habitat was determined to be absent for forty-four species. Of the three species determined to have potential habitat present, none were determined to have a moderate or higher potential to occur. All forty-seven special-status wildlife species, their habitat requirements, regulatory status, presence of habitat within the BSA, and their potential to occur are discussed in Table 3.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Invertebrates					
Busck's gallmoth	*Carolella busckana*	None/None	Coastal scrub dunes	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
western tidal-flat tiger beetle	*Cicindela gabbii*	None/None	Inhabits estuaries and mudflats along the coast of Southern California	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
sandy beach tiger beetle	*Cicindela hirticollis gravida*	None/None	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
western beach tiger beetle	*Cicindela latesignata latesignata*	None/None	Mudflats and beaches in coastal Southern California	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
senile tiger beetle	*Cicindela senilis frosti*	None/None	Inhabits marine shoreline, from Central California coast south to saltmarshes of San Diego; also found at Lake Elsinore	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Oblivious tiger beetle	*Cicindela latesignata obliviosa*	None/None	Inhabited the Southern California coastline, from La Jolla north to the Orange County line. Occupied saline mudflats and moist sandy spots in estuaries of small streams in the lower zone. Has not been observed in 20 years. The oblivious tiger beetle (*C. l. obliviosa*) is no longer the accepted name for this species (ITIS 2016).	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Palos Verdes blue butterfly	*Glaucopsyche lygdamus palosverdesensis*	FE/None	Cool, fog-shrouded, seaward side of Palos Verdes Hills, Los Angeles County	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Riverside fairy shrimp	*Streptocephalus woottoni*	FE/None	Vernal pools, non-vegetated ephemeral pools	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
mimic tryonia (=California brackishwater snail)	*Tryonia imitator*	None/None	Inhabits coastal lagoons, estuaries, and saltmarshes, from Sonoma County south to San Diego County	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Fish					
Mohave tui chub	Siphateles bicolor mohavensis	FE/FP, SE	Lacustrine ponds or pools; 4 feet min water depth; freshwater flow; mineralized and alkaline environment; habitat for aquatic invertebrate prey and egg attachment substrate; Ruppia maritima preferred for egg attachment and thermal refuge in summer months	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Amphibians					
western spadefoot	*Spea hammondii*	None/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Reptiles					
western pond turtle	*Actinemys marmorata*	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
southern California legless lizard	*Anniella stebbinsi*	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
California glossy snake	*Arizona elegans occidentalis*	None/SSC	Commonly occurs in desert regions throughout southern California. Prefers open sandy areas with scattered brush. Also found in rocky areas.	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
San Diegan tiger whiptail	*Aspidoscelis tigris stejnegeri*	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
green sea turtle	*Chelonia mydas*	FT/None	Shallow waters of lagoons, bays, estuaries, mangroves, eelgrass, and seaweed beds	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Blainville's horned lizard	*Phrynosoma blainvillii*	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
Birds					
tricolored blackbird	*Agelaius tricolor* (nesting colony)	BCC/SSC, SCE	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	None/WL	Nests and forages in open coastal scrub and chaparral with low cover of scattered scrub interspersed with rocky and grassy patches	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
burrowing owl	*Athene cunicularia* (burrow sites & some wintering sites)	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
ferruginous hawk	*Buteo regalis* (wintering)	BCC/WL	Winters and forages in open, dry country, grasslands, open fields, agriculture	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
Swainson's hawk	*Buteo swainsoni* (nesting)	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
wrentit	*Chamaea fasciata*	BCC/None	A common, characteristic resident of California chaparral habitat. Also frequents shrub understory of coniferous habitats from the coast to lower regions of mountains throughout cismontane California	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
western yellow-billed cuckoo	*Coccyzus americanus occidentalis* (nesting)	FT, BCC/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
yellow rail	*Coturnicops noveboracensis*	BCC/SSC	Nesting requires wet marsh/sedge meadows or coastal marshes with wet soil and shallow, standing water	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
southwestern willow flycatcher	*Empidonax traillii extimus* (nesting)	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
saltmarsh common yellowthroat	*Geothlypis trichas sinuosa*	BCC/SSC	Nests in woody swamp, brackish marsh, and freshwater marsh.	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA
song sparrow	*Melospiza melodia*	BCC/None	Breeds in riparian thickets of willows, other shrubs, vines, tall herbs, and in fresh or saline emergent vegetation	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA
Belding's savannah sparrow	*Passerculus sandwichensis beldingi*	None/SE	Nests and forages in coastal saltmarsh dominated by pickleweed (*Salicornia* spp.)	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
California brown pelican	*Pelecanus occidentalis californicus* (nesting colonies & communal roosts)	FDL/FP, SDL	Forages in warm coastal marine and estuarine environments; in California, nests on dry, rocky offshore islands	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
Nuttall's woodpecker	*Picoides nuttallii*	BCC/None	Nest located mostly in riparian habitat in dead (occasionally live) trunk or limb of willow, sycamore, cottonwood, or alder; rarely in oak. Forages mostly in oak and riparian deciduous habitats.	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
coastal California gnatcatcher	*Polioptila californica californica*	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
			at less than 1,000 feet above mean sea level		
bank swallow	*Riparia riparia* (nesting)	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
rufous hummingbird	*Selasphorus rufus*	BCC/None	A common migrant and uncommon summer resident of California. Breeding areas north of California in coniferous forests.	A	Not expected to occur. Suitable associated nesting, habitat is not present in the BSA. The species may forage in the area as a transient.
Allen's hummingbird	*Selasphorus sasin*	BCC/None	Often attaches nest to more than one lateral support on eucalyptus, juniper, willow, other trees, vines, shrubs, or ferns.	HP	Low potential to occur. Marginal nesting habitat within ornamental vegetation is present in the BSA.
California least tern	*Sternula antillarum browni* (nesting colony)	FE/FP, SE	Forages in shallow estuaries and lagoons; nests on sandy beaches or exposed tidal flats	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
least Bell's vireo	*Vireo bellii pusillus* (nesting)	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	A	Not expected to occur. Suitable associated nesting, roosting, and foraging habitat is not present in the BSA.
Mammals					
pallid bat	*Antrozous pallidus*	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	HP	Low potential to occur. The species is commonly found on bridges (Erickson et al. 2002); however, the BSA lacks the habitat that the species is associated with and there are few modern records

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
					from the Los Angeles Basin. Additionally, the project is within a highly urbanized area, which is a deterrent to roosting (Erickson et al. 2002).
western mastiff bat	*Eumops perotis californicus*	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels. Roosts are generally high above the ground, usually allowing a clear vertical drop of at least 3 meters below the entrance for flight	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA. The species may forage over the area during the night.
silver-haired bat	*Lasionycteris noctivagans*	None/None	Old-growth forest, maternity roosts in trees, large snags 50 feet aboveground; hibernates in hollow trees, rock crevices, buildings, mines, caves, and under sloughing bark; forages in or near coniferous or mixed deciduous forest, stream or river drainages	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA. The species may forage over the area during the night.
hoary bat	*Lasiurus cinereus*	None/None	Forest, woodland riparian, and wetland habitats; also juniper scrub, riparian forest, and desert scrub in arid areas; roosts in tree foliage and sometimes cavities, such as woodpecker holes	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA and the species is not known to use bridges (Erickson et al. 2002). The species may forage over the area during the night.
western yellow bat	*Lasiurus xanthinus*	None/SSC	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA and the species is not known to use bridges

Table 3: Listed, Proposed, and Other Specials-status Wildlife Species Known to Occur surrounding the BSA.

Common Name	Scientific Name	Status (Federal/State)	Habitat	Habitat Present/ Absent	Rationale
					(Erickson et al. 2002). The species may forage over the area during the night.
south coast marsh vole	*Microtus californicus stephensi*	None/SSC	Tidal marshes	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
pocketed free-tailed bat	*Nyctinomops femorosaccus*	None/SSC	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	HP	Not expected to occur. The species has not been recorded using bridges for roosting in California and the project is within a highly urbanized area, which is a deterrent to roosting (Erickson et al. 2002).
big free-tailed bat	*Nyctinomops macrotis*	None/SSC	Rocky areas; roosts in caves, holes in trees, buildings, and crevices on cliffs and rocky outcrops; forages over water	A	Not expected to occur. Suitable associated roosting habitat is not present in the BSA. The species may forage over the area during the night.
Pacific pocket mouse	*Perognathus longimembris pacificus*	FE/SSC	fine-grained sandy substrates in open coastal strand, coastal dunes, and river alluvium	A	Not expected to occur. Suitable associated habitat is not present in the BSA.
American badger	*Taxidea taxus*	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	A	Not expected to occur. Suitable associated habitat is not present in the BSA.

Table 3 Key:

Status:

Federal Endangered (FE), Federal Threatened (FT), Federal Delisted (FDL), Birds of Conservation Concern (BCC) (USFWS 2008) / State Endangered (SE), State Threatened (ST), State Candidate Endangered (SCE), State Delisted (SDL), State Fully Protected (FP), CDFW Species of Special Concern (SSC), CDFW Watch List

Habitat Present / Absent:

Absent [A] - no habitat present and no further work needed. Habitat Present [HP] -habitat is, or may be present.

Natural Communities of Special Concern

Sensitive natural communities, as defined in Section IV, Appendix G (Environmental Checklist Form), of the CEQA Guidelines (14 CCR 15000 et seq.), are referred to as "natural communities of special concern" and, as used in this report, include communities identified as high priority for inventory in the *California Natural Community List* (CDFW 2019e) by a state rarity ranking of S1, S2, or S3.

Four natural communities of special concern are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, Los Alamitos): California walnut woodland, southern coastal salt marsh, southern sycamore alder riparian woodland, and walnut forest (CDFW 2019a; Table 4). None of these natural communities of special concern overlap with the BSA for the project.

Table 4: Natural Communities of Special Concern Known to Occur surrounding the BSA.

Natural Community Name	Status Global/State Rank	Habitat Present/Absent
California Walnut Woodland	G2/S2.1	Absent
Southern Coastal Salt Marsh	G2/S2.1	Absent
Southern Sycamore Alder Riparian Woodland	G4/S4	Absent
Walnut Forest	G1/S1.1	Absent

Table 4 Key:

Status:

Global/State Rank –

G1 or S1: Critically Imperiled, at very high risk of extinction or elimination due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
G2 or S2: Imperiled, at high risk of extinction or elimination due to restricted range, few populations or occurrences, steep declines, sever threats, or other factors.
G4 or S4: Apparently Secure, at fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats or other factors.

0.1: Very threatened

Habitat Present / Absent: Absent [A] - no habitat present and no further work needed.

Critical Habitat

Based on a review of the USFWS Critical Habitat viewer, there is no USFWS-designated critical habitat for listed wildlife species within the BSA (USFWS 2019a).

Regulatory Waters

The proposed project is centered on Compton Creek (USGS HUC12: 180701050402), a north-south trending, USGS intermittent watercourse, and tributary to the Los Angeles River (USGS HUC8: 18070105) (USGS 2019). Compton Creek within the project conveys flow from upstream headwaters, through a heavily urbanized portion of the southern Los Angeles Basin, and eventually converges with the Los Angeles River approximately four miles southeast of the BSA. Within the BSA, Compton Creek is a rectangular concrete-lined flood control channel devoid of vegetation in the channel bottom with a clear demarcation of the potential limits of regulatory agency jurisdiction. The limits of jurisdiction for channelized rectangular channels are typically defined as the channel bottom for ACOE and Regional Water Quality Control Board (RWQCB), and the top of the channel bank or vertical wall for CDFW. Channels with vertical concrete walls have the same limit of jurisdiction for all three regulatory agencies. Therefore, the BSA contains a clearly defined regulated non-wetland Waters of the U.S. and State.

4. Results: Biological Resources, Discussion of Impacts & Mitigation

4.1 Habitats and Natural Communities of Special Concern

4.1.1 Mapped Vegetation Communities and Land Covers

Three vegetation communities and land covers were identified and mapped within the BSA for the project: ornamental vegetation, concrete-lined channel, and urban/developed. The vegetation communities and land covers within the BSA are listed below in Table 5 along with their acreages, and their spatial coverage depicted on Figure 3. Each individual vegetation community and land cover is described further detail below.

Table 5: Vegetation Communities and Land Cover Types in the BSA.

Vegetation Community/Land Cover	Status Global/State Rank	Acreage within the BSA
Urban/Developed (DEV)	GNR/SNR	42.34
Concrete Channel (CC)	GNR/SNR	2.00
Ornamental (ORN)	GNR/SNR	0.74
	TOTAL	**45.08**

Table 5 Key:
Status:
GNR or SNR: Unranked, global or state rank not yet assessed.

Urban/Developed Land

The urban/developed land mapping unit is not recognized by the Natural Communities List (CDFW 2018b), but is described by Holland (1986). Urban/developed land refers to areas that have been constructed upon or disturbed so severely that native vegetation is no longer supported (Holland 1986). Developed land includes areas with permanent or semi-permanent structures, pavement or hardscape, landscaped areas, and areas with a large amount of debris or other materials (Holland 1986). Developed areas are generally graded and compacted, sometimes covered with gravel road base or built structures, and have little to no vegetation present. Developed land dominates the majority of the BSA and refers to those areas supporting manmade structures or features including paved/compacted roadways, driveways, parking lots, residences, and commercial or industrial buildings. These areas support limited natural ecological processes, native vegetation, or habitat for wildlife species and thus are not considered sensitive by local, State, and/or federal agencies.

Concrete Channel

The concrete channel mapping unit is not recognized by the Natural Communities List (CDFW 2018b), but is described by Oberbauer et al. (2008). Concrete channels are characterized by barren or sparsely vegetated concrete-lined channels. Within the BSA, Compton Creek is mapped as a concrete-lined rectangular channel devoid of vegetation, which extends northwest-southeast across the BSA.

Ornamental Vegetation

The ornamental vegetation mapping unit is not recognized by the Natural Communities List (CDFW 2018b), but is described by Jones & Stokes (1993). Ornamental vegetation consists of introduced plantings of exotic species as landscaping elements within features such as greenbelts, parks, and horticultural nurseries (Jones and Stokes 1993). Ornamental vegetation within the BSA includes landscaping within commercial development located to the southeast of the proposed project. Ornamental vegetation is scattered throughout urban development within the BSA; however, these units did not meet the minimum mapping threshold and are therefore included within the urban/developed land mapping unit. Ornamental vegetation is not considered sensitive by local, state, and/or federal agencies.

4.1.2 Survey Results

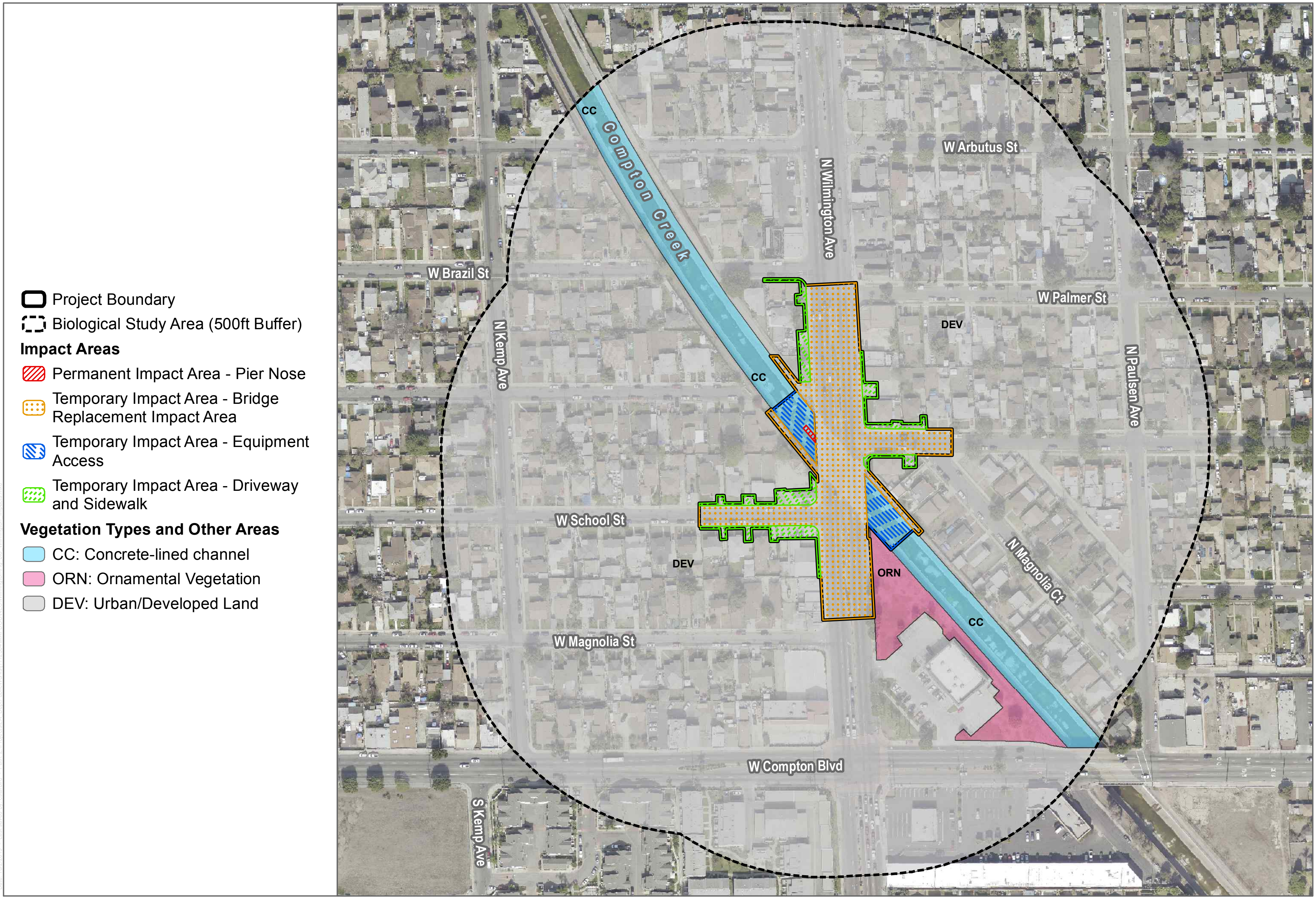
The BSA for the project does not contain any natural communities of special concern.

4.1.3 Project Impacts

Impacts to mapped vegetation communities and land covers associated with the proposed project were quantified by overlaying the proposed impact area with mapped biological resources (Figure 4). Vegetation community/land cover types impacted by the proposed project are urban/developed, concrete channel, and ornamental (Table 6). Urban/developed and ornamental are not habitats and natural communities of special concern. The concrete channel contains the waters of Compton Creek that are likely to be determined Waters of the U.S., Waters of the State, and a CDFW regulated-stream. A formal jurisdictional waters delineation was not conducted; however, the limits of jurisdiction are expected to be delineated along the channel bottom for ACOE and RWQCB, and along the top of the vertical wall of the channel for CDFW, with the horizontal demarcation for each of these jurisdictions being concurrent. The channel is devoid of vegetation within the BSA.

Table 6: Impacts to Vegetation Communities and Land Cover by the Proposed Project

Vegetation Community/Land Cover	Permanent Impacts (acres)	Temporary Impacts (acres)
Urban/Developed (DEV)	0	2.36
Concrete Channel (CC)	0.01	0.48
Ornamental (ORN)	0	0
TOTAL	**0.01**	**2.84**



SOURCE: LAR-IAC 2014; Open Street Map 2019

FIGURE 4

Project Impacts

The Wilmington Avenue Bridge Over Compton Creek

The new abutments for the proposed bridge would be constructed approximately 15 feet behind the existing abutments, which are outside of the potential jurisdictional limits of Compton Creek. The existing concrete channel wall would be protected in place. The proposed new pier in the middle of the channel would be constructed where the existing bridge pier is located and the proposed footing (including the sloping pier nose) would result in very small increase over the existing footing (0.01 acres). The proposed bridge deck would be constructed where the existing deck is located and would not increase shading of the waters within Compton Creek.

Potential temporary impacts to jurisdictional waters within the concrete channel would result from proposed construction activities. Temporary impacts would include vehicles and equipment within the channel, the generation of concrete debris and sediment due to the demolition of the existing bridge, and the potential introduction of chemical pollutants (fuel, oil, lubricants, paints, release agents, and other construction materials). The release of chemical pollutants can reduce the water quality downstream, especially if water is actively flowing through a project site. Work would be conducted during the dry season (April 15 to October 15); however, based on historical imagery (Google 2019), urban runoff is present in the Compton Creek channel throughout the year.

4.1.4 Avoidance and Minimization Efforts

Work areas would be reduced to the maximum extent feasible, and staging areas would be along the roadways and outside of Compton Creek. During construction, erosion-control measures would be implemented by the contractor as part of their County-certified Storm Water Pollution Prevention Plan (SWPPP) for the proposed project. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include best management practices (BMPs) to control the pollutants. All work shall conform to the site specific surface water diversion plan prepared for the project that will comply with the conditions included in the Water Quality Certification from the RWQCB and also include pertinent BMPs from the *Construction Site Best Management Practices (BMPs) Manual* (LADPW 2010). These include, but are not limited to, temporary sediment control, temporary soil stabilization, waste management and materials pollution control, wind erosion control, and other non-storm water BMPs.

4.1.5 Compensatory Mitigation

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

4.2 Special Status Plant Species

4.2.1 Survey Results

A total of seventeen plant species were recorded during the field survey. A full list of plant species observed within the proposed project area is provided in Appendix C.

No special-status plant species were detected during the biological reconnaissance survey. Due to the extent of developed lands and disturbed vegetation within the BSA, there is limited potential for special-status plant species to occur. Table 2 includes special-status plants that are known to occur in the USGS 7.5-minute South Gate quadrangle and surrounding eight topographic quadrangles (CDFW 2019d; CNPS 2019), as well as species included in the USFWS IPaC Trust Resource List (2019b) (Appendix B). Table 2 also analyzes each of these special-status species' potential to occur based on known range, habitat associations, preferred soil substrate, life form, elevation, and blooming period. There are no special-status plant species with a moderate or high potential to occur within the BSA.

4.2.2 Project Impacts

No special-status plant species were identified within the BSA and no special-status plants, including those referenced in the USFWS IPaC Trust Resources List (2019b), are expected to have a moderate or high potential to occur due to the extent of developed land and disturbed vegetation within the BSA. Additionally, proposed project activities will primarily occur within existing paved areas (i.e., roadways, bridge decks, concrete channel bottom); therefore, no impacts to potentially occurring special-status plant species are anticipated to occur.

4.2.3 Avoidance and Minimization Efforts/Compensatory Mitigation

No avoidance or minimization measures or compensatory mitigation are required for special-status plant species because impacts to special-status plant species are not expected to occur.

4.3 Special Status Wildlife Species

4.3.1 Survey Results

A total of eight wildlife species were recorded during the field survey. A full list of wildlife species observed within the proposed project area is provided in Appendix D.

No special-status wildlife species were observed during the biological reconnaissance survey. Due to the extent of developed lands and disturbed vegetation within the BSA, there is limited suitable habitat for special-status wildlife species. Table 3 includes occurrences of special-status wildlife species that have been recorded in the USGS 7.5-minute South Gate quadrangle and surrounding eight quadrangles (CDFW 2019d) as well as species included in the USFWS IPaC Trust Resource List (2019b) (Appendix B). Table 3 also analyzes each of these special-status species' potential to occur based on known range and habitat requirements. There are no special-status wildlife species with a moderate or high potential to occur within the BSA.

No bats or signs of bats (i.e., urine staining and guano droppings) were visually observed at the time of the site visit; however, it should be noted that specific focused surveys for bats were not conducted. Seven special-status bat species have recorded occurrences in the project vicinity (CDFW 2019d): pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), silver-haired bat (*Lasionycteris noctivagans*), hoary bat (*Lasiurus cinereus*), western yellow bat

(*Lasiurus xanthinus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), and big free-tailed bat (*Nyctinomops macrotis*). All of the species have potential to forage over the project site, but only pallid bat has a potential to roost within the bridge due to the lack of suitable roosting habitat for the other six species. Pallid bat is commonly found on bridges (Erickson et al. 2002); however, the BSA lacks the habitat that the species is associated with and there are few modern records from the Los Angeles Basin (CDFW 2019d, GBIF 2019). Additionally, the project is within a highly urbanized area, which is a deterrent to roosting (Erickson et al. 2002).

Ornamental vegetation within the BSA and the underside of the bridge deck may provide suitable nesting habitat for a number of common resident and migratory bird species protected under the MBTA and CFG Code Section 3500. Suitable nesting habitat for common, urban-adapted species such as house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), and lesser goldfinch (*Spinus psaltria*) occurs within the BSA.

4.3.2 Project Impacts

No special-status wildlife species were identified within the BSA and no special-status wildlife, including those referenced in the USFWS IPaC Trust Resources List (2019b), are expected to have a moderate or high potential to occur due to the lack of suitable habitat and the extent of developed land and disturbed vegetation within the BSA. Therefore, no impacts to potentially occurring special-status wildlife species are anticipated to occur.

Common bat species that could roost in the bridge Mexican free-tailed bat (*Tadarida brasiliensis*) and California myotis (*Myotis californicus*). Therefore, there may be a potential direct impact to roosting non-special-status bats if project activities commence during the bat maternity roosting period of March through August. However, this potential impact to non-special-status bats would not be considered significant because the bridge and potential roost would not be permanently removed, and therefore would not result in an impact that would cause the greater population of bat species to drop below self-sustaining levels.

Although the proposed project is not expected to impact special-status wildlife species, ornamental vegetation scattered throughout the BSA and the underside of the bridge deck could provide suitable habitat for nesting birds protected under MBTA and CFG Code. Nesting birds could be directly impacted by the removal of the existing bridge deck. Nesting birds could also be indirectly impacted from short-term construction-related noise, resulting in decreased reproductive success or nest abandonment. Therefore, if project activities were to occur during the general avian breeding season of February 1 through September 30, the project may directly and indirectly impact nesting birds protected under MBTA and CFG Code.

4.3.3 Avoidance and Minimization Efforts/Compensatory Mitigation

No avoidance or minimization measures or compensatory mitigation are required for special-status wildlife species because impacts to special-status wildlife species are not expected to occur.

To avoid potential direct and indirect impacts to nesting birds protected by the MBTA and CFG Code, project activities should avoid the general nesting season of February 1 through September 30. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species under the bridge deck and in vegetation within 300 feet (for non-raptor bird species) and 500 feet (for raptor species) of the proposed work area. If an active bird nest is found within the bridge deck, work would not be able to proceed until the nest is determined to be inactive (fledged or failed) by a qualified biologist. If an active bird nest is found within portions of the survey area adjacent to the bridge, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.

5. Conclusions & Regulatory Determination

5.1 Federal Endangered Species Act Consultation Summary

The project is primarily located within developed portions of urban areas in southern Los Angeles County (i.e. City of Compton) and will not result in the removal or degradation of any natural communities. The proposed project area is primarily developed with the bridge site spanning over an existing concrete-lined flood control channel (i.e., Compton Creek), reducing the potential for special-status plant and wildlife species to occur. No designated Critical Habitat is mapped within the BSA. Additionally, no primary constituent elements for Critical Habitat in the region occur within the BSA.

No direct consultation with NMFS was conducted for this project. However, an official species list was obtained through email from NMFS, and the species listed were considered for their potential to occur within the BSA. The NMFS species list is provided in Appendix B.

5.2 Wetlands and Other Waters Coordination Summary

No coordination with any wetland or waters regulatory agencies have been conducted for the proposed project.

A formal jurisdictional waters delineation was not conducted; however, the project would occur over and within the Compton Creek flood control channel that are likely to be Waters of the U.S. and Waters of the State. Approximately 0.49 acres of temporary impacts and approximately 0.01 acres of permanent impacts to waters of the U.S. and State are anticipated to occur as a result of the proposed project. Therefore, the proposed project would likely require a Section 404 Permit from ACOE, a Section 401 Water Quality Certification from the RWQCB, and a 1600 Streambed Alteration Agreement from CDFW.

5.3 Invasive Species

BMPS that would be implemented as part of the project design would include the cleaning of construction equipment prior to entering the site to reduce the spread of invasive plant seeds. No compensatory mitigation is proposed.

5.4 Other

Nesting bird species protected by the MBTA and CFG Code may be directly and indirectly impacted by the project should activities commence during the general nesting season of February 1 through September 30. Nesting season avoidance is proposed in Section 4.3 to reduce any potential impact to nesting birds, and a pre-construction clearance survey should the project occur during the nesting season. Consultation would occur with the appropriate wildlife resource agencies in the event that nesting birds are encountered. Active nests found during the pre-construction clearance survey will be flagged for avoidance and an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur without the consent of the on-site monitor, as long as a nest is still active.

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APPENDIX A
Site Photographs

APPENDIX A
Site Photographs

Facing west toward eastern side of Wilmington Avenue bridge over Compton Creek.

Facing southeast toward the western side of Wilmington Avenue bridge over Compton Creek.

Facing southeast toward ornamental and disturbed vegetation associated with commercial property located immediately southeast of the proposed project.

Facing northwest toward the Wilmington Avenue bridge deck.

APPENDIX A
Site Photographs

Facing northwest toward bike lane that runs adjacent to Compton Creek.

Facing northwest toward concrete-lined portion of Compton Creek
as viewed from the Wilmington Avenue Bridge.

APPENDIX B

IPaC/NMFS/CNDDB/CNPS/NMFS Species Lists

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
Phone: (760) 431-9440 Fax: (760) 431-5901
http://www.fws.gov/carlsbad/

In Reply Refer To: January 14, 2020
Consultation Code: 08ECAR00-2019-SLI-0929
Event Code: 08ECAR00-2020-E-01087
Project Name: Wilmington Over Compton Creek Project

Subject: Updated list of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Carlsbad Fish And Wildlife Office
2177 Salk Avenue - Suite 250
Carlsbad, CA 92008-7385
(760) 431-9440

Project Summary

Consultation Code: 08ECAR00-2019-SLI-0929

Event Code: 08ECAR00-2020-E-01087

Project Name: Wilmington Over Compton Creek Project

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: Compton, CA

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/33.89748758694574N118.23773432372053W

Counties: Los Angeles, CA

Endangered Species Act Species

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Birds

NAME	STATUS
Coastal California Gnatcatcher *Polioptila californica californica* There is **final** critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/8178	Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

NMFS Species List - Intersection of USGS Topographic Quadrangles with NOAA Fisheries ESA Listed Species, Critical Habitat, Essential Fish Habitat, and MMPA Species Data November 2016

X = Present on the Quadrangle		ESA ANADROMOUS FISH (E) = Endangered, (T) = Threatened												ESA ANADROMOUS FISH CRITICAL HABITAT												ESA MARINE INVERTEBRATES		ESA MARINE INVERT. CRITICAL HABITAT	ESA SEA TURTLES				ESA WHALES	ESA PINNIPEDS	ESA PINNIPEDS CRITICAL HABITAT	ESSENTIAL FISH HABITAT					MMPA SPECIES	
		COHO		CHINOOK			STEELHEAD							COHO		CHINOOK			STEELHEAD																	SALMON						
Quad Name	Quad Number	SONCC (T)	CCC (E)	CC (T)	CVSR (T)	SRWR (E)	NC (T)	CCC (T)	SCCC (T)	SC (E)	CCV (T)	Eulachon (T)	Southern DPS Green Sturgeon (T)	SONCC	CCC	CC	CVSR	SRWR	NC	CCC	SCCC	SC	CCV	Eulachon	Southern DPS Green Sturgeon	Black Abalone (E)	White Abalone (E)	Black Abalone	East Pacific Green Sea Turtle (T)	Olive Ridley Sea Turtle (T/E)	Leatherback Sea Turtle (E)	North Pacific Loggerhead Sea Turtle (E)	Whales (see list below)	Guadalupe Fur Seal (T)	Steller Sea Lion	Coho	Chinook	Groundfish	Coastal Pelagic	Highly Migratory Species	MMPA Cetaceans (see "MMPA Species" tab for list)	MMPA Pinnipeds (see "MMPA Species" tab for list)
South Gate	33118-H2									X																																

Selected Elements by Scientific Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Hollywood (3411813) OR Los Angeles (3411812) OR El Monte (3411811) OR Inglewood (3311883) OR South Gate (3311882) OR Whittier (3311881) OR Torrance (3311873) OR Long Beach (3311872) OR Los Alamitos (3311871))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Agelaius tricolor tricolored blackbird	ABPBXB0020	None	Threatened	G2G3	S1S2	SSC
Aimophila ruficeps canescens southern California rufous-crowned sparrow	ABPBX91091	None	None	G5T3	S3	WL
Anniella stebbinsi southern California legless lizard	ARACC01060	None	None	G3	S3	SSC
Antrozous pallidus pallid bat	AMACC10010	None	None	G5	S3	SSC
Aphanisma blitoides aphanisma	PDCHE02010	None	None	G3G4	S2	1B.2
Arenaria paludicola marsh sandwort	PDCAR040L0	Endangered	Endangered	G1	S1	1B.1
Arizona elegans occidentalis California glossy snake	ARADB01017	None	None	G5T2	S2	SSC
Aspidoscelis tigris stejnegeri coastal whiptail	ARACJ02143	None	None	G5T5	S3	SSC
Astragalus brauntonii Braunton's milk-vetch	PDFAB0F1G0	Endangered	None	G2	S2	1B.1
Astragalus tener var. titi coastal dunes milk-vetch	PDFAB0F8R2	Endangered	Endangered	G2T1	S1	1B.1
Athene cunicularia burrowing owl	ABNSB10010	None	None	G4	S3	SSC
Atriplex coulteri Coulter's saltbush	PDCHE040E0	None	None	G3	S1S2	1B.2
Atriplex pacifica south coast saltscale	PDCHE041C0	None	None	G4	S2	1B.2
Atriplex parishii Parish's brittlescale	PDCHE041D0	None	None	G1G2	S1	1B.1
Atriplex serenana var. davidsonii Davidson's saltscale	PDCHE041T1	None	None	G5T1	S1	1B.2
Berberis nevinii Nevin's barberry	PDBER060A0	Endangered	Endangered	G1	S1	1B.1
Bombus crotchii Crotch bumble bee	IIHYM24480	None	Candidate Endangered	G3G4	S1S2	
Buteo regalis ferruginous hawk	ABNKC19120	None	None	G4	S3S4	WL
Buteo swainsoni Swainson's hawk	ABNKC19070	None	Threatened	G5	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
California Walnut Woodland California Walnut Woodland	CTT71210CA	None	None	G2	S2.1	
Calochortus plummerae Plummer's mariposa-lily	PMLIL0D150	None	None	G4	S4	4.2
Calochortus weedii var. intermedius intermediate mariposa-lily	PMLIL0D1J1	None	None	G3G4T2	S2	1B.2
Calystegia felix lucky morning-glory	PDCON040P0	None	None	G1Q	S1	1B.1
Carolella busckana Busck's gallmoth	IILEM2X090	None	None	G1G3	SH	
Centromadia parryi ssp. australis southern tarplant	PDAST4R0P4	None	None	G3T2	S2	1B.1
Centromadia pungens ssp. laevis smooth tarplant	PDAST4R0R4	None	None	G3G4T2	S2	1B.1
Chelonia mydas green turtle	ARAAA02010	Threatened	None	G3	S1	
Chloropyron maritimum ssp. maritimum salt marsh bird's-beak	PDSCR0J0C2	Endangered	Endangered	G4?T1	S1	1B.2
Cicindela gabbii western tidal-flat tiger beetle	IICOL02080	None	None	G2G4	S1	
Cicindela hirticollis gravida sandy beach tiger beetle	IICOL02101	None	None	G5T2	S2	
Cicindela latesignata latesignata western beach tiger beetle	IICOL02113	None	None	G2G4T1T2	S1	
Cicindela senilis frosti senile tiger beetle	IICOL02121	None	None	G2G3T1T3	S1	
Coccyzus americanus occidentalis western yellow-billed cuckoo	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
Coturnicops noveboracensis yellow rail	ABNME01010	None	None	G4	S1S2	SSC
Cuscuta obtusiflora var. glandulosa Peruvian dodder	PDCUS01111	None	None	G5T4?	SH	2B.2
Danaus plexippus pop. 1 monarch - California overwintering population	IILEPP2012	None	None	G4T2T3	S2S3	
Dudleya multicaulis many-stemmed dudleya	PDCRA040H0	None	None	G2	S2	1B.2
Empidonax traillii extimus southwestern willow flycatcher	ABPAE33043	Endangered	Endangered	G5T2	S1	
Emys marmorata western pond turtle	ARAAD02030	None	None	G3G4	S3	SSC
Eryngium aristulatum var. parishii San Diego button-celery	PDAPI0Z042	Endangered	Endangered	G5T1	S1	1B.1

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Eumops perotis californicus western mastiff bat	AMACD02011	None	None	G5T4	S3S4	SSC
Glaucopsyche lygdamus palosverdesensis Palos Verdes blue butterfly	IILEPG402A	Endangered	None	G5T1	S1	
Helianthus nuttallii ssp. parishii Los Angeles sunflower	PDAST4N102	None	None	G5TH	SH	1A
Horkelia cuneata var. puberula mesa horkelia	PDROS0W045	None	None	G4T1	S1	1B.1
Icteria virens yellow-breasted chat	ABPBX24010	None	None	G5	S3	SSC
Isocoma menziesii var. decumbens decumbent goldenbush	PDAST57091	None	None	G3G5T2T3	S2	1B.2
Lasionycteris noctivagans silver-haired bat	AMACC02010	None	None	G5	S3S4	
Lasiurus cinereus hoary bat	AMACC05030	None	None	G5	S4	
Lasiurus xanthinus western yellow bat	AMACC05070	None	None	G5	S3	SSC
Lasthenia glabrata ssp. coulteri Coulter's goldfields	PDAST5L0A1	None	None	G4T2	S2	1B.1
Lepidium virginicum var. robinsonii Robinson's pepper-grass	PDBRA1M114	None	None	G5T3	S3	4.3
Microtus californicus stephensi south coast marsh vole	AMAFF11035	None	None	G5T1T2	S1S2	SSC
Nama stenocarpa mud nama	PDHYD0A0H0	None	None	G4G5	S1S2	2B.2
Nasturtium gambelii Gambel's water cress	PDBRA270V0	Endangered	Threatened	G1	S1	1B.1
Navarretia fossalis spreading navarretia	PDPLM0C080	Threatened	None	G2	S2	1B.1
Navarretia prostrata prostrate vernal pool navarretia	PDPLM0C0Q0	None	None	G2	S2	1B.1
Nemacaulis denudata var. denudata coast woolly-heads	PDPGN0G011	None	None	G3G4T2	S2	1B.2
Nyctinomops femorosaccus pocketed free-tailed bat	AMACD04010	None	None	G4	S3	SSC
Nyctinomops macrotis big free-tailed bat	AMACD04020	None	None	G5	S3	SSC
Orcuttia californica California Orcutt grass	PMPOA4G010	Endangered	Endangered	G1	S1	1B.1
Passerculus sandwichensis beldingi Belding's savannah sparrow	ABPBX99015	None	Endangered	G5T3	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Pelecanus occidentalis californicus California brown pelican	ABNFC01021	Delisted	Delisted	G4T3T4	S3	FP
Pentachaeta lyonii Lyon's pentachaeta	PDAST6X060	Endangered	Endangered	G1	S1	1B.1
Perognathus longimembris pacificus Pacific pocket mouse	AMAFD01042	Endangered	None	G5T1	S1	SSC
Phacelia stellaris Brand's star phacelia	PDHYD0C510	None	None	G1	S1	1B.1
Phrynosoma blainvillii coast horned lizard	ARACF12100	None	None	G3G4	S3S4	SSC
Polioptila californica californica coastal California gnatcatcher	ABPBJ08081	Threatened	None	G4G5T2Q	S2	SSC
Pseudognaphalium leucocephalum white rabbit-tobacco	PDAST440C0	None	None	G4	S2	2B.2
Quercus dumosa Nuttall's scrub oak	PDFAG050D0	None	None	G3	S3	1B.1
Ribes divaricatum var. parishii Parish's gooseberry	PDGRO020F3	None	None	G5TX	SX	1A
Riparia riparia bank swallow	ABPAU08010	None	Threatened	G5	S2	
Scutellaria bolanderi ssp. austromontana southern mountains skullcap	PDLAM1U0A1	None	None	G4T3	S3	1B.2
Sidalcea neomexicana salt spring checkerbloom	PDMAL110J0	None	None	G4	S2	2B.2
Siphateles bicolor mohavensis Mohave tui chub	AFCJB1303H	Endangered	Endangered	G4T1	S1	FP
Southern Coastal Salt Marsh Southern Coastal Salt Marsh	CTT52120CA	None	None	G2	S2.1	
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	CTT62400CA	None	None	G4	S4	
Spea hammondii western spadefoot	AAABF02020	None	None	G3	S3	SSC
Sternula antillarum browni California least tern	ABNNM08103	Endangered	Endangered	G4T2T3Q	S2	FP
Streptocephalus woottoni Riverside fairy shrimp	ICBRA07010	Endangered	None	G1G2	S1S2	
Suaeda esteroa estuary seablite	PDCHE0P0D0	None	None	G3	S2	1B.2
Symphyotrichum defoliatum San Bernardino aster	PDASTE80C0	None	None	G2	S2	1B.2
Symphyotrichum greatae Greata's aster	PDASTE80U0	None	None	G2	S2	1B.3

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Taxidea taxus American badger	AMAJF04010	None	None	G5	S3	SSC
Tryonia imitator mimic tryonia (=California brackishwater snail)	IMGASJ7040	None	None	G2	S2	
Vireo bellii pusillus least Bell's vireo	ABPBW01114	Endangered	Endangered	G5T2	S2	
Walnut Forest Walnut Forest	CTT81600CA	None	None	G1	S1.1	

Record Count: 86

CNPS California Native Plant Society

Inventory of Rare and Endangered Plants

*The database used to provide updates to the Online Inventory is under construction. View updates and changes made since May 2019 here.

Plant List

34 matches found. *Click on scientific name for details*

Search Criteria

California Rare Plant Rank is one of [1A, 1B, 2A, 2B], Found in Quads 3411813, 3411812, 3411811, 3311883, 3311882, 3311881, 3311873 3311872 and 3311871;

Modify Search Criteria Export to Excel Modify Columns Modify Sort Display Photos

Scientific Name	Common Name	Family	Lifeform	Blooming Period	CA Rare Plant Rank	State Rank	Global Rank
Arenaria paludicola	marsh sandwort	Caryophyllaceae	perennial stoloniferous herb	May-Aug	1B.1	S1	G1
Astragalus brauntonii	Braunton's milk-vetch	Fabaceae	perennial herb	Jan-Aug	1B.1	S2	G2
Astragalus pycnostachyus var. lanosissimus	Ventura marsh milk-vetch	Fabaceae	perennial herb	(Jun)Aug-Oct	1B.1	S1	G2T1
Astragalus tener var. titi	coastal dunes milk-vetch	Fabaceae	annual herb	Mar-May	1B.1	S1	G2T1
Atriplex coulteri	Coulter's saltbush	Chenopodiaceae	perennial herb	Mar-Oct	1B.2	S1S2	G3
Atriplex parishii	Parish's brittlescale	Chenopodiaceae	annual herb	Jun-Oct	1B.1	S1	G1G2
Atriplex serenana var. davidsonii	Davidson's saltscale	Chenopodiaceae	annual herb	Apr-Oct	1B.2	S1	G5T1
Berberis nevinii	Nevin's barberry	Berberidaceae	perennial evergreen shrub	(Feb)Mar-Jun	1B.1	S1	G1
Calochortus weedii var. intermedius	intermediate mariposa lily	Liliaceae	perennial bulbiferous herb	May-Jul	1B.2	S2	G3G4T2
Calystegia felix	lucky morning-glory	Convolvulaceae	annual rhizomatous herb	Mar-Sep	1B.1	S1	G1Q
Centromadia parryi ssp. australis	southern tarplant	Asteraceae	annual herb	May-Nov	1B.1	S2	G3T2
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	May-Oct(Nov)	1B.2	S1	G4?T1
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	2B.2	SH	G5T4?
Dudleya multicaulis	many-stemmed dudleya	Crassulaceae	perennial herb	Apr-Jul	1B.2	S2	G2
	Los Angeles sunflower	Asteraceae	perennial rhizomatous	Aug-Oct	1A	SH	G5TH

Helianthus nuttallii ssp. parishii			herb				
Horkelia cuneata var. puberula	mesa horkelia	Rosaceae	perennial herb	Feb-Jul(Sep)	1B.1	S1	G4T1
Isocoma menziesii var. decumbens	decumbent goldenbush	Asteraceae	perennial shrub	Apr-Nov	1B.2	S2	G3G5T2T3
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Asteraceae	annual herb	Feb-Jun	1B.1	S2	G4T2
Nama stenocarpa	mud nama	Namaceae	annual / perennial herb	Jan-Jul	2B.2	S1S2	G4G5
Nasturtium gambelii	Gambel's water cress	Brassicaceae	perennial rhizomatous herb	Apr-Oct	1B.1	S1	G1
Navarretia fossalis	spreading navarretia	Polemoniaceae	annual herb	Apr-Jun	1B.1	S2	G2
Navarretia prostrata	prostrate vernal pool navarretia	Polemoniaceae	annual herb	Apr-Jul	1B.1	S2	G2
Nemacaulis denudata var. denudata	coast woolly-heads	Polygonaceae	annual herb	Apr-Sep	1B.2	S2	G3G4T2
Orcuttia californica	California Orcutt grass	Poaceae	annual herb	Apr-Aug	1B.1	S1	G1
Pentachaeta lyonii	Lyon's pentachaeta	Asteraceae	annual herb	(Feb)Mar-Aug	1B.1	S1	G1
Phacelia stellaris	Brand's star phacelia	Hydrophyllaceae	annual herb	Mar-Jun	1B.1	S1	G1
Pseudognaphalium leucocephalum	white rabbit-tobacco	Asteraceae	perennial herb	(Jul)Aug-Nov(Dec)	2B.2	S2	G4
Quercus dumosa	Nuttall's scrub oak	Fagaceae	perennial evergreen shrub	Feb-Apr(May-Aug)	1B.1	S3	G3
Ribes divaricatum var. parishii	Parish's gooseberry	Grossulariaceae	perennial deciduous shrub	Feb-Apr	1A	SX	G5TX
Scutellaria bolanderi ssp. austromontana	southern mountains skullcap	Lamiaceae	perennial rhizomatous herb	Jun-Aug	1B.2	S3	G4T3
Sidalcea neomexicana	salt spring checkerbloom	Malvaceae	perennial herb	Mar-Jun	2B.2	S2	G4
Suaeda esteroa	estuary seablite	Chenopodiaceae	perennial herb	(May)Jul-Oct(Jan)	1B.2	S2	G3
Symphyotrichum defoliatum	San Bernardino aster	Asteraceae	perennial rhizomatous herb	Jul-Nov(Dec)	1B.2	S2	G2
Symphyotrichum greatae	Greata's aster	Asteraceae	perennial rhizomatous herb	Jun-Oct	1B.3	S2	G2

Suggested Citation

California Native Plant Society, Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 19 September 2019].

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The Jepson Flora Project
The Consortium of California Herbaria
CalPhotos

Questions and Comments

rareplants@cnps.org

APPENDIX C

Plant Compendium

APPENDIX C
Plant Compendium

EUDICOTS

VASCULAR SPECIES

ASTERACEAE—SUNFLOWER FAMILY

Ambrosia psilostachya—western ragweed
* *Erigeron bonariensis*—asthmaweed
Heterotheca grandiflora—telegraphweed
* *Lactuca serriola* – prickly lettuce
* *Taraxacum officinale* – common dandelion

BRASSICACEAE—MUSTARD FAMILY

* *Hirschfeldia incana*—shortpod mustard

CHENOPODIACEAE - GOOSEFOOT FAMILY

* *Chenopodium album* - lambsquarters

EUPHORBIACEAE—SPURGE FAMILY

* *Euphorbia prostrata* – prostrate sandmat

MALVACEAE - MALLOW FAMILY

* *Malva parviflora* - cheeseweed mallow
* *Malvella leprosa* - alkali mallow

MORACEAE - MULBERRY FAMILY

* *Ficus microcarpa* – Chinese banyan

PASSIFLORACEAE—PASSION FLOWER FAMILY

* *Passiflora caerulea*—bluecrown passionflower

SIMAROUBACEAE—QUASSIA/SIMAROUBA FAMILY

* *Ailanthus alitissima*—tree of heaven

SOLANACEAE—NIGHTSHADE FAMILY

Solanum douglasii—greenspot nightshade

ZYGOPHYLLACEAE - CALTROP FAMILY

* *Tribulus terrestris* – puncturevine

MONOCOTS

VASCULAR SPECIES

POACEAE—GRASS FAMILY

* *Bromus madritensis*—compact brome
* *Cynodon dactylon*—Bermudagrass

* signifies introduced (non-native) species

APPENDIX D

Wildlife Compendium

APPENDIX D
Wildlife Compendium

BIRD

BUSHTITS

AEGITHALIDAE—LONG-TAILED TITS & BUSHTITS

Psaltriparus minimus—bushtit

FINCHES

FRINGILLIDAE—FRINGILLINE & CARDUELINE FINCHES & ALLIES

Haemorhous mexicanus—house finch

FLYCATCHERS

TYRANNIDAE—TYRANT FLYCATCHERS

Sayornis nigricans—black phoebe

JAYS, MAGPIES & CROWS

CORVIDAE—CROWS & JAYS

Corvus brachyrhynchos—American crow

PIGEONS & DOVES

COLUMBIDAE—PIGEONS & DOVES

* *Columba livia*—rock pigeon (rock dove)
* *Streptopelia decaocto*—Eurasian collared-dove
Zenaida macroura—mourning dove

TERNS & GULLS

LARIDAE—GULLS, TERNS, & SKIMMERS

Larus occidentalis—western gull

* signifies introduced (non-native) species

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Appendix C

Confidential Records Search Map and Finding of No Adverse Effect

Appendix D

Geotechnical Memorandum

April 29, 2012

TO: Sree Kumar
Design Division

Attention Scott Gregowski

FROM: Greg Kelley RGD for GK
Geotechnical and Materials Engineering Division

WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK 53C-0907
COUNTY BRIDGE NO. 2668
GEOTECHNICAL SUBSURFACE EXPLORATION
PROJECT ID RDC0015755 (PCA NO. X220000462)

On November 26, 2012, we were requested to perform a limited geotechnical investigation for Wilmington Avenue Bridge over Compton Creek in the City of Compton. The approximate site location is provided in Figure 1. Our scope of work was to perform subsurface explorations and provide soil testing to determine subsurface conditions.

Subsurface Exploration

To evaluate subsurface conditions at this site, two exploratory borings were drilled on January 28, 2013 and January 31, 2013, and two Cone Penetration Test (CPT) soundings were advanced on January 29, 2013. One boring and one CPT were performed on each side of the bridge. The two borings were drilled with a CME 75 drill rig, using a 6.5-inch-diameter hollow stem auger to depths of 75 feet, each below ground surface (bgs). The two CPT soundings were advanced using a 25-ton truck-mounted CPT rig. The CPT on the south side of the bridge included a seismic shear wave velocity test (SCPT-01) and was advanced to a depth of 74.2 feet bgs. The CPT on the north side of the bridge (CPT-02) was advanced to 67.7 feet bgs. The approximate locations of the borings and CPTs are provided in Figure 2. The logs of borings and soundings are provided in Appendix A.

In-situ Testing

In-situ testing was conducted with the CPT soundings performed by Fugro Consultants. Pore pressure dissipation tests were conducted to determine the approximate depth to ground water. Seismic shear wave velocity measurements were taken to determine the site specific shear wave velocity for the upper 100 feet. The test results for the seismic shear wave velocity measurements are provided in Appendix B.

Laboratory Testing

Selected samples were collected for laboratory analysis to confirm soil classifications made in the field and to provide engineering properties of the existing soils. Soil tests were performed by the Geotechnical and Materials Engineering Division's Materials Laboratory. A summary of laboratory test results is provided in Appendix C.

Subsurface Information

- The soil types encountered during drilling consist predominantly of lean clay and silts in medium stiff to very stiff condition. A layer of very dense well-graded sand was encountered in both borings from depths of 65 feet to 75 feet. Hard silt was found below the layer of well-graded sand in both borings.
- Bedrock was not encountered in the borings or CPTs conducted at the subject site.
- Perched water was encountered at 45 feet bgs in both borings. Two different perched groundwater levels were recorded in the CPTs. CPTs indicated perched water at a depth of 53 in SCPT-01 and 45 feet deep in CPT-02.

The boring logs and soundings provided herein contain observations and interpretations that are valid only for the specific date and location of the borings and soundings. Subsurface conditions may vary between borings and with time.

If you have any questions regarding the reported information or if additional analyses or recommendations are needed, please contact Yonah Halpern or Yoshiya Morisaku at Extension 4925. To provide feedback on our services, please access http://dpw.lacounty.gov/go/gmedsurvey to complete a Customer Service Survey.

Prepared by:

for Yoshiya Morisaku
Yonah Halpern
Principal Civil Engineering Assistant

Prepared by:

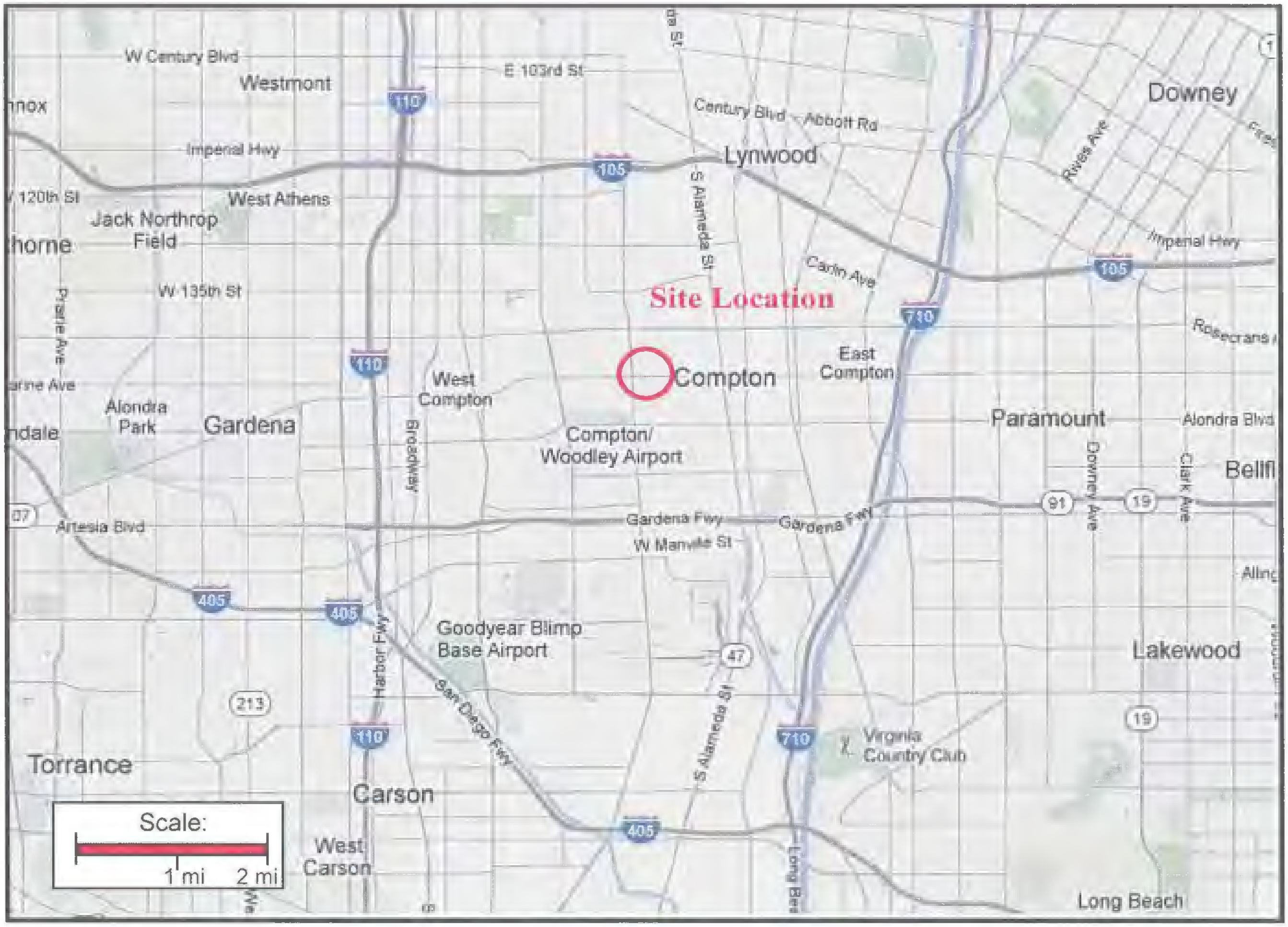
Yoshiya Morisaku
Yoshiya Morisaku
Associated Civil Engineer

REGISTERED PROFESSIONAL ENGINEER
YOSHIYA MORISAKU
No. 67587
Exp. 6/30/13
CIVIL
STATE OF CALIFORNIA

YH YM:kw
P:\gmepub\Secretarial\soilsrvw\REPORTS\Wilmington Ave over Compton Creek 53C-0907- Report.docx

Attach.

NORTH



Thomas Guide Page 734 Grid H4

WILMINGTON AVENUE
BRIDGE OVER
COMPTON CREEK
SITE LOCATION MAP

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
Geotechnical and Materials Engineering Division

DATE: March 2013

PREPARED BY: Megan Yanez

Figure 1

NORTH

Legend:

⊕ Approximate boring locations

▲ Approximate SCPT and CPT locations

WILMINGTON AVENUE BRIDGE OVER COMPTON CREEK BORING LOCATION MAP

COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
Geotechnical and Materials Engineering Division

DATE:	PREPARED BY:	
March 2013	Megan Yanez	Figure 2

Attachment A

Boring Logs and Soundings

Project: Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes / [✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-1	Date(s) Drilled: 1/28/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 1 of 3
Boring Location: 20' E of Wilmington Ave Median & 20' S of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/Lat: N 33° 53' 51.3" W 118° 14' 15.2"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA					DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)	Graphic Log		USCS	In-situ γ_d (pcf)	In-situ MC (%)	Sieve % Passing No. 4	Sieve % Passing No. 200	LL	PI	Type of Tests
0					■	4" AC / 12" CMB								
	2B		▨		▨	Sandy Lean Clay medium stiff, moist, brown, trace gravel	CL			95.4	58.4	31	12	CR MD SA
5	1R	⧅		3/3/5	▨	Lean Clay medium stiff to stiff, very moist, brown, trace silt and sand	CL							
10	3T	▯		3/2/3	▨	@10', moist		108.5	16.8					
15	4R	⧅		3/3/4	▨	@15', Lean Clay with Sand, moist		99.5	23.8	95.1	74.0	38	17	DS SA
20	5T	▯		7/12/15	░	Silty Sand medium dense, moist, brown	SM							
25														

LEGEND

⧅ California Ring (2.5 in. OD) Sample
☒ California Ring (3 in. OD) Sample
▯ SPT (2 in. OD) Sample
▨ Bulk Sample
➡ Depth to invert
▽ Seepage Encountered During Drilling
▼ Groundwater Encountered During Drilling
——— Distinct Contact
– – – Gradational or Uncertain Contact
γ_d - Dry Density
MC - Moisture Content

Types of Tests
CO - Consolidation
CR - Corrosion
DS - Direct Shear
EI - Expansion Index
HY - Hydrometer
MD - Maximum Density
PE - Permeability
SA - Sieve Analysis
SE - Sand Equivalence
TR - Triaxial

Note: This log contains observations and interpretations that are valid only for the specific date and location of the boring. Subsurface conditions vary between borings and with time. Material descriptions are derived using visual classification methods and may vary from descriptions/classifications based on laboratory testing.

Project:Wilmington Ave. Bridge Over Compton Creek 53C-0907
Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes / [✓ No]

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	Sample No.	Drive	Bulk	Blow Count (per 6 in.)			USCS	In-situ		Sieve % Passing		LL	PI	Type of Tests
								γ_d (pcf)	MC (%)	No. 4	No. 200			
25	6R	⧄		11/19/24	▨	Lean Clay hard, very moist, brown	CL	101.7	24.1	100	95.1	45	19	DS SA
30	7T	▯		6/10/11	▨	@ 30', very stiff		99.4	26.6					
35	8R	⧄		9/15/19	▨									
40	9T	▯		5/8/10	▨									
▽ 45	10R	⧄		13/26/50 (for 5")	▥	Silt with Sand hard, wet, brown perched water observed	ML	102.5	23.8	99.5	74.8			SA
50														

LEGEND

⧄ California Ring (2.5 in. OD) Sample
☒ California Ring (3 in. OD) Sample
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Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes [✓ No]

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Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

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DEPTH (FEET)	FIELD DATA				Graphic Log	DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)			USCS	In-situ γ_d (pcf)	In-situ MC (%)	Sieve % Passing No. 4	Sieve % Passing No. 200	LL	PI	Type of Tests
50	11T	▯		4/5/11		Silt very stiff, wet, brown	ML	95.8	28.3					
55	12R	⧄		15/29/41		Silty Sand dense, wet, grey	SM							
60	13T	▯		7/13/21										
65	14R	⧄		11/37/50 (for 3")		Well-Graded Sand very dense, wet, grey	SW							
70	15T	▯		12/9/22		@ 70', w/traces of silt		114.0	15.0					
75	16R	⧄		13/17/26		Silt hard, moist, dark grey (End of Boring @ 75')	ML							

LEGEND

⧄ California Ring (2.5 in. OD) Sample
⊠ California Ring (3 in. OD) Sample
▯ SPT (2 in. OD) Sample
▨ Bulk Sample
➡ Depth to invert
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Project Location: Compton
PCA: X220000462
Monitoring Well Installed: Yes / [✓ No]

SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

Boring No.: B-2	Date(s) Drilled: 1/30/13	Logged by: Yonah Halpern	Boring Diameter: 6.5 in.	Ground Elevation: N/A ft.	Page 1 of 3
Boring Location: 25' W of Wilmington Ave Median & 50' N of School St ℄		Drilled by: JET Driling	Hammer Weight: 140 lbs.	Total Depth: 75 ft.	Depth to Invert: N/A ft.
Long/ Lat : N33° 53' 50.5" W118° 14' 15.9"		Drilling Method: Hollow Stem Equipment: CME 75 Rig	Drop Height: 30 in.	Depth to Groundwater: 45 ft.	Depth to Bedrock: N/A ft.

DEPTH (FEET)	FIELD DATA Sample No.	Drive	Bulk	Blow Count (per 6 in.)	DESCRIPTION	USCS	LABORATORY TESTING In-situ γd (pcf)	MC (%)	Sieve % Passing No. 4	No. 200	LL	PI	Type of Tests
0					4" AC / 8" CMB								
	1B		▨		Sandy Lean Clay very stiff, moist, dark brown, trace gravel (fill)	CL			97.4	51.3	33	13	CR SA
5	2T	▯		3/5/9			115.4	15.4	98.0	61.0	35	19	SA
10	3R	⧄		8/9/12	Silt very stiff, moist, brown and grey, trace fine-grained sand and clay	ML							
15	4T	▯		5/10/14									
20	5R	⧄		9/18/23	Sandy Lean Clay hard, moist, brown and grey, fine-grained sand	CL	112.9	18.0	91.7	65.1	34	12	DS SA
25													

LEGEND

⧄ California Ring (2.5 in. OD) Sample
☒ California Ring (3 in. OD) Sample
▯ SPT (2 in. OD) Sample
▨ Bulk Sample
➡ Depth to invert
▽ Seepage Encountered During Drilling
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——— Distinct Contact
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γ_d - Dry Density
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Types of Tests

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Project Location: Compton
PCA: X220000462
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SOILS LOG OF BORING AND SAMPLING

Los Angeles County Department of Public Works
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	Sample No.	Drive	Bulk	Blow Count (per 6 in.)			USCS	In-situ		Sieve % Passing		LL	PI	Type of Tests
								γ_d (pcf)	MC (%)	No. 4	No. 200			
25	6T	▯		8/10/14		Sandy Lean Clay very stiff, moist, brown and grey, trace fine-grained sand	CL							
30	7R	⧅		7/10/17		@ 30' increased clay content								
35	8T	▯		8/8/13		@ 35' clay, trace fine-grained sand								
40	9R	⧅		8/18/27		Sandy Silt dense, very moist, brown, fine-grained sand	ML	106.5	21.8	100.0	50.2			DS SA
▽ 45	10T	▯		6/14/18		@ 45' perched water observed								
50														

LEGEND

⧅ California Ring (2.5 in. OD) Sample
☒ California Ring (3 in. OD) Sample
▯ SPT (2 in. OD) Sample
▨ Bulk Sample
➡ Depth to invert
▽ Seepage Encountered During Drilling
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Monitoring Well Installed: Yes [✓ No]

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Los Angeles County Department of Public Works
Geotechnical and Materials Engineering Division

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DEPTH (FEET)	FIELD DATA					DESCRIPTION	LABORATORY TESTING							
	Sample No.	Drive	Bulk	Blow Count (per 6 in.)	Graphic Log		USCS	In-situ		Sieve % Passing		LL	PI	Type of Tests
								γ_d (pcf)	MC (%)	No. 4	No. 200			
50	11R	⧅		10/19/24		Silt hard, wet, grey, trace fine-grained sand	ML	90.4	32.3	100.0	97.6	49	19	
55	12T	▯		7/14/16		Silty Sand dense, wet, grey	SM							
60	13R	⧅		14/50 (for 5")		@ 60', increased silt content		96.9 102.1	28.4 24.4					
65	14T	▯		3/5/15		Well-Graded Sand medium dense, wet, grey, coarse sand	SW							
70	15R	⧅		19/38/50 (for 2")		@ 70', very dense								
75	16T	▯		13/17/26		Silty hard, moist, dark grey (End of Boring @ 75')	ML							

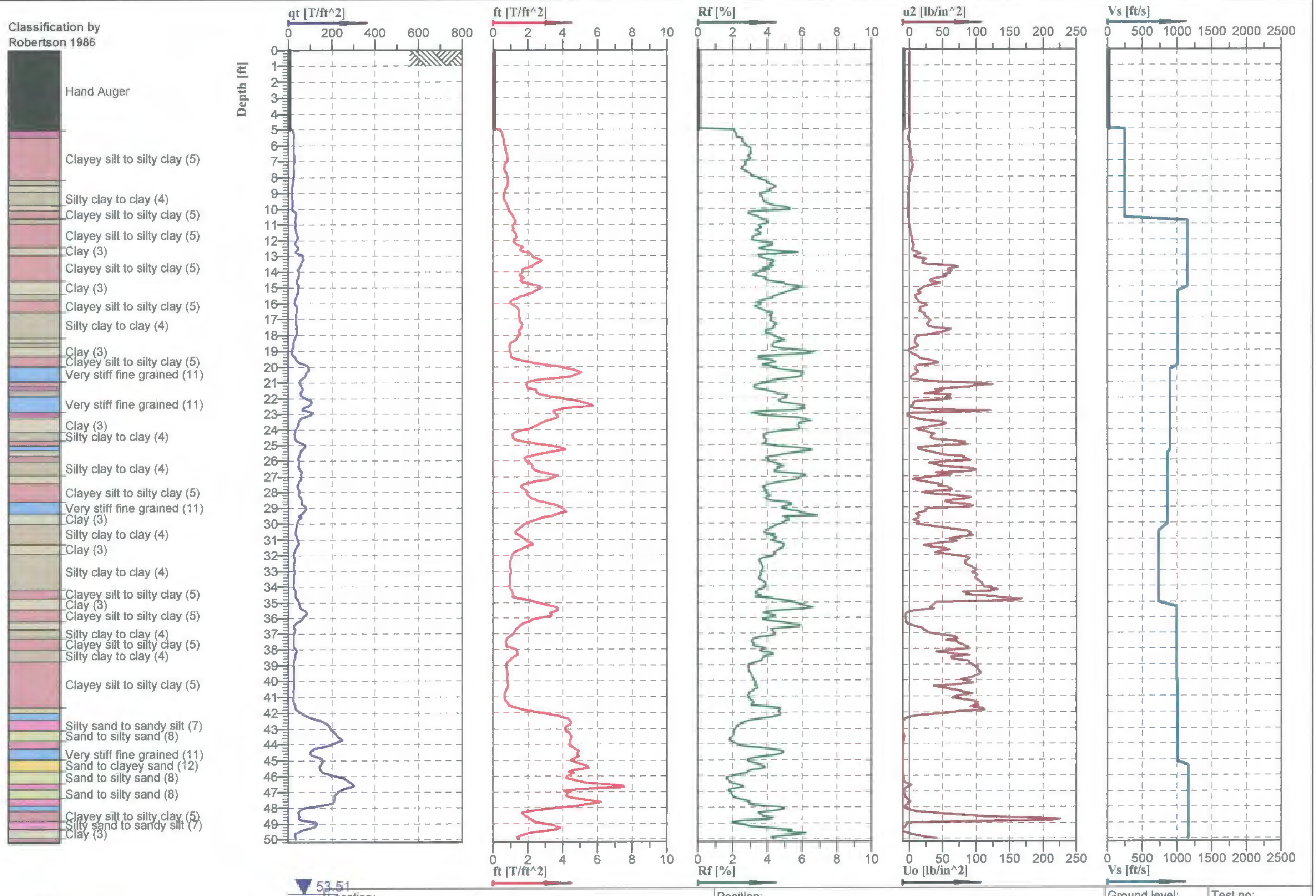
LEGEND

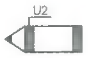
⧅ California Ring (2.5 in. OD) Sample
☒ California Ring (3 in. OD) Sample
▯ SPT (2 in. OD) Sample
▨ Bulk Sample
➡ Depth to invert
▽ Seepage Encountered During Drilling
▼ Groundwater Encountered During Drilling
——— Distinct Contact
— — — Gradational or Uncertain Contact
γ_d - Dry Density
MC - Moisture Content

Types of Tests

CO - Consolidation	MD - Maximum Density
CR - Corrosion	PE - Permeability
DS - Direct Shear	SA - Sieve Analysis
EI - Expansion Index	SE - Sand Equivalence
HY - Hydrometer	TR - Triaxial

Note: This log contains observations and interpretations that are valid only for the specific date and location of the boring. Subsurface conditions vary between borings and with time. Material descriptions are derived using visual classification methods and may vary from descriptions/classifications based on laboratory testing.





Cone No. 5583.101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

Location: Wilmington Bridge

Position:

Ground level:

Test no: SCPT-01

Project ID: XX220000462

Client: LADPW

Date: 29/Jan/2013

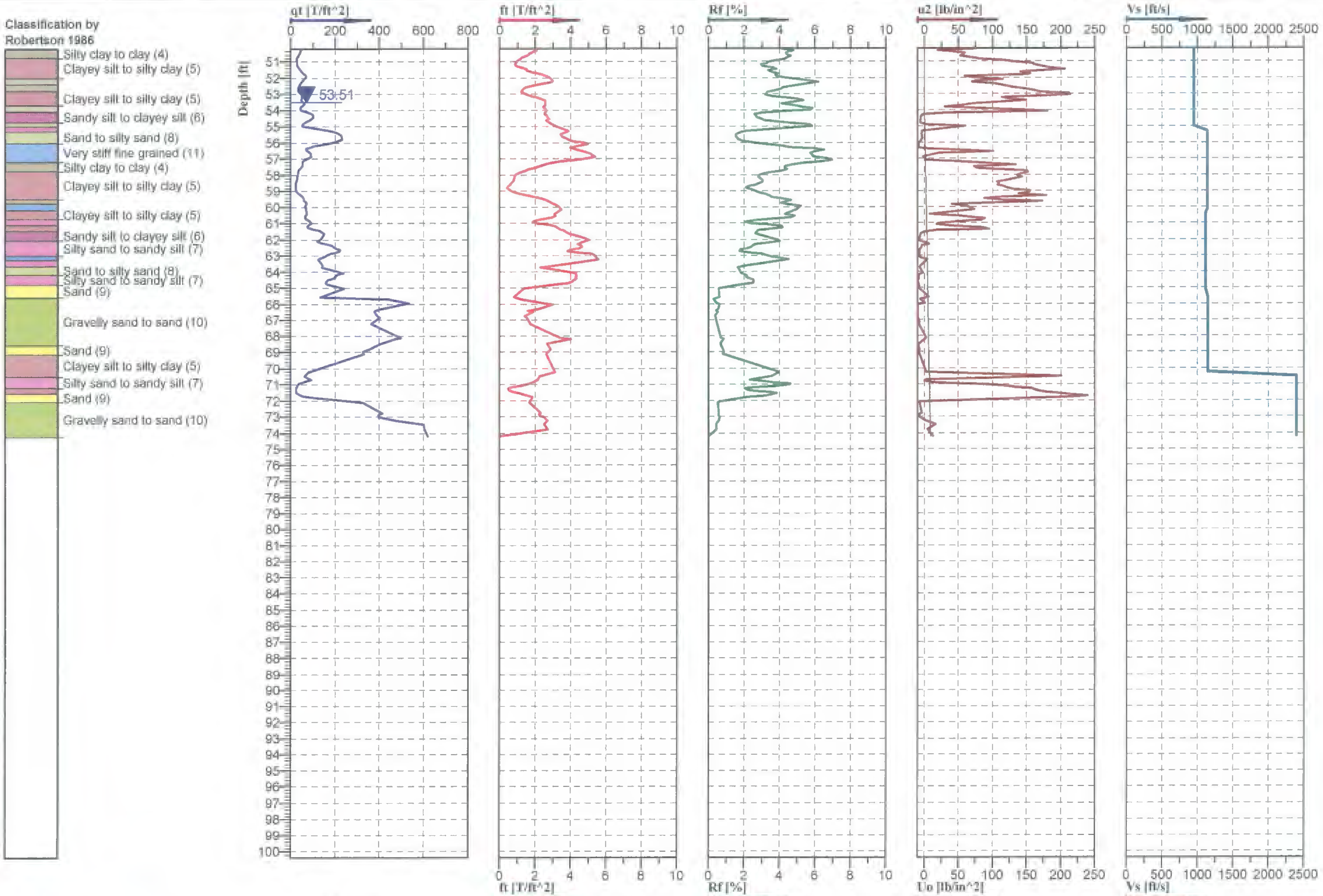
Scale: 1 : 100

Project: Wilmington Bridge SCPT

Page: 1/2

Fig:

File: CA29J1301C.csv



Cone No: 5583.101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

Location: Wilmington Bridge

Position:

Ground level:

Test no: SCPT-01

Project ID: XX220000462

Client: LADPW

Date: 29/Jan/2013

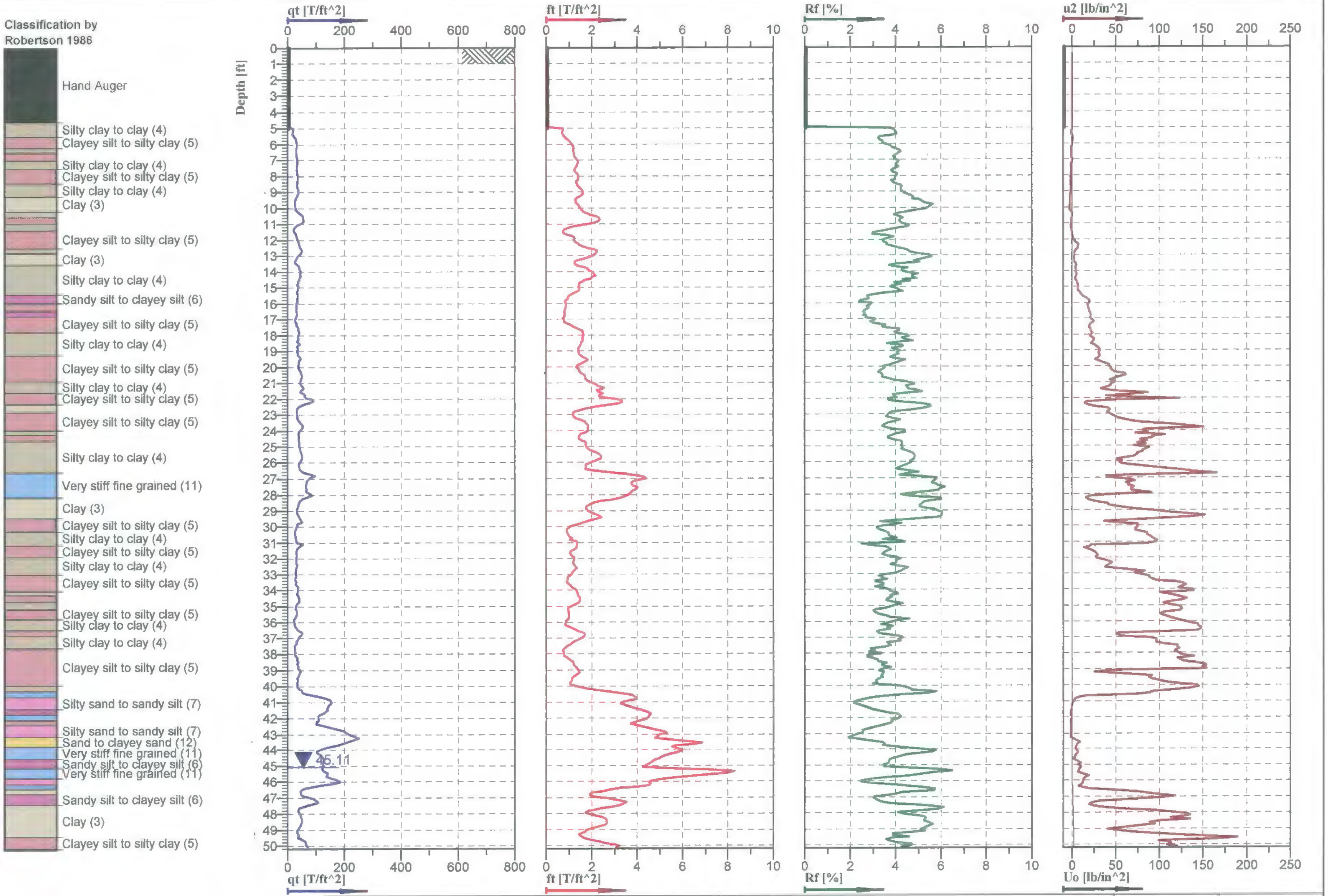
Scale: 1 : 100

Project: Wilmington Bridge SCPT

Page: 2/2

Fig:

File: CA29J1301C.csv



Cone No: 5583.101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

Location: Wilmington Bridge
Position:
Ground level:
Test no: CPT-02
Project ID: XX220000462
Client: LADPW
Date: 29/Jan/2013
Scale: 1 : 100
Project: Wilmington Bridge
Page: 1/2
Fig:
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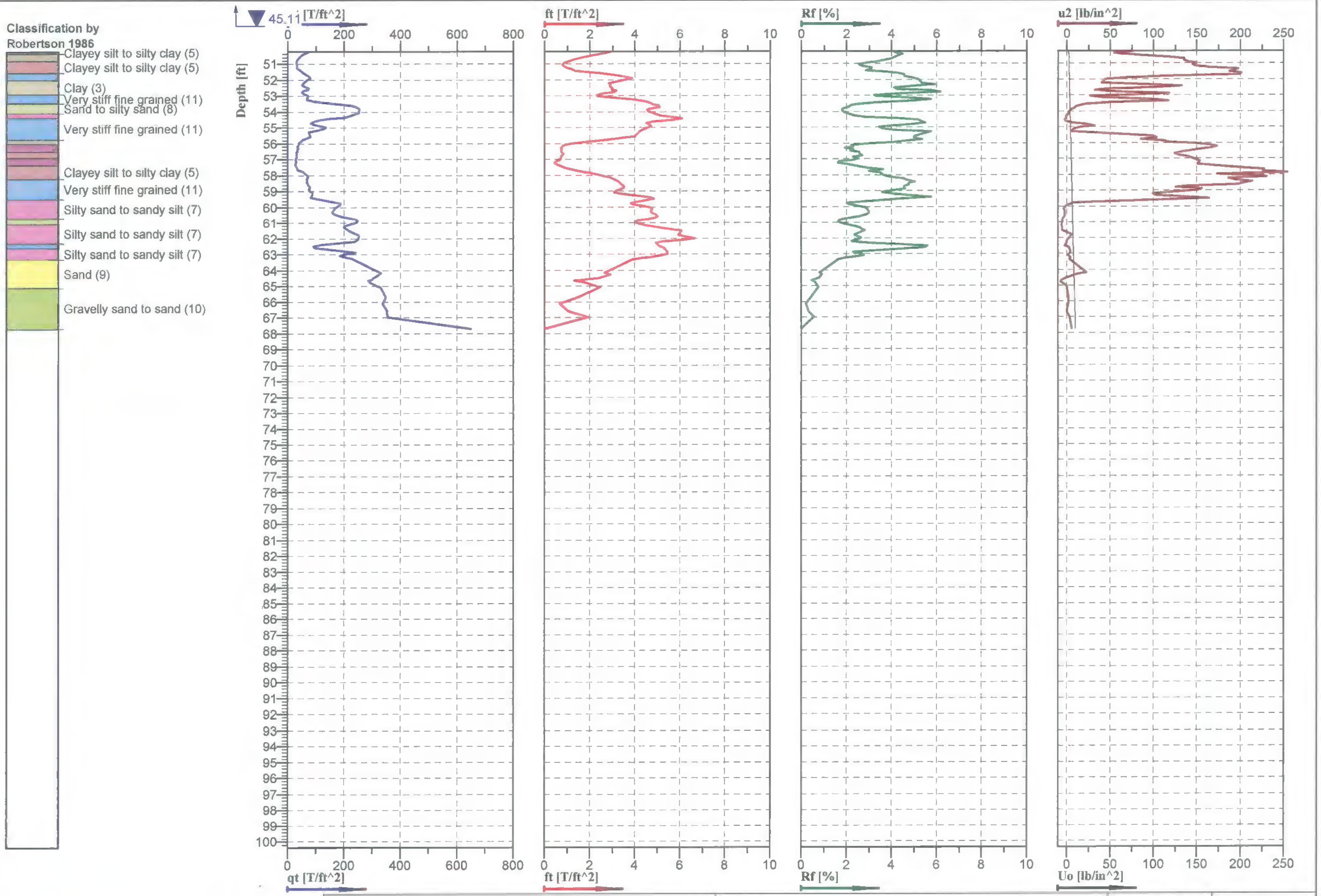
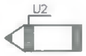




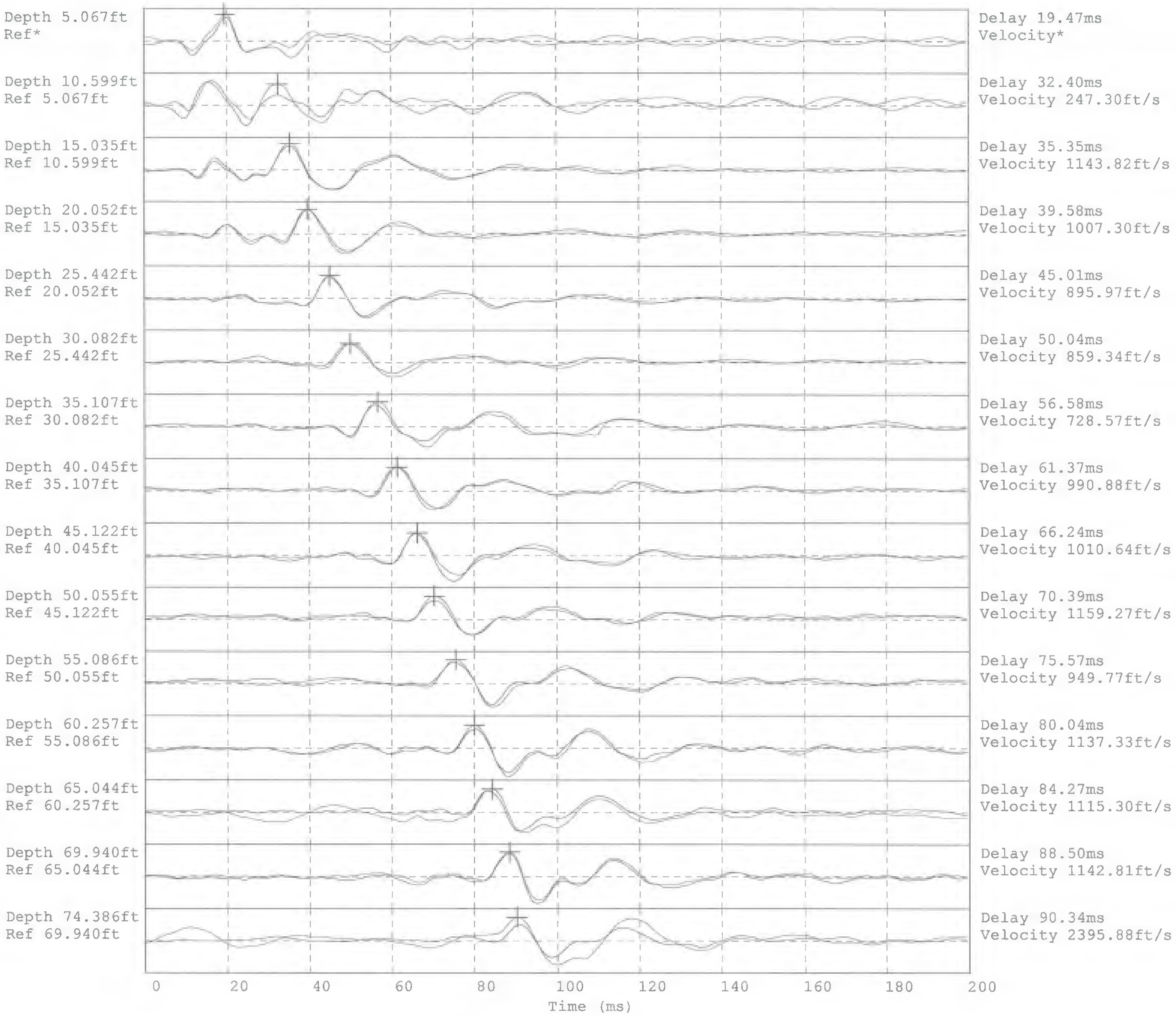
Cone No: 5583.101
Tip area [cm2]: 15
Sleeve area [cm2]: 225

Location: Wilmington Bridge
Position:
Ground level:
Test no: CPT-02
Project ID: XX220000462
Client: LADPW
Date: 29/Jan/2013
Scale: 1 : 100
Project: Wilmington Bridge
Page: 2/2
Fig:
File: CA29J1302C.cpd

Attachment B

Seismic Shear Wave Velocity

SCPT-01 S-Wave Form
Pr. No. XX220000462



Hammer to Rod String Distance 3.3 (m)
* = Not Determined

Attachment C

Summary of Laboratory Testing

SUMMARY OF LABORATORY TEST RESULTS

Geotechnical Laboratory

PROJECT NAME: Wilmington Ave. Over Compton Creek
TECHNICIAN: JA-HA-EH
PCA: X220000462

ENGINEER: Yonah Halpern
DATE: 03/07/2013
PAGE: 1 OF 1

BORING/ SAMPLE	DEPTH (ft)	UNIFIED SOIL CLASSIFICATION					MOISTURE AND DRY DENSITY				DIRECT SHEAR				CHEMICAL				Permeability (ft/day)
B - S		Class.	ATTERBERG LIMITS		#4 % Pass	#200 % Pass	Υd_{field} pcf	m.c.$_{field}$ %	$\Upsilon d_{maximum}$ pcf	m.c.$_{optimum}$ %	$\phi_{ultimate}$ Degree	$c_{ultimate}$ psf	$\phi_{maximum}$ Degree	$c_{maximum}$ psf	pH	Min. Resistivity (K ohm-cm)	Cl (ppm)	SO_4 (ppm)	
			LL	PI															
B1-2B	2-5	CL	31	12	95.4	58.4			127.0	11.3					7.35	1.6	2	0	
B1-3T	10-11.5						108.5	16.8											
B1-4R	15-16.5	CL	38	17	95.1	74.0	99.5	23.8			25	183	26	183					
B1-6R	25-26.5	CL	45	19	100.0	95.1	101.7	24.1			22	0	27	300					
B1-7T	30-31.5						99.4	26.6											
B1-10R	45-46.5	ML			99.5	74.8	102.5	23.8											
B1-11T	50-51.5						95.8	28.3											
B1-15-T	70-71.5						114.0	15.0											
B2-1B	5-10	CL	33	13	97.4	51.3									7.80	1.8	3	45	
B2-2T	5-6.5	CL	35	19	98.0	61.0	115.4	15.4											
B2-5R	20-21.5	CL	34	12	91.7	65.1	112.9	18.0			23	300	28	776					
B2-9R	40-41.5	ML			100.0	50.2	106.5	21.8			31	10	35	167					
B2-11R	50-51.5	ML	49	19	100.0	97.6	90.4	32.3											
B2-13R	60-61.5	Top rings					96.9	28.4											
B2-13R	60-61.5	Bott.rings					102.1	24.4											

Appendix E

Water Quality Assessment Report

Water Quality Assessment Report

Wilmington Avenue Bridge over Compton Creek

Wilmington Avenue Bridge over Compton Creek
Los Angeles County, California
Wilmington Avenue and West School Street
District 7-LA-0-City of Compton
Bridge No. 53C0907 BRLS-5953(615)

February 2020

Caltrans®

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Water Quality Assessment Report

Wilmington Avenue Bridge over Compton Creek Project
Los Angeles County, California
Wilmington Avenue and West School Street
District 7-LA-0-City of Compton
Bridge No. 53C0907 BRLS-5953(615)

February 2020

STATE OF CALIFORNIA
Department of Transportation

Prepared By: ______________________________ Date: 2/3/20
Danielle Thayer, Associate Environmental Planner
(310) 792-2690
El Segundo Office
GPA Consulting

Approved By: ______________________________ Date: ____________
Professional Content Reviewer, Title
Phone Number
Office Name
Partner Agency Name

Approved By: ______________________________ Date: ____________
Management Content Reviewer, Title
Phone Number
Office Name
Partner Agency Name

1.1 Executive Summary

The primary purpose of the Water Quality Assessment Report (WQAR) is to fulfill the requirements of the National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA), and provide information, to the extent possible, for the National Pollutant Discharge Elimination System (NPDES) permitting. This WQAR includes a discussion of the project, the physical setting of the project study area, and the regulatory framework with respect to water quality. It also provides data on existing water quality, surface water and groundwater resources within the project study area, describes water quality impairments and beneficial uses, identifies potential water quality impacts/benefits associated with the project, and recommends avoidance and/or minimization measures.

The County of Los Angeles, in coordination with the City of Compton, are proposing removal and replacement of the Wilmington Avenue Bridge over Compton Creek. The existing bridge includes two 11-foot-wide travel lanes and has been classified as structurally deficient due to extensive cracking and delamination of the bridge deck. The proposed bridge would be a 163-foot-long, 92-foot-wide, two-span precast pre-stressed concrete box beam structure supported by pile foundation. New bridge abutments would be constructed at approximately 15 feet behind the existing abutments/channel walls, which would be left in place with modifications to provide clearance to accommodate the new bridge superstructure. Pile drilling would be utilized at the abutment and pier locations. Full road closure would be required during project construction.

Compton Creek is a tributary of the Los Angeles River. The Compton Creek channel begins in the City of Los Angeles near Main Street and 107th Street, and flows south approximately 8.5 miles to the Los Angeles River in Rancho Dominguez. Beneficial uses of Compton Creek include groundwater recharge, municipal and domestic water supply, water contact recreation, noncontact water recreation, warm freshwater habitat, wetlands, and wildlife habitat. The creek has been listed for several pollutants on the Clean Water Act (CWA) 303(d) list; pollutants include benthic community effects, copper, indicator bacteria, lead, pH, trash, and zinc.

Project construction would last approximately 300 working days. Construction activities would include grading, demolition, pile drilling, excavation, bridge construction, and pavement installation. Project construction could result in temporary increases of pollutant loads due to construction activities. Avoidance and minimization measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, would be implemented as part of the project. Additionally, a Storm Water Pollution Prevention Plan (SWPPP) would be prepared to outline appropriate construction Best Management Practices (BMP) that would be implemented to prevent any pollutants from entering the creek within the project area.

The project would not result in substantial permanent changes to the line and grade of surface hydraulic conditions. The existing channel is completely lined with concrete and would remain channelized following project completion. The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions.

Proposed activities within Compton Creek would require coordination with, and permits from, several regulatory agencies, which include:

- Clean Water Act (CWA) Section 401 Water Quality Certification (Los Angeles Regional Water Quality Control Board (RWQCB))
- CWA Section 402 NPDES Permit (Los Angeles RWQCB, Order No. R4-2012-0175, NPDES Permit No. CAS004001) and Construction General Permit (State Water Resources Control Board (SWRCB), 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ)
- CWA Section 404 Pre-Construction Notification (U.S. Army Corps of Engineers (USACE), Nationwide Permit 14 for Multiple Crossings and Nationwide Permit 33 for Temporary Construction, Access, and Dewatering)
- California Fish and Game Code Section 1602 Streambed Alteration Agreement (California Department of Fish and Wildlife (CDFW))

Table of Contents

List of Figures

1 INTRODUCTION

1.1 Approach to Water Quality Assessment

The purpose of the Water Quality Assessment Report (WQAR) is to fulfill the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA), and to provide information for National Pollutant Discharge Elimination System (NPDES) permitting. The document includes a discussion of the proposed project, the general environmental setting of the project area, and the regulatory framework with respect to water quality; it also provides data on surface water and groundwater resources within the project area and the water quality of these waters, describes water quality impairments and beneficial uses, and identifies potential water quality impacts/benefits associated with the proposed project, and recommends avoidance and/or minimization measures for potentially adverse impacts.

As part of this analysis, reviews were conducted of the Water Quality Control Plan for the Los Angeles Region (Basin Plan), the FEMA Flood Insurance Rate Maps for Los Angeles County, Geotechnical Subsurface Exploration data, and hydraulic analysis modeling data. To determine the impacts on water quality, the increase in impervious surface area was calculated, and impacts of the construction activities were also considered.

1.2 No Build Alternative

The No Build Alternative would maintain the existing configuration of the Wilmington Avenue Bridge and would not result in improvements. The proposed project purpose and need would not be met, and operational and safety conditions (structural deficiency) would continue to worsen.

1.3 Build Alternative

1.3.1 History

The existing two-span steel girder bridge was built in 1938 and is currently supported by abutments and a middle pier. The existing bridge includes two 11-foot wide travel lanes, one 11-foot wide shoulder, and a 13-foot wide raised median.

1.3.2 Project Purpose and Need

The proposed project would correct existing bridge deficiencies, enhance vehicular safety on the bridge and improve transportation efficiency by enabling larger trucks to utilize the bridge. The project is being proposed because the existing steel girder bridge and middle pier have been determined to be structurally deficient due to extensive cracking and delamination of the bridge deck. The proposed project would include replacing the existing, steel girder bridge and pier with a new pre-cast, pre-stressed, concrete box beam structure supported by pile foundations, a new pier and new abutments.

1.3.3 Project Description

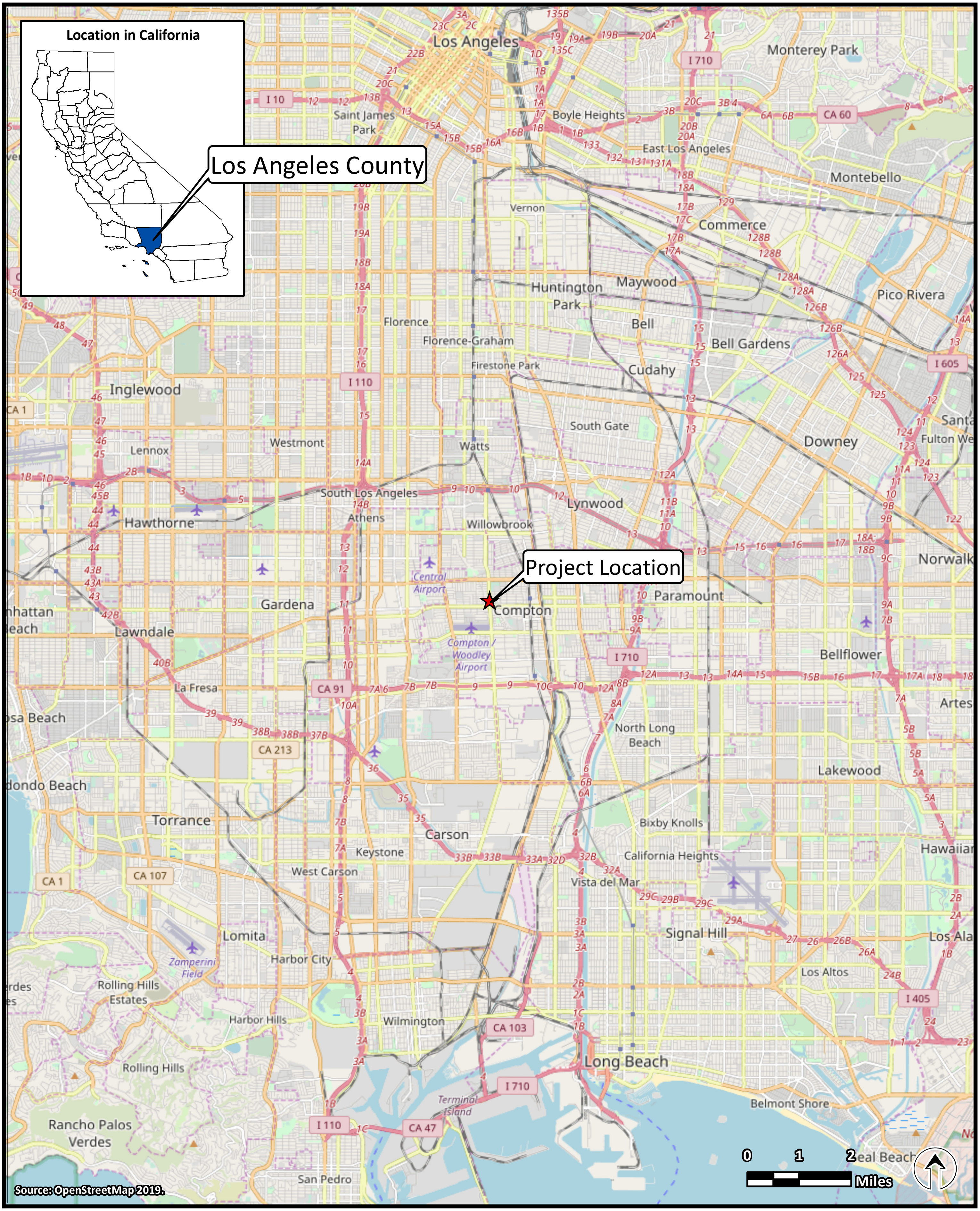
The proposed project would be located at Wilmington Avenue where it crosses over Compton Creek within the City of Compton (City) in southern Los Angeles County (County) (see **Figure 1**, Regional Location Map, and **Figure 2**, Project Location Map). The bridge replacement would be located within the South Gate U.S. Geological Survey (USGS) 7.5-minute quadrangle in Section 22, Township 3 South, Range 13 West. The area surrounding the existing bridge is largely developed with existing land uses comprised of residential and commercial development, existing right-of-way (ROW), as well as a concrete-lined flood control channel.

The proposed project would include demolition and construction activities. Generally, construction activities would include demolition, grading, pile drilling, installation of metal beam guardrail system, construction of bridge abutments, bridge pier reconstruction, reconstruction of sidewalks, drainage improvements (catch basins at driveway entrances) bicycle path reconstruction, roadway reconstruction to accommodate the raise in bridge elevation, and full road closures within project limits.

Under the proposed project, the existing two-span Wilmington Avenue Bridge over Compton Creek would be demolished. Specifically, the existing pier timber piles would be removed three feet below the finished grade, followed by the removal of the existing steel girders, cross brace members, reinforced concrete, asphalt pavement (bridge deck), and any excavated soil within the project limits of work. Specifically, the concrete bridge deck would be demolished by saw cutting and the steel girders would be removed by torch cutting before the transporting the fragmented pieces to the dump trucks using a crane. Once the bridge deck has been removed, all existing bridge bearing components would also be removed, including the concrete pier nose and abutments, which would be demolished using hoe rams and jackhammers.

The new concrete bridge pier would be constructed in the Compton Creek channel, at the same location as the existing pier. A new, sloping concrete pier nose would be constructed upstream from the bridge as part of the proposed project. Bridge pier construction would involve the installation of cast-in-drilled-hole (CIDH) concrete piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations), construction of concrete pier footings and the stem wall. Specifically, a hydraulic crane and drill rig would be utilized to drill the holes and install the rebar cages, while a concrete truck, concrete pump, fork lifts and loaders would be needed to fill the drilled holes and construct the footings and stem wall. Cast-in-drilled-hole (CIDH) piles (reinforced concrete piles cast in holes that are drilled to predetermined elevations) would support the new box beam structure. This stage would require pile driving, grading, construction of the bridge abutments and bridge pier reconstruction.

The new abutments would be constructed approximately 15 feet behind the existing abutments, which would be protected in place to accommodate clearance for the new bridge structure. The new bridge soffit (underside) would be raised approximately two feet higher than the existing bridge in order to meet the freeboard requirement. Similar to the construction of the bridge pier, the construction of the bridge abutments would involve the installation of CIDH concrete piles, pile caps, and backwalls, which would utilize a drill rig and hydraulic crane, while an excavator and crane would be utilized to install the formwork and the reinforcement for the pile caps. Additional equipment needed to install the pile caps and backwall includes forklifts, loaders, concrete pumps, and a concrete truck.



Source: OpenStreetMap 2019.

Public Works
LOS ANGELES COUNTY

FIGURE 1. REGIONAL LOCATION MAP
Wilmington Avenue over Compton Creek

Public Works
LOS ANGELES COUNTY

FIGURE 2. PROJECT LOCATION MAP
Wilmington Avenue over Compton Creek

The construction of the bridge superstructure would involve the installation of precast/prestressed adjacent concrete box beams, a cast-in-place reinforced concrete deck, sidewalks, and bridge barriers. Installation of these superstructure components would utilize a hydraulic crane, concrete slipform machine, concrete truck, and concrete pump. After the superstructure has been constructed, the bike paths, and access ramp would be reconstructed and the roadway would be paved and restriped.

Project construction would also include the reconstruction of the sidewalks adjacent to the project limits. Furthermore, drainage improvements, such as catch basins, would occur on several private property driveways. Proposed construction activities would include installing CIDH concrete piles using a drill rig, hydraulic crane, concrete truck and concrete pump and installing a reinforced concrete slab using forklifts, loaders, concrete trucks, and a concrete pump.

Project construction would also include the replacement of the bike paths along the Compton Creek channel. Specifically, reconstruction of the bike paths would include 400 feet of bike path along the north side of the channel along Wilmington Avenue, where the bike path would be supported on a concrete slab structure with CIDH piles. An access road, approximately 150 feet long, would be reconstructed along the channel at the southwest corner to accommodate the two-foot change in bridge elevation.

1.3.4 Construction Schedule

Project construction is anticipated to occur between January 2021 and May 2022, and would last for approximately 300 working days. Construction would occur Monday through Friday from 7 a.m. to 3:30 p.m.

2 REGULATORY SETTING

2.1 Federal Laws and Requirements

Clean Water Act

In 1972 Congress amended the Federal Water Pollution Control Act, making the addition of pollutants to the waters of the United States (U.S.) from any point source unlawful unless the discharge is in compliance with a NPDES permit. Known today as the Clean Water Act (CWA), Congress has amended it several times. In the 1987 amendments, Congress directed dischargers of stormwater from municipal and industrial/construction point sources to comply with the NPDES permit program. Important CWA sections are:

- Sections 303 and 304 require states to promulgate water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for a federal license or permit to conduct any activity, which may result in a discharge to waters of the U.S., to obtain certification from the State that the discharge will comply with other provisions of the act. (Most frequently required in tandem with a Section 404 permit request. See below).
- Section 402 establishes the NPDES, a permitting system for the discharges (except for dredge or fill material) of any pollutant into waters of the U.S. The Federal Environmental Protection Agency delegated to the California State Water Resources Control Board (SWRCB) the implementation and administration of the NPDES program in California. The SWRCB established nine Regional Water Quality Control Boards (RWQCBs). The SWRCB enacts and enforces the Federal NPDES program and all water quality programs and regulations that cross Regional boundaries. The nine RWQCBs enact, administer and enforce all programs, including NPDES permitting, within their jurisdictional boundaries. Section 402(p) requires permits for discharges of stormwater from industrial, construction, and Municipal Separate Storm Sewer Systems (MS4s).
- Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the U.S, including wetlands. This permit program is administered by the U.S. Army Corps of Engineers (USACE).

The objective of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”

The USACE issues two types of 404 permits: General and Individual. There are two types of General permits: Regional and Nationwide permits. 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 authorize a variety of minor project activities with no more than minimal effects.

There are also two types of Individual permits: Standard Individual permit and Letter of Permission. Ordinarily, projects that do not meet the criteria for a Nationwide Permit may be permitted under one of USACE’s Individual permits. For Standard Individual permit, the USACE decision to approve is based on compliance with U.S. Environmental Protection Agency’s (EPA) Section 404 (b)(1) Guidelines (U.S. EPA Code of Federal Regulations [CFR] 40 Part 230), and whether permit approval is in the public interest. The 404(b)(1) Guidelines were developed by the U.S. EPA in conjunction with USACE and allow the discharge of dredged or fill material into the aquatic system (waters of the U.S.) only if there is no practicable alternative which would have less adverse effects. The Guidelines state that USACE may not issue a permit if there is a least environmentally damaging practicable alternative (LEDPA), to the proposed discharge that would have less effects on waters of the U.S., and not have any other significant adverse environmental consequences. Per the Guidelines, documentation is needed that a sequence of avoidance, minimization, and compensation measures have been followed, in that order. The Guidelines also restrict permitting activities that violate water quality or toxic effluent standards, jeopardize the continued existence of listed species, violate marine sanctuary protections, or cause “significant degradation” to waters of the U.S. In addition, every permit from the USACE, even if not subject to the 404(b)(1) Guidelines, must meet general requirements. See 33 CFR 320.4.

2.2 State Laws and Requirements

Porter-Cologne Water Quality Control Act

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

The SWRCB and RWQCBs are responsible for establishing the water quality standards as required by the CWA, and regulating discharges to protect beneficial uses of water bodies. Details regarding water quality standards in a project area are contained in the applicable RWQCB Basin Plan. In California, Regional Boards designate beneficial uses for all water body segments in their jurisdictions, and then set standards necessary to protect these uses. Consequently, the water quality standards developed for particular water body segments are based on the designated use and vary depending on such use. Water body segments that fail to meet standards for specific pollutants are included in a Statewide List in accordance with CWA Section 303(d). If a Regional Board determines that waters are impaired for one or more constituents and the standards cannot be met through point source or non-source point controls (NPDES permits or Waste Discharge Requirements), the CWA requires the establishment of Total Maximum Daily Loads (TMDLs). TMDLs specify allowable pollutant loads from all sources (point, non-point, and natural) for a given watershed. The SWRCB implemented the requirements of CWA Section 303(d) through Los Angeles County’s MS4 Permit, as it includes specific TMDLs for which the County is the named stakeholder.

State Water Resources Control Board and Regional Water Quality Control Boards

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

National Pollutant Discharge Elimination System (NPDES) Program

Municipal Separate Storm Sewer Systems (MS4)

Section 402(p) of the CWA requires the issuance of NPDES permits for five categories of stormwater dischargers, including MS4s. The U.S. EPA defines an MS4 as “any conveyance or system of conveyances (roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, and storm drains) owned or operated by a state, city, town, county, or other public body having jurisdiction over storm water, that are designed or used for collecting or conveying stormwater.” The SWRCB has identified Los Angeles County as an owner/operator of an MS4 pursuant to federal regulations. The County’s MS4 permit covers all County rights-of-way, properties, facilities, and activities in the state. The SWRCB or the RWQCB issues NPDES permits for five years, and permit requirements remain active until a new permit has been adopted.

Construction General Permit

The State’s General Permit (NPDES No. CAS000002, SWRCB Order No. 2009-0009-DWQ adopted on November 16, 2010) became effective on February 14, 2011 and was amended by Order No. 2010-0014-DWQ and Order No. 2012-0006-DWQ. The permit regulates stormwater discharges from construction sites which result in a Disturbed Soil Area (DSA) or one acre or greater, and/or smaller sites that are part of a larger common plan of development.

For all projects subject to the CGP, the applicant is required to hire a Qualified Storm Water Pollution Prevention Plan (SWPPP) Developer (QSD) to develop and implement an effective SWPPP. All Project Registration Documents, including the SWPPP, are required to be uploaded into the SWRCB’s on-line Stormwater Multiple Application and Report Tracking System (SMARTS), at least 30 days prior to construction.

Section 401 Permitting

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

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

2.3 Regional and Local Requirements

Basin Plan for the Los Angeles Region

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

The Basin Plan lists the beneficial uses of surface waters and groundwaters in the region. Beneficial uses are uses that may be protected against quality degradation. These uses include and are not limited to domestic, municipal, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. The beneficial uses of surface waters and groundwaters in the basin are designated in the water quality control plans.

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

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

Phase I of the SWRCB’s MS4 program, issued in 1990, requires medium and large cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges. A municipal NPDES stormwater permit was issued to the County of Los Angeles and 84 incorporated cities (with the exception of the City of Long Beach) under Order No. R4-2012-0175, NPDES Permit No. CAS004001 by the Los Angeles RWQCB on November 8, 2012 (Los Angeles Regional Water Quality Control Board 2012).

Los Angeles County Code and Flood Control District Code

The Los Angeles County Code applies to the unincorporated areas that are directly affected by the Build Alternatives. Chapter 21 (Storm Water and Runoff Pollution Control) sets forth standards to regulate the stormwater and non-stormwater discharges to the facilities of the Los Angeles County Flood Control District to protect those facilities, the water quality of the waters in and downstream of those facilities, and the quality of the water that is being stored in underground water-bearing zones (County of Los Angeles 2013).

Los Angeles County General Plan

The *Los Angeles County General Plan* (County’s General Plan) contains the County’s goals related to land use and is designed to serve as the basis for development decisions. The following objective and policy from the County’s General Plan, Conservation and Open Space Element are applicable to the project (County of Los Angeles 1980):

- Objective: To conserve water and protect water quality.
- Policy 5: Encourage the maintenance, management, and improvement of the quality of imported domestic water, groundwater supplies, natural runoff, and ocean water.

The Greater Los Angeles County Integrated Regional Water Management Plan

The Greater Los Angeles County Region Integrated Regional Water Management group finalized the *Greater Los Angeles County Region Integrated Regional Water Management Plan* in 2014. Integrated Regional Water Management Plans are regional plans designed to improve collaboration in water resources management. The first Integrated Regional Water Management Plan for the Greater Los Angeles County Region Integrated Regional Water Management group was published in 2006 following a multiyear effort among water retailers, wastewater agencies, stormwater and flood managers, watershed groups, the business community, tribes, agriculture, and nonprofit stakeholders to improve water resources planning in the Los Angeles Basin. The plan provides a mechanism for: (1) coordinating, refining, and integrating existing planning efforts within a comprehensive, regional context; (2) identifying specific regional and watershed-based priorities for implementation projects; and (3) providing funding support for the plans, programs, projects, and priorities of existing agencies and stakeholders.

Los Angeles River Master Plan

Compton Creek is a tributary of the Los Angeles River. In July 1991, the Los Angeles County Board of Supervisors directed the County Departments of Public Works, Parks and Recreation, and Regional Planning to coordinate all interested public and private parties in the planning, financing, and implementation efforts of the *Los Angeles River Master Plan* (Los Angeles County Public Works 1996). The master plan identifies ways to enhance and revitalize the publicly owned rights of way along the Los Angeles River and Tujunga Wash.

The Compton Creek Master Plan 2006

The *Compton Creek Master Plan* was developed in 2006 to establish a vision for the future uses and needs of Compton Creek. The plan includes several design concepts for Compton Creek and surrounding land, which includes recreation opportunities, stormwater management, art, safety, and potential events and partnerships.

3 AFFECTED ENVIRONMENT

3.1 General Environmental Setting

3.1.1 Population and Land Use

Land use is an important factor in water quality. Surrounding land uses affect the quality and quantity of stormwater runoff that results from a precipitation event. Urbanized areas typically include greater proportions of impervious surface area, which could result in greater runoff potential and pollutant loads. The project area is in the City of Compton and is surrounded by low density residential, mixed use, and general commercial land uses. The project area includes and is adjacent to an existing transportation corridor, single-family residential homes, automotive and retail businesses, and open vacant land. A paved trail runs along the east side of the creek and is separated from the channel by chain-link fencing.

The project area overlaps with a vacant parcel, approximately one acre in size, and is directly southeast of the Compton Boulevard and Compton Creek intersection. Additionally, there are several parks and open spaces near the project area. Walter R. Tucker Park includes approximately four acres of open space and is 0.2 mile to the south of the project area. A second park, approximately one acre in size, is approximately 0.3 mile to the southwest of the project area. The Davis Middle School property includes a large recreational field that extends approximately 13.1 acres and is 0.3 mile to the north of the project area. Compton High School includes three recreational fields that are 10.3 acres in total, approximately 0.4 mile to the southeast of the project area.

3.1.2 Topography

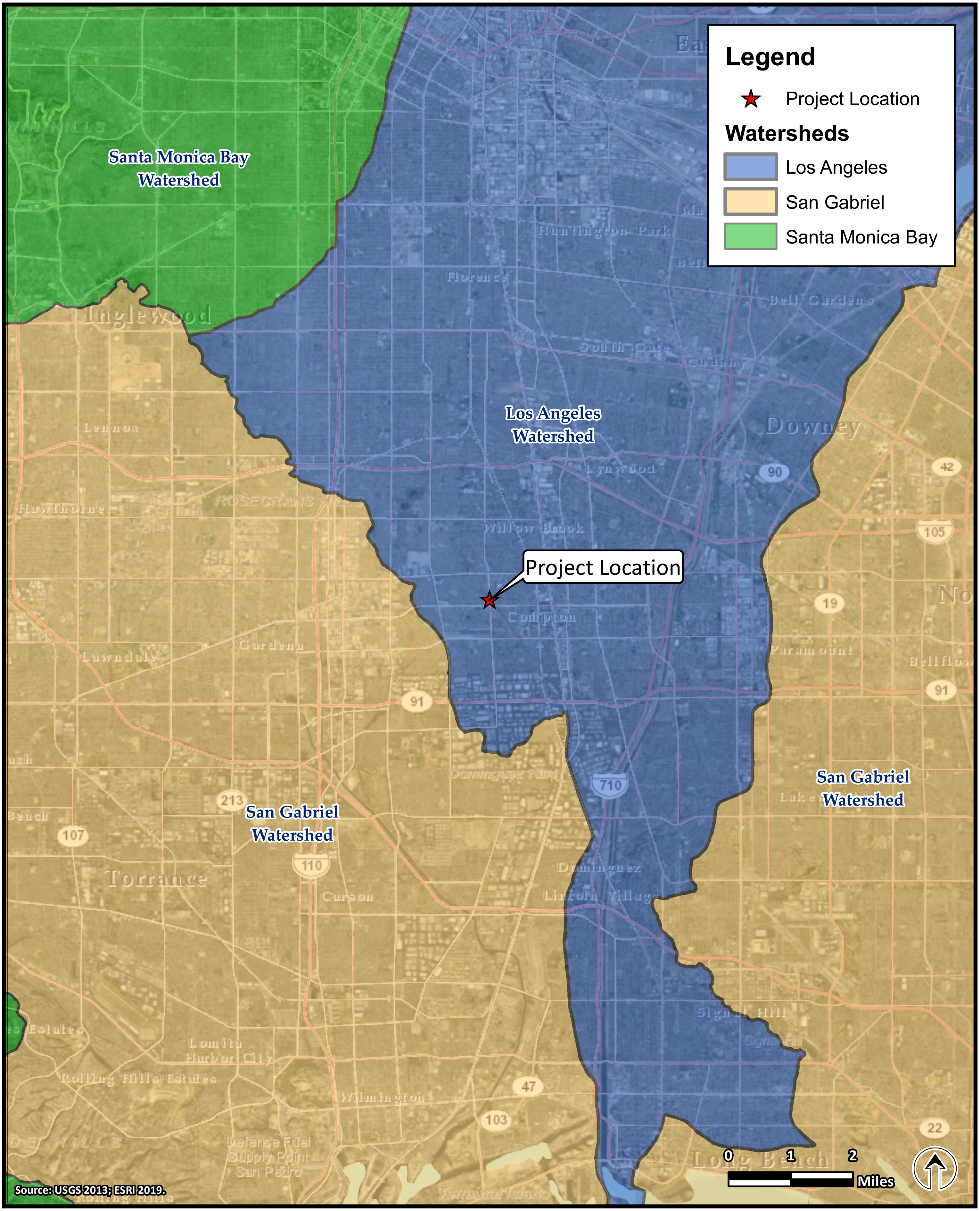
California is divided into 11 geomorphic provinces, which are naturally defined geologic regions that display a distinct landscape or landform. The project area is in the central portion of the Peninsular Ranges geomorphic province. The Peninsular Ranges province is distinguished by northwest-trending mountain ranges and valleys following faults branching from the San Andreas Fault (California Geological Survey 2002). The Peninsular Ranges are bound to the east by the Colorado Desert and extend north locally to the Santa Monica Mountains, west into the submarine continental shelf, and south to the California state line.

The topography of the project area and surrounding land uses is mostly flat. Compton Creek is a completely concrete-lined rectangular channel with an approximately 0.1% bottom grade. Areas adjacent to the channel include a slight slope towards the channel.

3.1.3 Hydrology

3.1.3.1 Regional Hydrology

The Los Angeles RWQCB, Region 4, oversees the protection of surface water and groundwater quality in the Los Angeles Region, where the project study area is located (Los Angeles Regional Water Quality Control Board 2014). The Los Angeles Region encompasses 10 Watershed Management Areas, which generally consist of a single large watershed within which exist smaller subwatersheds that are tributary to the main river. The project area is in the Los Angeles River Watershed, as shown on **Figure 3**, Watershed Map.



Source: USGS 2013; ESRI 2019.

Public Works LOS ANGELES COUNTY

FIGURE 3. WATERSHED MAP
Wilmington Avenue over Compton Creek

The Los Angeles River Watershed is one of the largest in the region, at 824 square miles, with almost half of that covered by forest or open space, including the area near the headwaters, which originate in the Santa Monica, Santa Susana, and San Gabriel mountains (California State Water Resources Control Board 2018). The rest of the watershed is intensely urbanized, and the river itself is highly modified, having been lined with concrete along most of its length by the USACE. The project area is in the Compton Creek subwatershed of the Los Angeles River Watershed (California Department of Transportation 2019).

3.1.3.2 Local Hydrology

3.1.3.2.1 Precipitation and Climate

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

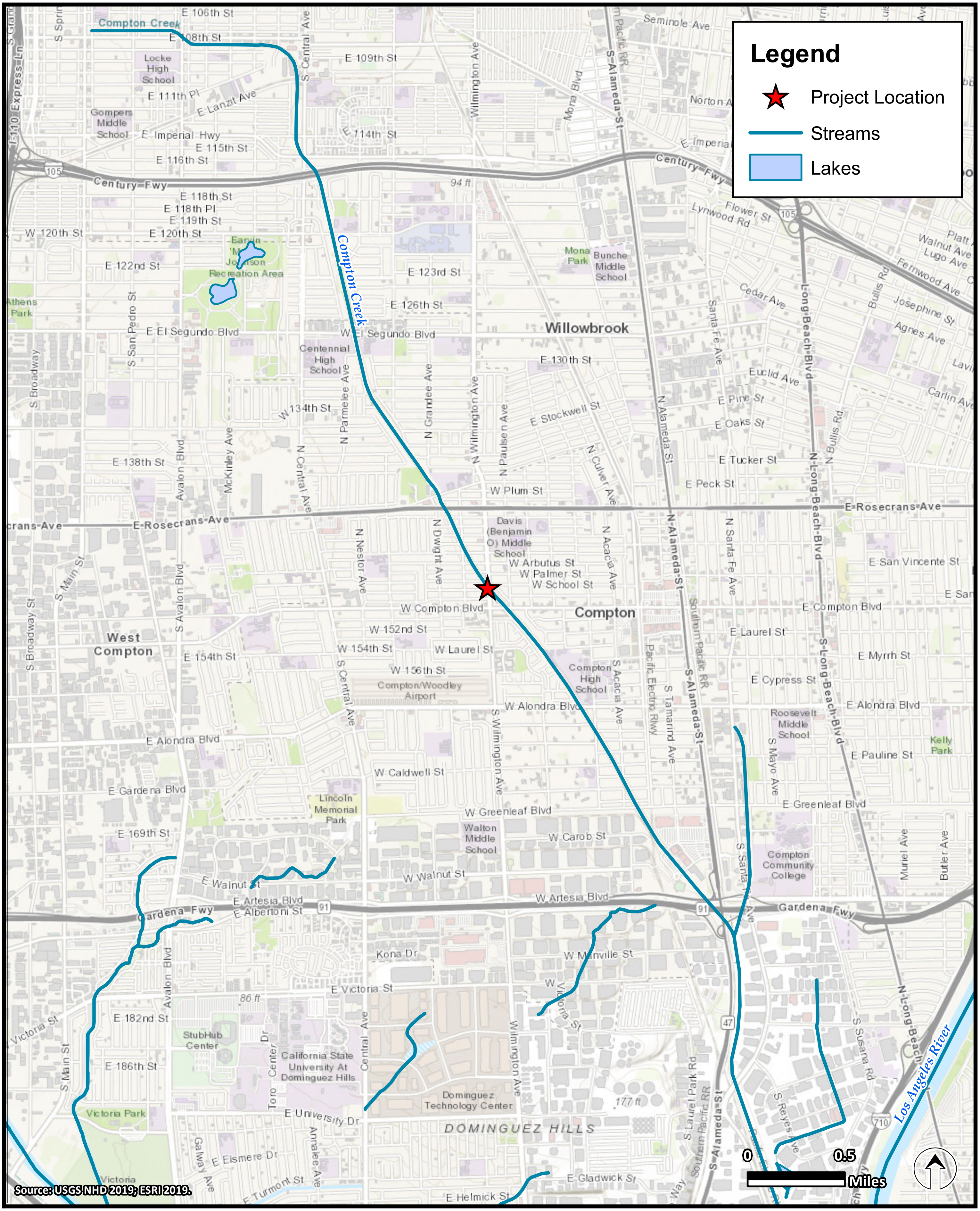
Precipitation in the project area in the year 2018 was approximately 6.94 inches, as measured by the Hawthorn Municipal Airport weather station (National Oceanic Atmospheric Administration 2018). The project area does not receive snowfall.

3.1.3.2.2 Surface Waters

Compton Creek is a tributary of the Los Angeles River. These waterways are shown on **Figure 4**, Surface Waters Map. The Compton Creek channel begins in the City of Los Angeles near Main Street and 107th Street, and flows south approximately 8.5 miles to the Los Angeles River in Rancho Dominguez (University of California Cooperative Extension 2019). The portion of Compton Creek Channel in the project area is owned and operated by the Los Angeles County Flood Control District. The creek has historically received water from surrounding freshwater marshes and willow-cottonwood forest. The creek landscape is now highly urbanized and is mostly channelized within a concrete box. The lower 2.7 miles of creek is reinforced by concrete along the sides and has an earthen bottom that supports wetland habitat. This portion of the creek begins approximately 1.4 miles to the southeast from the project area.

Beneficial uses of Compton Creek include groundwater recharge, municipal and domestic water supply, water contact recreation, noncontact water recreation, warm freshwater habitat, wetlands, and wildlife habitat (California Department of Transportation 2019). The creek is not considered a sediment-sensitive waterbody. The creek has been listed for several pollutants on the CWA 303(d) list; pollutants include benthic community effects, copper, indicator bacteria, lead, pH, trash, and zinc.

The project area is at a high point on Wilmington Avenue, and the surface water runoff generally follows both north and south away from the Prairie Avenue Bridge. The flow heading north is collected by the catch basin located at Wilmington Avenue and Palmer Street, approximately 400 feet north of the bridge. The flow heading south is collected by two catch basins located at Wilmington Avenue and School Street, approximately 100 feet south of the bridge.



Source: USGS NHD 2019; ESRI 2019.

Public Works
LOS ANGELES COUNTY

FIGURE 4. SURFACE WATERS MAP
Wilmington Avenue over Compton Creek

3.1.3.2.3 Floodplains

The project area is included in Panel 1815F of the Federal Emergency Management Agency (FEMA) Flood Insurance Risk Map (FIRM) for Los Angeles County, California. The project area is identified as Zone X, which is defined as an area determined to be outside of the 0.2 percent annual chance floodplain (see **Figure 5**, Flood Hazard Zones Map). Therefore, the project area is not considered to be within a floodplain. The Los Angeles River floodplain is approximately 0.4 mile to the east of the project area.

3.1.3.2.4 Municipal Supply

The City of Compton's water supply is a blend of mostly groundwater from the Central Basin groundwater basin and surface water imported by the Metropolitan Water District of Southern California (MWD). MWD's imported water sources are a blend of State Water Project water from Northern California and water from the Colorado River Aqueduct. The City utilizes eight groundwater wells to pump potable water from a natural underground reservoir. The nearest groundwater well to the project area is well number 870H approximately 0.4 mile to the northeast (Los Angeles County Department of Public Works n.d.). The City also has three imported water connections that help supplement the City's water demands.

3.1.3.3 Groundwater Hydrology

The classification system for groundwater was developed by the California Department of Water Resources (CDWR), and divides groundwaters into hydrologic regions (HR), basins, and subbasins (California Department of Water Resources 2003a). HRs are areas defined by physical hydrologic features such as watershed boundaries (California Department of Conservation 2010).

The project area is in the South Coast HR, which is bounded by the Pacific Ocean to the west, the crest of the San Jacinto Mountains to the east, the crest of the Transverse Ranges through the San Gabriel and San Bernardino mountains to the north, and the international boundary with the Republic of Mexico to the south. The South Coast HR contains the San Fernando, San Gabriel, Santa Ana River, and Santa Clara River valleys (California Department of Water Resources 2003b). The South Coast HR includes all of Orange County, most of San Diego and Los Angeles Counties, parts of Riverside, San Bernardino, and Ventura Counties, and a small amount of Kern and Santa Barbara Counties.

The South Coast HR has 56 delineated groundwater basins. Twenty-one basins are in subregion 4 (Los Angeles), eight basins in subregion 8 (Santa Ana), and 27 basins in subregion 9 (San Diego) (California Department of Water Resources 2003b). The project area is in the Central Groundwater Subbasin of the South Coast HR. The Central Subbasin extends over approximately 177,000 acres and occupies a large portion of the southeastern part of the Coastal Plain of Los Angeles Groundwater Basin.

The depth of groundwater in the project area is approximately 45 feet below ground surface (bgs). Surface flows through Whittier Narrows are the major source of replenishment of the groundwater supply in the Central Subbasin. Groundwater also enters from surface and subsurface flow, and percolation of precipitation, stream flow, and imported and recycled water (California Department of Water Resources 2004b). Percolation is limited in some areas because of the number of paved surfaces.

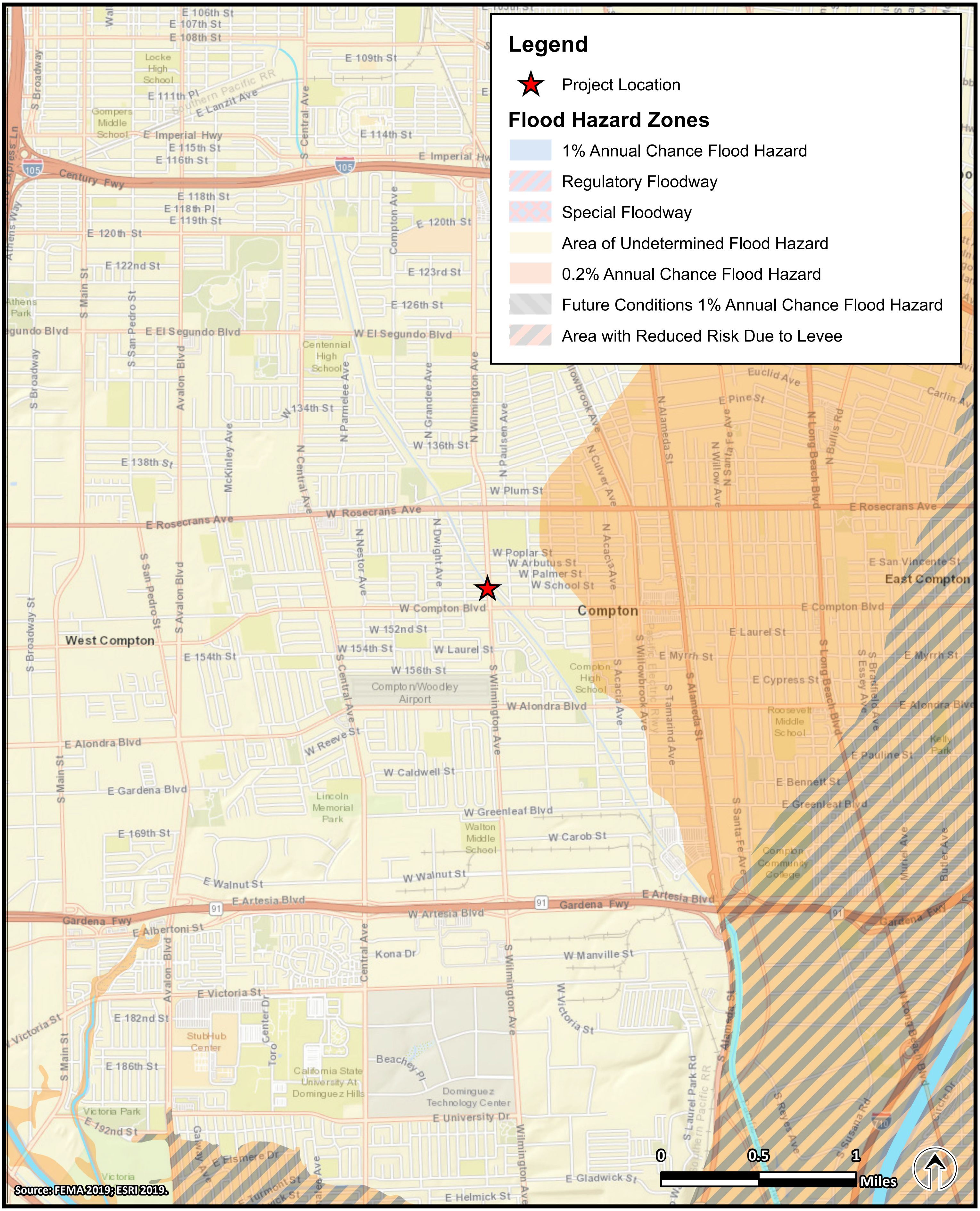


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FIGURE 5. FLOOD HAZARD ZONES MAP
Wilmington Avenue over Compton Creek

Water levels have historically varied over a range of about 5 to 25 feet since 1961. Most water wells show levels in 1999 that are in the upper portion of their recent historical range. Beneficial uses for groundwater supply from the Central Subbasin include municipal and domestic supply, industrial process supply, industrial service supply, and agricultural supply.

3.1.4 Geology/Soils

The project area is within the Los Angeles Basin, which is an actively subsiding basin bound by the Santa Monica and San Gabriel mountains to the north, the Santa Ana Mountains to the east, and the Palos Verdes Hills to the south (United States Geological Survey 1965). The project area is on the border of the Southwestern and Central blocks of the Los Angeles Basin. The project area is underlain by Quaternary nonmarine terrace deposits to the west of Compton Creek and Alluvium to the east of the creek (California Department of Conservation 1962). Quaternary rocks include unconsolidated (i.e., loose materials such as clay and sand) and semi consolidated sediments that are formed from alluvium, lake, playa, and terrace deposits and are mostly nonmarine in origin.

The soil-erodibility factor (K) represents: (1) the susceptibility of soil or surface material to erosion, (2) the transportability of the sediment, and (3) the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. Fine-textured soils that are high in clay have low K values (about 0.05 to 0.15) because the particles are resistant to detachment. Coarse-textured soils, such as sandy soils, also have low K values (about 0.05 to 0.2) because of high infiltration resulting in low runoff, although these particles are easily detached. Medium-textured soils, such as a silt loam, have moderate K values (about 0.25 to 0.45) because they are moderately susceptible to particle detachment and they produce runoff at moderate rates. Soils having a high silt content are especially susceptible to erosion and have high K values, which can exceed 0.45 and can be as large as 0.65. Silt-size particles are easily detached and tend to crust, producing high runoff rates and large runoff volumes.

The project area has a K-factor rating of 0.32, which means that underlying soil is medium-textured and yields runoff at a moderate rate. However, the creek is entirely paved with no potential for soil erosion within the channel.

3.1.5 Biological Communities

A *Natural Environment Study Minimal Impacts* (NESMI) was prepared to evaluate potential biological impacts that could occur as a result of the project (Dudek 2019). The following discussion incorporates findings from the NESMI.

The project area is surrounded by urban development and adjacent to a variety of land uses including residential and commercial. The project area also includes a recreational trail. Vegetation communities and land covers found within the project area are entirely non-native and non-natural land covers comprised of urban/developed land, disturbed habitat, ornamental vegetation, as well as concrete-lined channels associated with Compton Creek.

Areas of potential jurisdiction were evaluated according to the USACE, RWQCB, and CDFW criteria as part of the *Natural Environment Study Minimal Impacts* (NESMI) (GPA Consulting 2019). Within the project area, Compton Creek is a rectangular concrete-lined flood control channel devoid of vegetation in the channel bottom with a clear demarcation of the potential limits of regulatory agency jurisdiction. The limits of jurisdiction for channelized rectangular channels are defined as the channel bottom for USACE and RWQCB, and the top of the channel bank or vertical wall for CDFW. Channels with vertical concrete walls have the same limit of jurisdiction for all three regulatory agencies. Therefore, the project area contains regulated non-wetland Waters of the U.S. and State. Temporary and permanent impacts to waters of the U.S. and State are anticipated to occur as a result of the project. Therefore, the project would require a Section 404 Permit from USACE, a Section 401 Water Quality Certification from the RWQCB, and a 1600 Streambed Alteration Agreement from CDFW.

3.1.5.1 Aquatic Habitat

The proposed project is centered on Compton Creek (United States Geological Survey [USGS] Hydrologic Unit Code [HUC] 12: 180701050402), a north-south trending, USGS intermittent watercourse, and tributary to the Los Angeles River (USGS HUC8: 18070105) (USGS 2019) (United States Geological Survey 2019). Compton Creek within the project area conveys flow from upstream headwaters, through a heavily urbanized portion of the southern Los Angeles Basin, and eventually converges with the Los Angeles River approximately four miles southeast of the project area. Within the project area, Compton Creek is a rectangular concrete-lined flood control channel devoid of vegetation in the channel bottom with a clear demarcation of the potential limits of regulatory agency jurisdiction.

3.1.5.1.1 Special Status Species

Thirty-eight special-status plant species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, and Los Alamitos) or included within the United States Fish and Wildlife Service (USFWS) Information Planning and Conservation (IPaC) Trust Resource List for the proposed project. Potential habitat was determined to be absent for all of the thirty-eight species due to the heavily urbanized nature of the project area.

Forty-seven special-status wildlife species are reported to occur within the USGS 7.5-minute South Gate quadrangle and surrounding eight 7.5-minute quadrangles (i.e., Hollywood, Los Angeles, El Monte, Inglewood, Whittier, Torrance, Long Beach, and Los Alamitos) (California Department of Fish and Wildlife 2019, United States Fish and Wildlife Service 2019, National Marine Fisheries Service 2016). Thirteen of these species are federally- and/or State-listed (or proposed for listing) as endangered or threatened species. Potential habitat was determined to be absent for forty-four species. Of the three species determined to have potential habitat present, none were determined to have a moderate or higher potential to occur.

3.1.5.1.2 Stream/Riparian Habitats

Streams are defined in the California Code of Regulations (CCR) (14 CCR Section 1.72) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and that support fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation.” Under the California Fish and Game Code, the limits of CDFW’s jurisdiction within streams and other drainages extends from the top of the stream bank to the top of the opposite bank, to the outer drip line in areas containing riparian vegetation, and/or within the 100-year floodplain of a stream or river system containing fish or wildlife resources. Compton Creek Channel is completely lined with concrete in the project area. The lower 2.7 miles of creek, which is outside the project area, is reinforced by concrete along the sides and has an earthen bottom that supports wetland habitat. This portion of the creek begins approximately 1.4 miles to the southeast from the project area. Compton Creek is considered a stream for the purposes of this report per 14 CCR Section 1.72.

3.1.5.1.3 Wetlands

CDFW has jurisdictional authority over waters of the state, including wetlands. In practice, CDFW follows the USFWS definition of wetlands in Cowardin’s Classification of Wetlands and Deepwater Habitats of the United States: “Wetlands are lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this classification, wetlands must have one or more of the following three attributes: 1) at least periodically, the land supports hydrophytes; 2) the substrate is predominantly undrained hydric soil; and 3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year" (Cowardin, Carter, Golet, & LaRoe, 1979). The project area does not contain wetlands that meet the USFWS definition of wetlands.

3.1.5.1.4 Fish Passage

An official species list was obtained through email from the National Marine Fisheries Service (NMFS), and the species listed were considered for their potential to occur within the BSA. The NMFS species list is provided in Appendix B of the NESMI. One federal endangered/state fully protected and state endangered fish species, the Mohave tui chub (*Siphateles bicolor mohavensis*), is known to occur in areas surrounding the BSA. However, the fish species is not expected to occur in the project area because suitable associated habitat is not present in the BSA. In addition, the project area does not include Essential Fish Habitat (National Marine Fisheries Service 2019). Therefore, the project area does not include fish habitat or support fish passage.

4 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

Impacts to water quality can include temporary and/or long-term effects. Generally, temporary impacts apply to the construction phase of a project. The project would result in a DSA of 1.0 acre or more and is required to obtain coverage under Construction General NPDES Permit Number CAS000002 (CGP) (see Section 5, Avoidance and Minimization Measures).

Long-term impacts are usually caused by addition of net impervious surface area. As discussed below, the project could result in negligible increases in impervious surface area that would be accommodated by existing drainage systems. Therefore, proposed stormwater improvements are not included as part of the project. The project would comply with the *County of Los Angeles Best Management Practices Design Manual* (County of Los Angeles 2010) (see Section 5, Avoidance and Minimization Measures).

4.2 Potential Impacts to Water Quality

As discussed below, with implementation of the proposed minimization measures and BMPs, direct and indirect impacts on water quality would be minimized. In addition, no substantial or adverse changes in the physical/chemical, or biological, or human use characteristics of the aquatic environment are anticipated to result from the project.

4.2.1 Anticipated Changes to the Physical/Chemical Characteristics of the Aquatic Environment

4.2.1.1 Substrate

Project construction would require work within the Compton Creek Channel. Proposed construction activities within the channel include removal and reconstruction of the bridge pier. Hydraulic hammers and backhoe would be utilized to demolish and remove the existing concrete pier. Grading would be required for the foundation supporting the pile cap. A drill rig would be utilized to drill holes for the piles, and manual installation and a crane would be required to install the reinforcement and forms for the piles, pile cap, and pier wall. The project would include cut and fill activity for the construction of the abutment pile caps behind the existing channel walls. Excavation of approximately 10 feet deep along the cap length would be needed to construct the cap, and structural backfill would be needed after the cap is constructed. Concrete would be installed by concrete pump truck behind the existing channel walls. Pier construction would last approximately two months. The project would not result in exposed and erodible soils or substrate.

The project construction area would encompass approximately 1.72 acres. Temporary impacts on substrate could result from construction crews and equipment accessing the creek channels, temporary water diversions and support structures, dewatering activities, excavation of the channel bottom for cap construction, and the use of other heavy equipment within the channel. However, disturbance of substrate in the channel would be localized within relatively small areas directly beneath the bridge pier and footings. Temporary water diversions and support structures would be removed following construction, and disturbed areas would be restored to the extent feasible. The project would not result in any permanent impacts on substrate.

Therefore, the project would temporarily affect the substrate of the waterway during construction; however, the channel is concrete-lined, and these impacts would not adversely affect the beneficial uses of the creek.

Following project construction, no disturbance to the substrate would be required while the project is in operation. Therefore, no substantial changes to the substrate are anticipated.

4.2.1.2 Currents, Circulation or Drainage Patterns

The project would require in-channel work to replace the existing bridge. Project construction would include pile drilling at the pier locations. During construction, temporary water diversion and temporary structures could be required for work within the creek; however, these structures would be removed following construction. Therefore, any changes to circulation or drainage from these structures would be temporary. With implementation of BMPs, which include soil stabilization, sediment control, wind erosion control, tracking control, non-stormwater management, and waste management and material pollution control (see avoidance and minimization measure **WQ-3** listed in Section 5, Avoidance and Minimization Measures), project construction would not result in an altered flow rate or an increased volume of flow. In addition, construction of the project would not result in seasonal changes or tidal influences in the channel. The depth of Compton Creek would not change as a result of the project.

The project could result in negligible increases in impervious surface area. All of the other project components (bridge, sidewalks, bike path, new bridge abutments, and a sloping pier nose for the new bridge) are already impervious surfaces (concrete or asphalt). Because any potential change in impervious surface area would be minor, the drainage facilities at the bridge and creek channel would be able to accommodate future stormwater flows following project implementation. The project would not result in any permanent impacts on currents, circulation, or drainage patterns. Therefore, no substantial changes to currents, circulation, or drainage patterns are anticipated to result from the project.

4.2.1.3 Suspended Particulates (Turbidity)

Compton Creek is completely channelized with concrete. Some grassy areas and vegetation are adjacent to the channel walls. Construction activities and vehicle access within the channel would be required during project construction. The existing channel is lined with concrete and is not susceptible to erosion. However, existing pier timber piles would be removed three feet below the finished grade, and new pile caps would be graded in preparation for the new bridge structure. Additionally, project construction would include excavation and reconstruction of existing roadway, sidewalks, and bike path adjacent to the channel.

Removal and reconstruction of the bridge piers and adjacent roadways, sidewalks, and bike paths could result in temporary increases in debris and soil erosion. Therefore, soil disturbance could result in increased turbidity and total suspended solids during project construction. Measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, include compliance with the applicable NPDES Permit, SWPPP, and SWRCB CGP, which would include requirements to stabilize soils and minimize potential for discharge of suspended particulates in the creek. The contractor would develop a list of BMPs and inspection protocols that would comply with Caltrans standards. The existing roadway and embankment would be restored to match existing stabilized conditions. Therefore, temporary impacts related to suspended particulates would be minimized.

Following project construction, no soil-disturbing or erosive activity would be required while the project is in operation. Therefore, no substantial changes to suspended particulates and turbidity would be anticipated as a result of the project.

4.2.1.4 Oil, Grease and Chemical Pollutants

During construction, use of equipment and materials could result in the release of pollutants into waterbodies, including oil, grease or other chemical pollutants, such as metals and pesticides. Construction equipment would be staged on 200 feet of approach roadway on either side of the bridge. Additionally, project construction would require access and operation of construction equipment within the channel. The project would include implementation of measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures. Prior to construction, a SWPPP would be prepared to outline appropriate construction BMPs, which would include requirements to stabilize soils and minimize potential for discharge of suspended particulates, to prevent any pollutants from entering the creek within the project area. Therefore, no substantial changes to levels of oil, grease, and chemical pollutants are anticipated during project construction.

During project operation, oil, grease, and chemical pollutants could be discharged onto roadways as a result of incidental drippings from vehicles and accidental maintenance spills that could be carried into the creek through stormwater runoff. Potential pollutants could include oils, bridge paint, and surface treatments. The project would not result in increased vehicular use of a roadway or expansion of roadway surface area that could result in increased deposition of oil, grease, and other chemical pollutants typically collected on roadways. The project could result in a minor permanent increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. Therefore, the project would not result in a substantial increase in discharge of oil, grease, and chemical pollutants into the creek.

4.2.1.5 Temperature, Oxygen, Depletion and Other Parameters

Project construction could result in the generation of trash and debris that have potential to enter the creek, which could affect temperature, oxygen, and other parameters in the creek. Prior to construction, a SWPPP would be prepared to outline appropriate construction BMPs that would be implemented to prevent any pollutants from entering the creek within the project area. Additionally, the project would include implementation of measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, to prevent pollutants from entering the creek during construction.

Following project construction, the project would not generate additional sources of pollution that could affect temperature, oxygen, or other parameters. Therefore, the project would not result in permanent impacts related to these conditions.

4.2.1.6 Flood Control Functions

According to **Figure 4**, Flood Hazard Zones Map, the project area is identified as Zone X, which is defined as an area determined to be outside of the 0.2 percent annual chance floodplain. The maximum water depth of the channel in the project vicinity ranges from approximately 12.82 to 13.68 feet. During construction, the project would require work within the Compton Creek channel to replace the existing bridge. During project construction, minor, temporary supports could be required within the channel for the removal and reconstruction of the bridge pier; however, the supports would be minor structures that would be completely removed following construction.

The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. In addition, the proposed bridge structure is similar to the existing structure. Because proposed drainage conditions would be similar to existing conditions, stormwater runoff and creek flows would remain similar to existing flow conditions. Therefore, no substantial changes to the floodplains or flood control functions are anticipated.

4.2.1.7 Storm, Wave and Erosion Buffers

Wetlands may serve as buffer zones, shielding upland areas from wave actions, storm damage and erosion, per 40 CFR § 230.41. Storm, wave, and erosion buffers, including wetlands, are not located in the project area. Therefore, no substantial changes to storm, wave, and erosion buffers are anticipated during project construction or operation.

4.2.1.8 Erosion and Accretion Patterns

Some grassy areas and vegetation are adjacent to the channel walls. Equipment staging, movement of construction vehicles, and construction activity in and adjacent to the channel could result in increased erosion potential; however, the project would include implementation of measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, to avoid/minimize erosion during construction. A SWPPP would be prepared to outline appropriate construction BMPs that would be implemented to prevent erosion during project construction.

During project operation, there is no potential for erosion within the project area, as the project includes replacement and reconstruction of existing facilities, including the bridge, roadway, bicycle ramps, and embankments, which are paved and stabilized. Therefore, no substantial changes to erosion and accretion patterns are anticipated as a result of the project.

4.2.1.9 Aquifer Recharge/Groundwater

Groundwater is approximately 45 feet bgs in the project area. Project construction would include excavation to approximately 10 feet deep along the cap length to construct the cab and structural backfill. Therefore, project construction is not anticipated to require dewatering. Construction activity is not anticipated to reach groundwater and would not result in groundwater depletion or contamination.

The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. The project would include the replacement of the existing bridge, and the reconstruction of existing roadway and bicycle ramps, which are existing impervious surfaces. The project would not affect the infiltration of stormwater or groundwater recharge in the project area. Additionally, the project would not result in additional traffic or an increase in pollutant discharge that could contribute to groundwater contamination. Therefore, the project would not be anticipated to result in substantial changes to aquifer recharge or groundwater conditions.

4.2.1.10 Baseflow

Baseflow is the portion of water in a channel that is the constant stream flow in the absence or stormwater runoff. Year-round low flow in the project area is primarily from urban runoff. Compton Creek is a subwatershed of the Los Angeles River Watershed that drains approximately 42.1 square miles. The project could result in a permanent minor increase in impervious surface area (approximately 0.05 acre), resulting from an access road (currently dirt) on the southwest corner of the bridge that would be reconstructed with a concrete slab. However, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. Avoidance and minimization measures **WQ-1** through **WQ-3** would be implemented to avoid and minimize potential impacts on stormwater runoff and water quality as a result of the project. Therefore, the project would not result in substantial changes to baseflow of the creek.

4.2.2 Anticipated Changes to the Biological Characteristics of the Aquatic Environment

4.2.2.1 Special Aquatic Sites

According to CFR 40 Part 230, special aquatic sites are geographic areas that have special ecological characteristics, such as productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas, which include wetlands, mudflats, vegetated shallow, coral reefs, and riffle and pool complexes, are generally recognized as areas that substantially influence or positively contribute to the general overall environmental health or vitality of the entire ecosystem of a region. The project area does not include any geographic areas characterized as special aquatic sites. Therefore, the project would not result in impacts on special aquatic sites.

4.2.2.2 Habitat for Fish and Other Aquatic Organisms

The aquatic environment of the project area does not support fish habitat or habitat for other aquatic organisms; therefore, the project would have no impact on habitat for fish and other aquatic organisms.

4.2.2.2.1 Fish Passage (Beneficial Uses)

The aquatic environment of the project area does not support fish passage; therefore, the project would have no impact on fish passage.

4.2.2.3 Wildlife Habitat

The project area is unlikely to contain wildlife or potential wildlife habitat. Project construction would include ground disturbance within the Compton Creek Channel and along the channel banks. Although the proposed project is not expected to impact special-status wildlife species, ornamental vegetation within the project area could provide suitable habitat for nesting birds. Nesting birds could be indirectly impacted from short-term construction-related noise, resulting in decreased reproductive success or nest abandonment. Therefore, if project activities were to occur during the general avian breeding season of February 1 through September 1, the project may indirectly impact nesting birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game (CFG) Code. However, with implementation of avoidance and minimization measure **WQ-6**, the project would avoid impacts to nesting birds and potential nesting bird habitat. Therefore, the project is not anticipated to result in impacts on wildlife habitat.

4.2.2.3.1 Wildlife Passage (Beneficial Uses)

The project area is surrounded by urban, developed land uses, and does not contain any greenbelts for wildlife movement, or native vegetation and undeveloped land capable of facilitating the movement of species between large tracts of native habitat. The Compton Creek watershed is entirely urban, so the channel does not connect any large natural areas upstream with the Los Angeles River and Pacific Ocean downstream. Therefore, the project is not anticipated to result in impacts on wildlife passage.

4.2.2.4 Endangered or Threatened Species

The project area is located within a developed portion of southern Los Angeles County (i.e. City of Compton) and would not result in the removal or degradation of any natural communities. The project area is primarily developed with the bridge site spanning over an existing concrete-lined flood control channel (i.e., Compton Creek), reducing the potential for special-status plant and wildlife species to occur. No designated Critical Habitat is mapped within the project area. Additionally, no primary constituent elements for Critical Habitat in the region occur within the project area. Therefore, the project is not anticipated to result in impacts on endangered or threatened species.

4.2.2.5 Invasive Species

Invasive plants are a subset of nonnative plants that spread into undisturbed ecosystems and generally negatively impact native plants and alter ecosystem processes. One species was found in the project area that is rated as “Moderate” by California Invasive Plant Council (2019): shortpod mustard (*Hirschfeldia incana*). Shortpod mustard is common in the project vicinity in disturbed habitats. General BMPs that would be implemented as part of the project design would include the cleaning of construction equipment prior to entering the site to reduce the spread of invasive plant seeds. Therefore, the project is not anticipated to result in impacts related to invasive species.

4.2.3 Anticipated Changes to the Human Use Characteristics of the Aquatic Environment

4.2.3.1 Existing and Potential Water Supplies; Water Conservation

Beneficial uses of Compton Creek include groundwater recharge, municipal and domestic water supply, water contact recreation, noncontact water recreation, warm freshwater habitat, wetlands, and wildlife habitat (California Department of Transportation 2019). During project construction and operation, minimal water would be required for construction activities. Water would be brought in by truck and would not be sourced from the creek. Project operation would not require water supply. Therefore, the project would not result in a substantial change to existing or potential water supplies.

4.2.3.2 Recreational or Commercial Fisheries

No recreational or commercial fisheries are located within the project area. Therefore, the project would not result in impacts to recreational or commercial fisheries.

4.2.3.3 Other Water Related Recreation

Beneficial uses of Compton Creek include noncontact water recreation and contact water recreation. The noncontact recreational use in the project area includes multipurpose trails used by bicyclists and pedestrians. During construction, the project could result in temporary closures of Compton Creek Bike Trail that runs adjacent to the creek; however, a temporary detour would be provided during project construction and access to the trail would resume following project construction (see measure **WQ-4**, listed in Section 5, Avoidance and Minimization Measures). The portion of Compton Creek in the project area does not directly support any contact water recreation. Therefore, the project would not result in a substantial change in water-related recreation opportunities.

4.2.3.4 Aesthetics of the Aquatic Ecosystem

During project construction, construction equipment and activities would be visible in and around the aquatic ecosystems of the project area; however, the aesthetic quality of the aquatic ecosystems would return to similar conditions following project competition. During project operation, the project area would appear similar to existing conditions with regard to color, material, and scale. Infrastructure in the creek would be repurposed and would not be substantially modified. Therefore, the project would not result in substantial changes to the aesthetics of the aquatic ecosystem.

4.2.3.5 Parks, National and Historic Monuments, National Seashores, Wild and Scenic Rivers, Wilderness Areas, etc.

The nearest park, Walter R. Tucker Park, is approximately 0.2 mile south of the project area. The project area includes the Compton Creek Bike Trail along the east side of the creek. The project would include the reconstruction of 1660 feet of sidewalks along Wilmington Avenue and adjacent roadways; and 400 feet of bike path along the Compton Creek channel.

During construction, the project could result in temporary closures of Compton Creek Bike Trail that runs adjacent to the creek; however, a temporary detour would be provided during project construction and access to the trail would resume following project completion (see measure **WQ-4**, listed in Section 5, Avoidance and Minimization Measures). The project area does not include national and historic monuments, national seashores, wild and scenic rivers, or wilderness areas. Therefore, the project is not anticipated to result in substantial impacts on these resources.

4.2.3.6 Traffic/Transportation Patterns

During construction, full road closures on the Wilmington Avenue Bridge would be required for approximately 300 days, and planned detour routes would be provided on Rosecrans Avenue, Compton Boulevard, and Willowbrook Avenue (see measure **WQ-5**, listed in Section 5, Avoidance and Minimization Measures). Specifically, northbound traffic would be directed east on Compton Boulevard, north on Willowbrook Avenue, west on Rosecrans Avenue, and north back onto Wilmington Avenue. Southbound traffic would be directed east on Rosecrans Avenue, south on Willowbrook Avenue, west on Compton Boulevard, and south back onto Wilmington Avenue.

During operation, traffic and transportation would improve because the project would address nonstandard features and design deficiencies. Therefore, no substantial traffic or transportation changes are anticipated that would substantially alter water resources or water quality in the project area.

4.2.3.7 Energy Consumption of Generation

Project construction would require a temporary need for energy to operate construction vehicles and equipment. Energy consumption would be minimal. The project would not include adding any lanes on the bridge, and therefore, traffic levels and energy required for vehicle use would not increase in the project area as a result of the project. Additional long-term energy resources would not be required for project operation. Therefore, the project would not result in substantial changes to energy consumption or generation.

4.2.3.8 Navigation

Navigation is not permitted in Compton Creek; therefore, the project would result in no changes to navigation.

4.2.3.9 Safety

Temporary detours and signage would be provided during construction of the project to maintain vehicle and pedestrian safety (see measures **WQ-4** and **WQ-5**, listed in Section 5, Avoidance and Minimization Measures). The existing bridge is classified as structurally deficient due to extensive cracking and delamination of the bridge deck. The project would include replacement of the bridge to comply with structural safety standards. Therefore, existing traffic safety and operations are expected to improve.

4.2.4 Temporary Impacts to Water Quality

4.2.4.1 No Build Alternative

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

4.2.4.2 Build Alternative

The project would require construction activity that could result in temporary impacts on water quality. Proposed activities within Compton Creek would require coordination with, and permits from, several regulatory agencies, which could require additional time to coordinate. The anticipated reviews/permits associated with the improvements would include:

- CWA Section 401 Water Quality Certification (Los Angeles RWQCB)

- CWA Section 402 NPDES Permit (Los Angeles RWQCB, Order No. R4-2012-0175, NPDES Permit No. CAS004001) and Construction General Permit (SWRCB, 2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ)
- CWA Section 404 Pre-Construction Notification (USACE) (Nationwide Permit 14 for Multiple Crossings and Nationwide Permit 33 for Temporary Construction, Access, and Dewatering)
- California Fish and Game Code Section 1602 Streambed Alteration Agreement (California Department of Fish and Wildlife (CDFW))

4.2.4.2.1 Physical/Chemical Characteristics

Project construction is anticipated to be completed between January 2021 and May 2022, and would last for approximately 300 working days. Construction activities would include grading, demolition, pile drilling, excavation, bridge construction, and pavement installation. Project construction could result in temporary increases of pollutant loads due to construction operations, such as oil and grease spills or leaks from heavy equipment or vehicle used for construction, trash from workers, construction debris, petroleum products from construction equipment, sanitary wastes from portable toilets, and other chemicals used for construction equipment such as coolants, concrete curing compounds, and concrete waste.

Measures **WQ-1** through **WQ-4**, listed in Section 5, Avoidance and Minimization Measures, would be implemented as part of the project. Additionally, a SWPPP would be prepared to outline appropriate construction BMPs that would be implemented to prevent any pollutants from entering the creek within the project area. Through implementation of avoidance and minimization measures, pollutant discharges would be prevented throughout project construction. Therefore, the project would not be anticipated to result in substantial changes to the physical or chemical characteristics of the creek.

4.2.4.2.2 Biological Characteristics

Compton Creek within the project area does not include special aquatic sites or support habitat for fish and other aquatic organisms, wildlife, and endangered or threatened species. The project would require construction within the creek; however, the project is not anticipated to result in impacts on biological resources with implementation of BMPs and avoidance and minimization measure **WQ-6**.

4.2.4.2.3 Human Use Characteristics

Within the project area, existing beneficial uses include noncontact water recreation (California Department of Transportation 2019). During construction, access to the Compton Creek Bike Trail could be temporarily closed in some areas. Detours and signage would be implemented for trail users throughout the duration of construction (see measure **WQ-4**, listed in Section 5, Avoidance and Minimization Measures). Following project completion, full access to the trails would resume. Therefore, the project would result in substantial temporary changes to the human use characteristics of the creek.

4.2.5 Long-term Impacts During Operation and Maintenance

4.2.5.1 No Build Alternative

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

4.2.5.2 Build Alternative

4.2.5.2.1 Physical/Chemical Characteristics

The project could result in a permanent minor increase in impervious surface area; however, potential minor impervious surface area increases would result in negligible impacts to drainage, stormwater runoff, and water quality conditions. The project would not result in changes to line and grade of surface hydraulic conditions. The existing channel is completely lined with concrete and would remain channelized following project completion. The project is not anticipated to result in substantial changes to the physical or chemical characteristics of the creek.

4.2.5.2.2 Biological Characteristics

Compton Creek within the project area does not include special aquatic sites or support habitat for fish and other aquatic organisms, wildlife, and endangered or threatened species. The project could result in a permanent net increase to impervious surface area (approximately 0.05 acre). However, changes to net impervious surface area would be minor and would not result in impacts on biological resources. Project operation would not require long-term creek access. Therefore, the project is not anticipated to result in impacts on biological resources.

4.2.5.2.3 Human Use Characteristics

The project would include reconstruction of 400 feet of the Compton Creek Bike Trail in the same place as the existing trail. Soil excavated from roadway and structural excavation would fill portions of the trail at both corners of the bridge on Wilmington Avenue. The alignment and features of the proposed trail would be similar to the existing trail. Following project construction, the trail would function the same as existing conditions. Therefore, the project would not result in substantial long-term changes to the human use characteristics of the creek.

4.3 Impact Assessment Methodology

Impacts that would result from the project have been assessed for the Build Alternative. With the implementation of BMPs and standard measures, direct and indirect impacts on water quality would be minimized.

4.4 Cumulative Impacts

The cumulative setting is considered the Los Angeles watershed. The Los Angeles watershed includes the project area and Compton Creek. Existing and continuing development, as well as flood control measures and structures, contribute to cumulative water quality impacts. The project would include bridge removal and replacement and would not contribute to development in the project area or surrounding vicinity.

During project construction, the project could would result in disturbance of 1.72 acres. The project would have the potential to result in temporary increases to construction-related pollutants and turbidity within Compton Creek and its receiving water bodies. However, with implementation of measures **WQ-1** through **WQ-5**, listed in Section 5, Avoidance and Minimization Measures, the project is not anticipated to contribute to substantial cumulative impacts on water quality.

The project could result in a minor net increase to impervious surface area. The imperviousness of a drainage area contributes to the runoff volume and pollutant loads that a water body receives following a storm event. The minor increase in impervious surface as a result of the project would be considered negligible. Existing drainage systems in the project area would be able to accommodate any minor increases to stormwater runoff. Although minor, the long-term implementation of transportation projects that add to the imperviousness of the Los Angeles Watershed could be considered a cumulatively considerable impact to overall water quality of receiving waters. However, the project would not result in a substantial contribution to cumulative water quality impacts in the Los Angeles watershed.

5 AVOIDANCE AND MINIMIZATION MEASURES

To avoid and/or minimize potential impacts to water quality, the following measures would be implemented:

WQ-1: The project would comply with the applicable RWQCB NPDES Permit (Order No. R4-2012-0175, NPDES Permit No. CAS004001), SWPPP, and SWRCB CGP (2009-0009-DWQ amended by 2010-0014-DWQ & 2012-0006-DWQ).

WQ-2: The project would comply with the *County of Los Angeles Best Management Practices Manual*.

WQ-3: The contractor would develop a BMP Inspections and Checklist that follows criteria identified in the *Los Angeles County Department of Public Works Construction Site Best Management Practices Manual*. The checklist would list standard construction BMPs, which include soil stabilization, sediment control, wind erosion control, tracking control, non-stormwater management, and waste management and material pollution control. BMPs would be inspected at a minimum of once per week, within 48 hours prior and after a qualifying rain event, and at least 24 hours during extended precipitation events during project construction.

WQ-4: A temporary trail detour would be provided during temporary closures of Compton Creek Bike Trail. Signage would be placed in the project area to notify the public of the temporary detour route.

WQ-5: During construction, temporary detours and signage would be provided to maintain the flow of vehicle traffic.

WQ-6: To avoid potential direct and indirect impacts to nesting birds protected by the MBTA and CFG Code, project activities would avoid the general nesting season of February 1 through September 1. If this season cannot be avoided, then a pre-construction clearance survey should be conducted seven days prior to project activities to determine the presence/absence of any nesting bird species within the tree proposed for removal, as well as vegetation within 300 feet (for non-raptor bird species) and 500 feet (for raptor species) of the proposed work area. If a nesting bird is found, an avoidance buffer will be established around the nest, based on the species sensitivity to disturbance and proximity to impact areas. The buffer will remain in place as long as the nest is considered active, as determined by an on-site monitor. No encroachment into the buffer may occur within the consent of the on-site monitor, as long as a nest is still active.

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6.2 Preparer Qualifications

Danielle Thayer, Associate Environmental Planner, GPA Consulting. M.S. in Natural Resources and Environmental Sciences. 6 years of experience in water quality impacts analysis.

Jeanne Ogar, Senior Environmental Planner, GPA Consulting. Master of Environmental Science and Management (MESM). 13 years of experience in environmental impacts analysis.

Appendix F

Field Noise Measurement Data

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT WILMINGTON BRIDGE **PROJECT #** 11125 03 04
SITE ID
SITE ADDRESS **OBSERVER(S)** PETE VITAR
START DATE 5/14/19 **END DATE** 5/14/19
START TIME **END TIME**

METEOROLOGICAL CONDITIONS
TEMP 64 F **HUMIDITY** 76 % R.H. **WIND** [✓ CALM] LIGHT MODERATE
WINDSPD MPH **DIR.** N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY SUNNY CLEAR [✓ OVRCAST] PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM-3 TYPE 1 2 SERIAL # 1403M004
CALIBRATOR BSWA CA 114 SERIAL # 480151
CALIBRATION CHECK PRE-TEST ______ dBA SPL POST-TEST ______ dBA SPL WINDSCRN YES

SETTINGS A-WTD [✓ SLOW] FAST FRONTAL RANDOM ANSI OTHER:

ST-1

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
7-8	9:16	9:31	75.4	90.2	54.5				

COMMENTS
READING TAKEN AT WESTERN PROPERTY LINE OF 245 N. MAGNOLIA COUNTY, ALONGSIDE COMPTON CREEK AND WILMINGTON AVE; PRIMARY NOISE SOURCE IS TRAFFIC

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE [✓ TRAFFIC] AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR [✓ EOP:] 23' FROM WILMINGTON AVE EO
TRAFFIC COUNT DURATION: — MIN SPEED ____ MIN SPEED

COUNT 1 (OR RDWY 1) DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB	IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2) NB/EB	SB/WB	NB/EB	SB/WB
AUTOS									
MED TRKS									
HVY TRKS									
BUSES									
MOTRCLS									

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS [✓ BIRDS] DIST. INDUSTRIAL DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN [✓ HARD] SOFT MIXED FLAT OTHER:
PHOTOS 4502; 4503; 4504; 4505; 4506; 4507; 4508;
OTHER COMMENTS / SKETCH

N

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT WILMINGTON BRIDGE PROJECT # 11125 03 04
SITE ID
SITE ADDRESS OBSERVER(S) PETE VITAR
START DATE 5/14/19 END DATE 5/14/19
START TIME END TIME

METEOROLOGICAL CONDITIONS
TEMP 64 F HUMIDITY 76 % R.H. WIND [✓ CALM] LIGHT MODERATE
WINDSPD MPH DIR. N NE S SE S SW W NW VARIABLE STEADY GUSTY
SKY SUNNY CLEAR [✓ OVRCAST] PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM-3 TYPE 1 2 SERIAL # MU3 17004
CALIBRATOR BSWA CA 114 SERIAL # 480151
CALIBRATION CHECK PRE-TEST ____ dBA SPL POST-TEST ____ dBA SPL WINDSCRN YES

SETTINGS A-WTD [✓ SLOW] FAST FRONTAL RANDOM ANSI OTHER:

ST-2

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
[illegible]	[illegible]	[illegible]							
10-11	9:46	10:01	67.1	82.2	49.9				

COMMENTS
READING TAKEN IN FRONT OF 810 W. SCHOOL ST. (RESIDENTIAL); PRIMARY NOISE SOURCE IS TRAFFIC ON WILMINGTON AVE, TO THE EAST; 20' TO END OF PAVEMENT ON SCHOOL ST., 85' TO END OF PAVEMENT ON WILMINGTON AVE.

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE [✓ TRAFFIC] AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR [✓ EOP:] 20' TO SCHOOL ST / 85' TO WILMINGTO
TRAFFIC COUNT DURATION: – MIN SPEED ___ MIN SPEED

	COUNT 1 (OR RDWY 1)				IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE	COUNT 2 (OR RDWY 2)			
			SPEED					SPEED	
DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB
AUTOS									
MED TRKS									
HVY TRKS									
BUSES									
MOTRCLS									

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES DIST. BARKING DOGS [✓ BIRDS] DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN [✓ HARD] SOFT MIXED FLAT OTHER:
PHOTOS 4510; 4511; 4512; 4513; 4514; 4515
OTHER COMMENTS / SKETCH

N

DUDEK

FIELD NOISE MEASUREMENT DATA

PROJECT WILMINGTON BRIDGE
PROJECT # 11125 03 04
SITE ID
OBSERVER(S) PETE VITAR
SITE ADDRESS
START DATE 5/14/19 END DATE 5/14/19
START TIME END TIME

METEOROLOGICAL CONDITIONS
TEMP 64 F HUMIDITY 74 % R.H.
WIND [✓ CALM] LIGHT MODERATE VARIABLE STEADY GUSTY
WINDSPD MPH DIR. N NE S SE S SW W NW
SKY SUNNY CLEAR [✓ OVRCAST] PRTLY CLDY FOG RAIN

ACOUSTIC MEASUREMENTS
MEAS. INSTRUMENT PICCOLO SLM-3 TYPE 1 2 SERIAL # 140317004
CALIBRATOR BSWA CA 114 SERIAL # 480151
CALIBRATION CHECK PRE-TEST dBA SPL POST-TEST dBA SPL WINDSCRN YES

SETTINGS A-WTD [✓ SLOW] FAST FRONTAL RANDOM ANSI OTHER:

ST-3

REC. #	BEGIN	END	Leq	Lmax	Lmin	L90	L50	L10	OTHER (SPECIFY METRIC
12-13	10:08	10:23	60.7	73.9	49.0				

COMMENTS
READING TAKEN IN FRONT OF 810-812 PALMER ST. (RESIDENTIAL), ALONGSIDE COMPTON CREEK; PRIMARY NOISE SOURCE IS TRAFFIC ON WILMINGTON AVE;

SOURCE INFO AND TRAFFIC COUNTS
PRIMARY NOISE SOURCE [✓ TRAFFIC] AIRCRAFT RAIL INDUSTRIAL OTHER:
ROADWAY TYPE: ASPHALT DIST. TO RDWY C/L OR [✓ EOP]: 1' FROM EOP ON PALMER ST
TRAFFIC COUNT DURATION: — MIN SPEED MIN SPEED

	DIRECTION	NB/EB	SB/WB	NB/EB	SB/WB		NB/EB	SB/WB	NB/EB	SB/WB
COUNT 1 (OR RDWY 1)	AUTOS					IF COUNTING BOTH DIRECTIONS AS ONE, CHECK HERE				
	MED TRKS									
	HVY TRKS									
	BUSES									
	MOTRCLS					COUNT 2 (OR RDWY 2)				

SPEEDS ESTIMATED BY: RADAR / DRIVING THE PACE
POSTED SPEED LIMIT SIGNS SAY:

OTHER NOISE SOURCES (BACKGROUND): DIST. AIRCRAFT RUSTLING LEAVES [✓ DIST. BARKING DOGS] [✓ BIRDS] DIST. INDUSTRIAL
DIST. KIDS PLAYING DIST. CONVRSTNS / YELLING DIST. TRAFFIC (LIST RDWYS BELOW) DISTD GARDENERS/LANDSCAPING NOISE
OTHER:

DESCRIPTION / SKETCH
TERRAIN HARD SOFT [✓ MIXED] FLAT OTHER:
PHOTOS 4517; 4518; 4519; 4520; 4521; 4522; 4523;
OTHER COMMENTS / SKETCH

N

Appendix G

Traffic Counts

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	19	2	0	0	0	0	0	0	0	0	0	0	**21**
00:15	0	22	2	0	0	0	0	0	0	0	0	0	0	**24**
00:30	0	20	3	0	0	0	0	0	0	0	0	0	0	**23**
00:45	0	19	2	0	0	0	0	0	0	0	0	0	0	**21**
01:00	0	15	1	0	0	0	0	0	0	0	0	0	0	**16**
01:15	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
01:30	0	21	3	0	0	0	0	0	0	0	0	0	0	**24**
01:45	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
02:00	0	13	1	0	0	0	0	0	0	0	0	0	0	**14**
02:15	0	10	2	0	1	0	0	0	0	0	0	0	0	**13**
02:30	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
02:45	0	9	3	0	1	0	0	0	0	0	0	0	0	**13**
03:00	0	7	1	0	0	0	0	0	0	0	0	0	0	**8**
03:15	0	11	2	0	0	0	0	0	0	0	0	0	0	**13**
03:30	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
03:45	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
04:00	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
04:15	0	10	2	0	0	0	0	0	0	0	0	0	0	**12**
04:30	0	13	1	0	0	0	0	0	0	0	0	0	0	**14**
04:45	0	17	2	0	0	0	0	0	0	0	0	0	0	**19**
05:00	0	20	4	1	0	0	0	0	0	0	0	0	0	**25**
05:15	0	25	7	0	1	0	0	0	0	0	0	0	0	**33**
05:30	0	22	5	1	0	0	0	0	0	0	0	0	0	**28**
05:45	0	38	9	1	0	0	0	0	0	0	0	0	0	**48**
06:00	0	24	4	0	0	0	0	0	0	0	0	0	0	**28**
06:15	0	49	7	3	0	0	0	0	0	0	0	0	0	**59**
06:30	0	67	9	3	0	0	0	0	0	0	0	0	0	**79**
06:45	0	60	15	2	0	0	0	0	0	0	0	0	0	**77**
07:00	0	99	15	2	0	0	0	0	0	0	0	0	0	**116**
07:15	0	122	15	5	2	0	0	0	0	0	0	0	0	**144**
07:30	0	162	16	6	3	0	0	0	0	0	0	0	0	**187**
07:45	0	216	23	5	2	0	0	0	0	0	0	0	0	**246**
08:00	0	212	24	4	1	0	0	0	0	0	0	0	0	**241**
08:15	0	202	19	3	3	0	0	0	0	0	0	0	0	**227**
08:30	0	127	16	5	1	0	0	0	0	0	0	0	0	**149**
08:45	0	152	17	5	2	0	0	0	0	0	0	0	0	**176**
09:00	0	125	16	2	1	0	0	0	0	0	0	0	0	**144**
09:15	0	116	14	4	2	0	0	0	0	0	0	0	0	**136**
09:30	0	97	15	3	1	0	0	0	0	0	0	0	0	**116**
09:45	0	116	16	2	2	0	0	1	0	0	0	0	0	**137**
10:00	0	109	14	1	1	0	0	0	0	0	0	0	0	**125**
10:15	0	135	17	4	2	0	0	1	0	0	0	0	0	**159**
10:30	0	108	13	3	1	0	0	0	1	0	0	0	0	**126**
10:45	0	120	15	1	1	0	0	1	0	0	0	0	0	**138**
11:00	0	125	14	3	3	0	0	0	1	0	0	0	0	**146**
11:15	0	126	16	1	1	0	0	0	0	0	0	0	0	**144**
11:30	0	127	12	4	3	0	0	0	0	0	0	0	0	**146**
11:45	0	125	16	2	1	0	0	0	0	0	0	0	0	**144**
12:00 PM	0	130	15	2	3	0	0	0	0	0	0	0	0	**150**
12:15	0	134	22	3	2	1	0	0	0	0	0	0	0	**162**
12:30	0	115	14	2	3	0	0	0	0	0	0	0	0	**134**
12:45	0	136	16	2	2	0	0	0	0	0	0	0	0	**156**
13:00	0	136	14	4	1	0	0	0	0	0	0	0	0	**155**
13:15	0	116	15	1	1	0	0	0	0	0	0	0	0	**133**
13:30	0	131	17	2	2	1	0	0	0	0	0	0	0	**153**
13:45	1	130	17	4	3	0	0	0	0	0	0	0	0	**155**
14:00	0	152	17	4	2	0	0	0	0	0	0	0	0	**175**
14:15	0	177	29	5	1	0	0	0	0	0	0	0	0	**212**
14:30	0	240	35	6	1	0	0	0	0	0	0	0	0	**282**
14:45	0	282	32	5	3	0	0	0	0	0	0	0	0	**322**
15:00	0	228	23	4	3	0	0	0	0	0	0	0	0	**258**
15:15	0	204	30	3	4	0	0	0	0	0	0	0	0	**241**
15:30	0	210	33	6	1	0	0	0	1	0	0	0	0	**251**
15:45	0	271	34	4	3	0	0	0	0	0	0	0	0	**312**
16:00	0	226	29	6	2	0	0	0	0	0	0	0	0	**263**
16:15	0	270	41	5	3	0	0	0	0	0	0	0	0	**319**
16:30	1	249	32	4	2	0	0	0	0	0	0	0	0	**288**
16:45	1	263	39	5	2	0	0	0	0	0	0	0	0	**310**
17:00	0	200	23	3	1	0	0	0	1	0	0	0	0	**228**
17:15	0	291	40	4	1	0	0	0	0	0	0	0	0	**336**
17:30	0	261	26	6	2	0	0	0	0	0	0	0	0	**295**
17:45	0	243	30	3	2	0	0	0	1	0	0	0	0	**279**
18:00	0	223	23	6	1	0	0	0	0	0	0	0	0	**253**
18:15	0	224	28	2	3	0	0	0	0	0	0	0	0	**257**
18:30	0	164	20	4	3	0	0	0	0	0	0	0	0	**191**
18:45	0	152	20	3	1	0	0	0	0	0	0	0	0	**176**
19:00	0	144	18	3	1	0	0	1	0	0	0	0	0	**167**
19:15	0	103	10	2	0	0	0	0	0	0	0	0	0	**115**
19:30	0	117	13	3	1	0	0	0	0	0	0	0	0	**134**
19:45	1	106	12	1	1	0	0	0	0	0	0	0	0	**121**
20:00	0	89	10	2	0	0	0	0	0	0	0	0	0	**101**
20:15	0	99	15	1	1	0	0	0	0	0	0	0	0	**116**
20:30	0	85	11	1	0	0	0	0	0	0	0	0	0	**97**
20:45	0	76	9	2	0	0	0	0	0	0	0	0	0	**87**
21:00	0	71	7	1	0	0	0	0	0	0	0	0	0	**79**
21:15	0	65	6	1	0	0	0	0	0	0	0	0	0	**72**
21:30	0	57	7	2	0	0	0	0	0	0	0	0	0	**66**
21:45	0	56	6	1	0	0	0	0	0	0	0	0	0	**63**
22:00	0	56	7	2	0	0	0	0	0	0	0	0	0	**65**
22:15	0	47	5	1	0	0	0	0	0	0	0	0	0	**53**
22:30	0	48	3	1	0	0	0	0	0	0	0	0	0	**52**
22:45	0	23	3	0	0	0	0	0	0	0	0	0	0	**26**
23:00	0	23	2	1	0	0	0	0	0	0	0	0	0	**26**
23:15	0	27	2	0	0	0	0	0	0	0	0	0	0	**29**
23:30	0	32	4	0	0	0	0	0	0	0	0	0	0	**36**
23:45	0	27	2	0	1	0	0	0	0	0	0	0	0	**30**
Totals	**4**	**10200**	**1282**	**209**	**99**	**2**		**4**	**5**					**11805**
% of Totals	0%	86%	11%	2%	1%	0%		0%	0%					100%

AM Volumes	0	3291	416	76	36	0	0	3	2	0	0	0	0	3824
% AM		28%	4%	1%	0%			0%	0%					32%
AM Peak Hour		07:30	07:30	07:15	07:30	11:30		09:30	10:15					07:30
Volume		792	82	20	9	1		2	2					901
PM Volumes	4	6909	866	133	63	2	0	1	3	0	0	0	0	7981
% PM	0%	59%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	16:00	17:15	16:00	15:30	14:30	12:00		18:15	17:00					15:45
Volume	2	1018	141	21	11	1		1	2					1182

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1486	⟷	13%	1198	⟷	10%	2318	⟷	20%	6803	⟷	58%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	13	2	0	0	0	0	0	0	0	0	0	0	**15**
00:15	0	15	0	0	0	0	0	0	0	0	0	0	0	**15**
00:30	0	15	1	0	0	0	0	0	0	0	0	0	0	**16**
00:45	0	7	2	0	0	0	0	0	1	0	0	0	0	**10**
01:00	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
01:15	0	9	2	0	0	0	0	0	0	0	0	0	0	**11**
01:30	0	10	2	0	0	0	0	0	0	0	0	0	0	**12**
01:45	0	8	1	0	0	0	0	0	0	0	0	0	0	**9**
02:00	0	4	1	0	0	0	0	0	1	0	0	0	0	**6**
02:15	0	5	0	0	0	0	0	0	0	0	0	0	0	**5**
02:30	0	5	1	0	0	0	0	0	0	0	0	0	0	**6**
02:45	0	6	1	0	0	0	0	0	0	0	0	0	0	**7**
03:00	0	10	0	0	0	0	0	0	0	0	0	0	0	**10**
03:15	0	9	2	0	0	0	0	0	1	0	0	0	0	**12**
03:30	0	10	1	0	0	0	0	0	0	0	0	0	0	**11**
03:45	0	13	2	0	0	0	0	0	0	0	0	0	0	**15**
04:00	0	12	2	0	0	0	0	0	0	0	0	0	0	**14**
04:15	0	22	2	0	0	0	0	0	0	0	0	0	0	**24**
04:30	0	39	6	0	0	0	0	0	0	0	0	0	0	**45**
04:45	0	43	4	1	1	0	0	0	0	0	0	0	0	**49**
05:00	0	38	7	0	0	0	0	0	0	0	0	0	0	**45**
05:15	0	54	11	1	1	0	0	0	0	0	0	0	0	**67**
05:30	0	77	8	1	2	0	0	0	0	0	0	0	0	**88**
05:45	0	90	11	2	1	0	0	0	0	0	0	0	0	**104**
06:00	0	91	13	1	2	1	0	0	0	0	0	0	0	**108**
06:15	1	102	16	2	2	0	0	0	0	0	0	0	0	**123**
06:30	0	145	23	3	1	0	0	0	0	0	0	0	0	**172**
06:45	0	152	19	2	1	0	0	0	0	0	0	0	0	**174**
07:00	1	204	21	3	5	1	0	1	0	0	0	0	0	**236**
07:15	0	172	24	1	3	0	0	0	0	0	0	0	0	**200**
07:30	0	231	27	2	4	0	0	0	0	0	0	0	0	**264**
07:45	0	241	26	3	5	1	0	0	0	0	0	0	0	**276**
08:00	0	234	32	2	4	0	0	0	0	0	0	0	0	**272**
08:15	0	201	30	3	4	0	0	0	0	0	0	0	0	**238**
08:30	0	156	21	2	2	0	0	0	0	0	0	0	0	**181**
08:45	0	135	19	3	1	0	0	0	0	0	0	0	0	**158**
09:00	0	132	17	3	1	0	0	0	0	0	0	0	0	**153**
09:15	0	128	15	2	3	0	0	0	0	0	0	0	0	**148**
09:30	0	122	17	1	3	0	0	0	0	0	0	0	0	**143**
09:45	0	136	14	2	1	0	0	0	0	0	0	0	0	**153**
10:00	0	133	14	1	2	0	0	0	0	0	0	0	0	**150**
10:15	0	149	16	1	1	0	0	0	0	0	0	0	0	**167**
10:30	0	154	22	0	2	0	0	0	0	0	0	0	0	**178**
10:45	0	127	12	0	3	0	0	0	0	0	0	0	0	**142**
11:00	0	155	20	2	4	0	0	0	0	0	0	0	0	**181**
11:15	0	143	21	1	2	0	0	0	0	0	0	0	0	**167**
11:30	0	173	26	3	5	0	0	0	0	0	0	0	0	**207**
11:45	0	159	16	1	1	0	0	0	0	0	0	0	0	**177**
12:00 PM	0	176	17	2	1	0	0	0	0	0	0	0	0	**196**
12:15	0	179	20	2	1	0	0	0	0	0	0	0	0	**202**
12:30	0	158	19	1	2	1	0	0	0	0	0	0	0	**181**
12:45	0	175	22	2	3	0	0	0	0	0	0	0	0	**202**
13:00	0	160	16	2	2	0	0	0	0	0	0	0	0	**180**
13:15	0	148	17	1	2	0	0	0	0	0	0	0	0	**168**
13:30	0	166	23	2	1	0	0	0	0	0	0	0	0	**192**
13:45	0	170	23	2	4	0	0	0	0	0	0	0	0	**199**
14:00	0	157	16	1	2	0	0	0	1	0	0	0	0	**177**
14:15	0	183	32	2	2	0	0	0	0	0	0	0	0	**219**
14:30	0	189	22	3	3	0	0	1	0	0	0	0	0	**218**
14:45	1	201	21	3	3	0	0	0	0	0	0	0	0	**229**
15:00	0	229	22	0	2	0	0	0	0	0	0	0	0	**253**
15:15	0	222	22	3	3	0	0	0	0	0	0	0	0	**250**
15:30	0	180	18	1	2	0	0	0	0	0	0	0	0	**201**
15:45	0	175	16	2	4	0	0	0	0	0	0	0	0	**197**
16:00	0	209	23	3	3	1	0	0	0	0	0	0	0	**239**
16:15	0	184	22	3	4	0	0	0	0	0	0	0	0	**213**
16:30	0	178	22	2	3	0	0	0	0	0	0	0	0	**205**
16:45	0	200	22	1	4	0	0	0	0	0	0	0	0	**227**
17:00	0	186	21	2	3	0	0	0	0	0	0	0	0	**212**
17:15	0	147	13	3	1	0	0	0	0	0	0	0	0	**164**
17:30	0	175	17	1	2	0	0	0	0	0	0	0	0	**195**
17:45	0	147	15	2	3	0	0	0	0	0	0	0	0	**167**
18:00	0	147	19	3	3	0	0	0	0	0	0	0	0	**172**
18:15	0	145	21	1	2	0	0	0	0	0	0	0	0	**169**
18:30	0	128	7	2	1	0	0	0	0	0	0	0	0	**138**
18:45	0	100	14	1	1	0	0	0	0	0	0	0	0	**116**
19:00	0	121	15	1	3	0	0	0	0	0	0	0	0	**140**
19:15	0	116	7	2	1	0	0	0	0	0	0	0	0	**126**
19:30	0	115	13	1	2	0	0	0	0	0	0	0	0	**131**
19:45	0	96	8	1	0	0	0	0	0	0	0	0	0	**105**
20:00	0	105	10	1	0	0	0	0	0	0	0	0	0	**116**
20:15	0	92	6	2	3	0	0	0	0	0	0	0	0	**103**
20:30	0	81	9	1	1	0	0	0	0	0	0	0	0	**92**
20:45	0	92	7	1	0	0	0	0	0	0	0	0	0	**100**
21:00	1	110	13	1	2	0	0	0	0	0	0	0	0	**127**
21:15	0	86	7	2	0	0	0	0	0	0	0	0	0	**95**
21:30	0	64	5	0	3	0	0	0	0	0	0	0	0	**72**
21:45	0	57	7	0	2	0	0	0	0	0	0	0	0	**66**
22:00	0	71	7	0	1	0	0	0	0	0	0	0	0	**79**
22:15	0	52	4	1	0	0	0	0	0	0	0	0	0	**57**
22:30	0	33	3	0	0	0	0	0	0	0	0	0	0	**36**
22:45	0	38	4	1	0	0	0	0	0	0	0	0	0	**43**
23:00	0	32	4	0	0	0	0	0	0	0	0	0	0	**36**
23:15	0	32	2	0	0	0	0	0	0	0	0	0	0	**34**
23:30	0	27	4	0	0	0	0	0	0	0	0	0	0	**31**
23:45	0	22	3	0	1	0	0	0	0	0	0	0	0	**26**
Totals	**4**	**10556**	**1231**	**117**	**153**	**5**		**2**	**4**					**12072**
% of Totals	0%	87%	10%	1%	1%	0%		0%	0%					100%

AM Volumes	2	4300	551	49	67	3	0	1	3	0	0	0	0	4976
% AM	0%	36%	5%	0%	1%	0%		0%	0%					41%
AM Peak Hour	06:15	07:30	07:30	08:15	07:00	07:00		06:15						07:30
Volume	2	907	115	11	17	2		1	1					1050
PM Volumes	2	6256	680	68	86	2	0	1	1	0	0	0	0	7096
% PM	0%	52%	6%	1%	1%	0%		0%	0%					59%
PM Peak Hour	14:00	14:30	14:15	15:45	15:45	12:00		13:45	13:15					14:30
Volume	1	841	97	10	14	1		1	1					950

Directional Peak Periods **All Classes**	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume		%	Volume		%	Volume		%	Volume		%
	1825	⟷	15%	1520	⟷	13%	1622	⟷	13%	7105	⟷	59%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	32	4	0	0	0	0	0	0	0	0	0	0	**36**
00:15	0	37	2	0	0	0	0	0	0	0	0	0	0	**39**
00:30	0	35	4	0	0	0	0	0	0	0	0	0	0	**39**
00:45	0	26	4	0	0	0	0	0	1	0	0	0	0	**31**
01:00	0	26	2	0	0	0	0	0	0	0	0	0	0	**28**
01:15	0	18	3	0	0	0	0	0	0	0	0	0	0	**21**
01:30	0	31	5	0	0	0	0	0	0	0	0	0	0	**36**
01:45	0	17	2	0	0	0	0	0	0	0	0	0	0	**19**
02:00	0	17	2	0	0	0	0	0	1	0	0	0	0	**20**
02:15	0	15	2	0	1	0	0	0	0	0	0	0	0	**18**
02:30	0	13	2	0	0	0	0	0	0	0	0	0	0	**15**
02:45	0	15	4	0	1	0	0	0	0	0	0	0	0	**20**
03:00	0	17	1	0	0	0	0	0	0	0	0	0	0	**18**
03:15	0	20	4	0	0	0	0	0	1	0	0	0	0	**25**
03:30	0	21	2	0	0	0	0	0	0	0	0	0	0	**23**
03:45	0	24	3	0	0	0	0	0	0	0	0	0	0	**27**
04:00	0	23	3	0	0	0	0	0	0	0	0	0	0	**26**
04:15	0	32	4	0	0	0	0	0	0	0	0	0	0	**36**
04:30	0	52	7	0	0	0	0	0	0	0	0	0	0	**59**
04:45	0	60	6	1	1	0	0	0	0	0	0	0	0	**68**
05:00	0	58	11	1	0	0	0	0	0	0	0	0	0	**70**
05:15	0	79	18	1	2	0	0	0	0	0	0	0	0	**100**
05:30	0	99	13	2	2	0	0	0	0	0	0	0	0	**116**
05:45	0	128	20	3	1	0	0	0	0	0	0	0	0	**152**
06:00	0	115	17	1	2	1	0	0	0	0	0	0	0	**136**
06:15	1	151	23	5	2	0	0	0	0	0	0	0	0	**182**
06:30	0	212	32	6	1	0	0	0	0	0	0	0	0	**251**
06:45	0	212	34	4	1	0	0	0	0	0	0	0	0	**251**
07:00	1	303	36	5	5	1	0	1	0	0	0	0	0	**352**
07:15	0	294	39	6	5	0	0	0	0	0	0	0	0	**344**
07:30	0	393	43	8	7	0	0	0	0	0	0	0	0	**451**
07:45	0	457	49	8	7	1	0	0	0	0	0	0	0	**522**
08:00	0	446	56	6	5	0	0	0	0	0	0	0	0	**513**
08:15	0	403	49	6	7	0	0	0	0	0	0	0	0	**465**
08:30	0	283	37	7	3	0	0	0	0	0	0	0	0	**330**
08:45	0	287	36	8	3	0	0	0	0	0	0	0	0	**334**
09:00	0	257	33	5	2	0	0	0	0	0	0	0	0	**297**
09:15	0	244	29	6	5	0	0	0	0	0	0	0	0	**284**
09:30	0	219	32	4	4	0	0	0	0	0	0	0	0	**259**
09:45	0	252	30	4	3	0	0	1	0	0	0	0	0	**290**
10:00	0	242	28	2	3	0	0	0	0	0	0	0	0	**275**
10:15	0	284	33	5	3	0	0	1	0	0	0	0	0	**326**
10:30	0	262	35	3	3	0	0	0	1	0	0	0	0	**304**
10:45	0	247	27	1	4	0	0	1	0	0	0	0	0	**280**
11:00	0	280	34	5	7	0	0	0	1	0	0	0	0	**327**
11:15	0	269	37	2	3	0	0	0	0	0	0	0	0	**311**
11:30	0	300	38	7	8	0	0	0	0	0	0	0	0	**353**
11:45	0	284	32	3	2	0	0	0	0	0	0	0	0	**321**
12:00 PM	0	306	32	4	4	0	0	0	0	0	0	0	0	**346**
12:15	0	313	42	5	3	1	0	0	0	0	0	0	0	**364**
12:30	0	273	33	3	5	1	0	0	0	0	0	0	0	**315**
12:45	0	311	38	4	5	0	0	0	0	0	0	0	0	**358**
13:00	0	296	30	6	3	0	0	0	0	0	0	0	0	**335**
13:15	0	264	32	2	3	0	0	0	0	0	0	0	0	**301**
13:30	0	297	40	4	3	1	0	0	0	0	0	0	0	**345**
13:45	1	300	40	6	7	0	0	0	0	0	0	0	0	**354**
14:00	0	309	33	5	4	0	0	0	1	0	0	0	0	**352**
14:15	0	360	61	7	3	0	0	0	0	0	0	0	0	**431**
14:30	0	429	57	9	4	0	0	1	0	0	0	0	0	**500**
14:45	1	483	53	8	6	0	0	0	0	0	0	0	0	**551**
15:00	0	457	45	4	5	0	0	0	0	0	0	0	0	**511**
15:15	0	426	52	6	7	0	0	0	0	0	0	0	0	**491**
15:30	0	390	51	7	3	0	0	0	1	0	0	0	0	**452**
15:45	0	446	50	6	7	0	0	0	0	0	0	0	0	**509**
16:00	0	435	52	9	5	1	0	0	0	0	0	0	0	**502**
16:15	0	454	63	8	7	0	0	0	0	0	0	0	0	**532**
16:30	1	427	54	6	5	0	0	0	0	0	0	0	0	**493**
16:45	1	463	61	6	6	0	0	0	0	0	0	0	0	**537**
17:00	0	386	44	5	4	0	0	0	1	0	0	0	0	**440**
17:15	0	438	53	7	2	0	0	0	0	0	0	0	0	**500**
17:30	0	436	43	7	4	0	0	0	0	0	0	0	0	**490**
17:45	0	390	45	5	5	0	0	0	1	0	0	0	0	**446**
18:00	0	370	42	9	4	0	0	0	0	0	0	0	0	**425**
18:15	0	369	49	3	5	0	0	0	0	0	0	0	0	**426**
18:30	0	292	27	6	4	0	0	0	0	0	0	0	0	**329**
18:45	0	252	34	4	2	0	0	0	0	0	0	0	0	**292**
19:00	0	265	33	4	4	0	0	1	0	0	0	0	0	**307**
19:15	0	219	17	4	1	0	0	0	0	0	0	0	0	**241**
19:30	0	232	26	4	3	0	0	0	0	0	0	0	0	**265**
19:45	1	202	20	2	1	0	0	0	0	0	0	0	0	**226**
20:00	0	194	20	3	0	0	0	0	0	0	0	0	0	**217**
20:15	0	191	21	3	4	0	0	0	0	0	0	0	0	**219**
20:30	0	166	20	2	1	0	0	0	0	0	0	0	0	**189**
20:45	0	168	16	3	0	0	0	0	0	0	0	0	0	**187**
21:00	1	181	20	2	2	0	0	0	0	0	0	0	0	**206**
21:15	0	151	13	3	0	0	0	0	0	0	0	0	0	**167**
21:30	0	121	12	2	3	0	0	0	0	0	0	0	0	**138**
21:45	0	113	13	1	2	0	0	0	0	0	0	0	0	**129**
22:00	0	127	14	2	1	0	0	0	0	0	0	0	0	**144**
22:15	0	99	9	2	0	0	0	0	0	0	0	0	0	**110**
22:30	0	81	6	1	0	0	0	0	0	0	0	0	0	**88**
22:45	0	61	7	1	0	0	0	0	0	0	0	0	0	**69**
23:00	0	55	6	1	0	0	0	0	0	0	0	0	0	**62**
23:15	0	59	4	0	0	0	0	0	0	0	0	0	0	**63**
23:30	0	59	8	0	0	0	0	0	0	0	0	0	0	**67**
23:45	0	49	5	0	2	0	0	0	0	0	0	0	0	**56**
Totals	**8**	**20756**	**2513**	**326**	**252**	**7**		**6**	**9**					**23877**
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	7591	967	125	103	3	0	4	5	0	0	0	0	8800
% AM	0%	32%	4%	1%	0%	0%		0%	0%					37%
AM Peak Hour	06:15	07:30	07:30	07:15	07:30	07:00		09:30	10:15					07:30
Volume	2	1699	197	28	26	2		2	2					1951
PM Volumes	6	13165	1546	201	149	4	0	2	4	0	0	0	0	15077
% PM	0%	55%	6%	1%	1%	0%		0%	0%					63%
PM Peak Hour	16:00	14:30	16:00	15:30	15:45	12:00		13:45	17:00					16:00
Volume	2	1795	230	30	24	2		1	2					2064

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	3311	⟷	14%	2718	⟷	11%	3940	⟷	17%	13908	⟷	58%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	80	9	0	0	0	0	0	0	0	0	0	0	89
01:00	0	54	6	0	0	0	0	0	0	0	0	0	0	60
02:00	0	40	7	0	2	0	0	0	0	0	0	0	0	49
03:00	0	40	5	0	0	0	0	0	0	0	0	0	0	45
04:00	0	51	6	0	0	0	0	0	0	0	0	0	0	57
05:00	0	105	25	3	1	0	0	0	0	0	0	0	0	134
06:00	0	200	35	8	0	0	0	0	0	0	0	0	0	243
07:00	0	599	69	18	7	0	0	0	0	0	0	0	0	693
08:00	0	693	76	17	7	0	0	0	0	0	0	0	0	793
09:00	0	454	61	11	6	0	0	1	0	0	0	0	0	533
10:00	0	472	59	9	5	0	0	2	1	0	0	0	0	548
11:00	0	503	58	10	8	0	0	0	1	0	0	0	0	580
12:00 PM	0	515	67	9	10	1	0	0	0	0	0	0	0	602
13:00	1	513	63	11	7	1	0	0	0	0	0	0	0	596
14:00	0	851	113	20	7	0	0	0	0	0	0	0	0	991
15:00	0	913	120	17	11	0	0	0	1	0	0	0	0	1062
16:00	2	1008	141	20	9	0	0	0	0	0	0	0	0	1180
17:00	0	995	119	16	6	0	0	0	2	0	0	0	0	1138
18:00	0	763	91	15	8	0	0	0	0	0	0	0	0	877
19:00	1	470	53	9	3	0	0	1	0	0	0	0	0	537
20:00	0	349	45	6	1	0	0	0	0	0	0	0	0	401
21:00	0	249	26	5	0	0	0	0	0	0	0	0	0	280
22:00	0	174	18	4	0	0	0	0	0	0	0	0	0	196
23:00	0	109	10	1	1	0	0	0	0	0	0	0	0	121
Totals	4	10200	1282	209	99	2		4	5					11805
% of Totals	0%	86%	11%	2%	1%	0%		0%	0%					100%

AM Volumes	0	3291	416	76	36	0	0	3	2	0	0	0	0	3824
% AM		28%	4%	1%	0%			0%	0%					32%
AM Peak Hour		08:00	08:00	07:00	11:00			10:00	10:00					08:00
Volume		693	76	18	8			2	1					793
PM Volumes	4	6909	866	133	63	2	0	1	3	0	0	0	0	7981
% PM	0%	59%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	16:00	16:00	16:00	14:00	15:00	12:00		19:00	17:00					16:00
Volume	2	1008	141	20	11	1		1	2					1180

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1486	⟷	13%	1198	⟷	10%	2318	⟷	20%	6803	⟷	58%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	50	5	0	0	0	0	0	1	0	0	0	0	56
01:00	0	38	6	0	0	0	0	0	0	0	0	0	0	44
02:00	0	20	3	0	0	0	0	0	1	0	0	0	0	24
03:00	0	42	5	0	0	0	0	0	1	0	0	0	0	48
04:00	0	116	14	1	1	0	0	0	0	0	0	0	0	132
05:00	0	259	37	4	4	0	0	0	0	0	0	0	0	304
06:00	1	490	71	8	6	1	0	0	0	0	0	0	0	577
07:00	1	848	98	9	17	2	0	1	0	0	0	0	0	976
08:00	0	726	102	10	11	0	0	0	0	0	0	0	0	849
09:00	0	518	63	8	8	0	0	0	0	0	0	0	0	597
10:00	0	563	64	2	8	0	0	0	0	0	0	0	0	637
11:00	0	630	83	7	12	0	0	0	0	0	0	0	0	732
12:00 PM	0	688	78	7	7	1	0	0	0	0	0	0	0	781
13:00	0	644	79	7	9	0	0	0	0	0	0	0	0	739
14:00	1	730	91	9	10	0	0	1	1	0	0	0	0	843
15:00	0	806	78	6	11	0	0	0	0	0	0	0	0	901
16:00	0	771	89	9	14	1	0	0	0	0	0	0	0	884
17:00	0	655	66	8	9	0	0	0	0	0	0	0	0	738
18:00	0	520	61	7	7	0	0	0	0	0	0	0	0	595
19:00	0	448	43	5	6	0	0	0	0	0	0	0	0	502
20:00	0	370	32	5	4	0	0	0	0	0	0	0	0	411
21:00	1	317	32	3	7	0	0	0	0	0	0	0	0	360
22:00	0	194	18	2	1	0	0	0	0	0	0	0	0	215
23:00	0	113	13	0	1	0	0	0	0	0	0	0	0	127
Totals	4	10556	1231	117	153	5		2	4					12072
% of Totals	0%	87%	10%	1%	1%	0%		0%	0%					100%

AM Volumes	2	4300	551	49	67	3	0	1	3	0	0	0	0	4976
% AM	0%	36%	5%	0%	1%	0%		0%	0%					41%
AM Peak Hour	06:00	07:00	08:00	08:00	07:00	07:00		07:00						07:00
Volume	1	848	102	10	17	2		1	1					976
PM Volumes	2	6256	680	68	86	2	0	1	1	0	0	0	0	7096
% PM	0%	52%	6%	1%	1%	0%		0%	0%					59%
PM Peak Hour	14:00	15:00	14:00	14:00	16:00	12:00		14:00	14:00					15:00
Volume	1	806	91	9	14	1		1	1					901

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1825	⟷	15%	1520	⟷	13%	1622	⟷	13%	7105	⟷	59%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	130	14	0	0	0	0	0	1	0	0	0	0	**145**
01:00	0	92	12	0	0	0	0	0	0	0	0	0	0	**104**
02:00	0	60	10	0	2	0	0	0	1	0	0	0	0	**73**
03:00	0	82	10	0	0	0	0	0	1	0	0	0	0	**93**
04:00	0	167	20	1	1	0	0	0	0	0	0	0	0	**189**
05:00	0	364	62	7	5	0	0	0	0	0	0	0	0	**438**
06:00	1	690	106	16	6	1	0	0	0	0	0	0	0	**820**
07:00	1	1447	167	27	24	2	0	1	0	0	0	0	0	**1669**
08:00	0	1419	178	27	18	0	0	0	0	0	0	0	0	**1642**
09:00	0	972	124	19	14	0	0	1	0	0	0	0	0	**1130**
10:00	0	1035	123	11	13	0	0	2	1	0	0	0	0	**1185**
11:00	0	1133	141	17	20	0	0	0	1	0	0	0	0	**1312**
12:00 PM	0	1203	145	16	17	2	0	0	0	0	0	0	0	**1383**
13:00	1	1157	142	18	16	1	0	0	0	0	0	0	0	**1335**
14:00	1	1581	204	29	17	0	0	1	1	0	0	0	0	**1834**
15:00	0	1719	198	23	22	0	0	0	1	0	0	0	0	**1963**
16:00	2	1779	230	29	23	1	0	0	0	0	0	0	0	**2064**
17:00	0	1650	185	24	15	0	0	0	2	0	0	0	0	**1876**
18:00	0	1283	152	22	15	0	0	0	0	0	0	0	0	**1472**
19:00	1	918	96	14	9	0	0	1	0	0	0	0	0	**1039**
20:00	0	719	77	11	5	0	0	0	0	0	0	0	0	**812**
21:00	1	566	58	8	7	0	0	0	0	0	0	0	0	**640**
22:00	0	368	36	6	1	0	0	0	0	0	0	0	0	**411**
23:00	0	222	23	1	2	0	0	0	0	0	0	0	0	**248**
Totals	**8**	**20756**	**2513**	**326**	**252**	**7**		**6**	**9**					**23877**
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	7591	967	125	103	3	0	4	5	0	0	0	0	8800
% AM	0%	32%	4%	1%	0%	0%		0%	0%					37%
AM Peak Hour	06:00	07:00	08:00	07:00	07:00	07:00		10:00						07:00
Volume	1	1447	178	27	24	2		2	1					1669
PM Volumes	6	13165	1546	201	149	4	0	2	4	0	0	0	0	15077
% PM	0%	55%	6%	1%	1%	0%		0%	0%					63%
PM Peak Hour	16:00	16:00	16:00	14:00	16:00	12:00		14:00	17:00					16:00
Volume	2	1779	230	29	23	2		1	2					2064

Directional Peak Periods **All Classes**	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume		%	Volume		%	Volume		%	Volume		%
	3311	⟷	14%	2718	⟷	11%	3940	⟷	17%	13908	⟷	58%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by NDS/ATD

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	11,805	12,072	23,

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOT
00:00	0	0	21		15		36		**12:00**	0	0	150		196		346
00:15	0	0	24		15		39		**12:15**	0	0	162		202		364
00:30	0	0	23		16		39		**12:30**	0	0	134		181		315
00:45	0	0	21	89	10	56	31	145	**12:45**	0	0	156	602	202	781	358
01:00	0	0	16		12		28		**13:00**	0	0	155		180		335
01:15	0	0	10		11		21		**13:15**	0	0	133		168		301
01:30	0	0	24		12		36		**13:30**	0	0	153		192		345
01:45	0	0	10	60	9	44	19	104	**13:45**	0	0	155	596	199	739	354
02:00	0	0	14		6		20		**14:00**	0	0	175		177		352
02:15	0	0	13		5		18		**14:15**	0	0	212		219		431
02:30	0	0	9		6		15		**14:30**	0	0	282		218		500
02:45	0	0	13	49	7	24	20	73	**14:45**	0	0	322	991	229	843	551
03:00	0	0	8		10		18		**15:00**	0	0	258		253		511
03:15	0	0	13		12		25		**15:15**	0	0	241		250		491
03:30	0	0	12		11		23		**15:30**	0	0	251		201		452
03:45	0	0	12	45	15	48	27	93	**15:45**	0	0	312	1062	197	901	509
04:00	0	0	12		14		26		**16:00**	0	0	263		239		502
04:15	0	0	12		24		36		**16:15**	0	0	319		213		532
04:30	0	0	14		45		59		**16:30**	0	0	288		205		493
04:45	0	0	19	57	49	132	68	189	**16:45**	0	0	310	1180	227	884	537
05:00	0	0	25		45		70		**17:00**	0	0	228		212		440
05:15	0	0	33		67		100		**17:15**	0	0	336		164		500
05:30	0	0	28		88		116		**17:30**	0	0	295		195		490
05:45	0	0	48	134	104	304	152	438	**17:45**	0	0	279	1138	167	738	446
06:00	0	0	28		108		136		**18:00**	0	0	253		172		425
06:15	0	0	59		123		182		**18:15**	0	0	257		169		426
06:30	0	0	79		172		251		**18:30**	0	0	191		138		329
06:45	0	0	77	243	174	577	251	820	**18:45**	0	0	176	877	116	595	292
07:00	0	0	116		236		352		**19:00**	0	0	167		140		307
07:15	0	0	144		200		344		**19:15**	0	0	115		126		241
07:30	0	0	187		264		451		**19:30**	0	0	134		131		265
07:45	0	0	246	693	276	976	522	1669	**19:45**	0	0	121	537	105	502	226
08:00	0	0	241		272		513		**20:00**	0	0	101		116		217
08:15	0	0	227		238		465		**20:15**	0	0	116		103		219
08:30	0	0	149		181		330		**20:30**	0	0	97		92		189
08:45	0	0	176	793	158	849	334	1642	**20:45**	0	0	87	401	100	411	187
09:00	0	0	144		153		297		**21:00**	0	0	79		127		206
09:15	0	0	136		148		284		**21:15**	0	0	72		95		167
09:30	0	0	116		143		259		**21:30**	0	0	66		72		138
09:45	0	0	137	533	153	597	290	1130	**21:45**	0	0	63	280	66	360	129
10:00	0	0	125		150		275		**22:00**	0	0	65		79		144
10:15	0	0	159		167		326		**22:15**	0	0	53		57		110
10:30	0	0	126		178		304		**22:30**	0	0	52		36		88
10:45	0	0	138	548	142	637	280	1185	**22:45**	0	0	26	196	43	215	69
11:00	0	0	146		181		327		**23:00**	0	0	26		36		62
11:15	0	0	144		167		311		**23:15**	0	0	29		34		63
11:30	0	0	146		207		353		**23:30**	0	0	36		31		67
11:45	0	0	144	580	177	732	321	1312	**23:45**	0	0	30	121	26	127	56
TOTALS				3824		4976		**8800**	**TOTALS**				7981		7096	
SPLIT %				43.5%		56.5%		**36.9%**	**SPLIT %**				52.9%		47.1%	

DAILY TOTALS	NB	SB	EB	WB	To
	0	0	11,805	12,072	23,

AM Peak Hour			07:30	07:30	**07:30**	**PM Peak Hour**			15:45	14:30
AM Pk Volume			901	1050	**1951**	**PM Pk Volume**			1182	950
Pk Hr Factor			0.916	0.951	**0.934**	**Pk Hr Factor**			0.926	0.939
7 - 9 Volume	0	0	1486	1825	**3311**	**4 - 6 Volume**	0	0	2318	1622
7 - 9 Peak Hour			07:30	07:30	**07:30**	**4 - 6 Peak Hour**			16:00	16:00
7 - 9 Pk Volume	0	0	901	1050	**1951**	**4 - 6 Pk Volume**	0	0	1180	884
Pk Hr Factor	0.000	0.000	0.916	0.951	**0.934**	**Pk Hr Factor**	0.000	0.000	0.925	0.925

Prepared by NDS/ATD

Project #: CA19_5294_001 **City:** Compton

Location: W Compton Blvd Bet. S Matthisen Ave & N **Date:** 5/21/2019

Prepared by National Data & Surveying Services

Screenline Pedestrian & Bike Study

Location: W Compton Blvd Bet. S Matthisen Ave & N Paulsen Ave
City: Compton

Date: 05/21/2019
Day: Tuesday

TIME	Peds				TOTAL	Bikes				TOTAL
	Northleg		Southleg			Northleg		Southleg		
	EB	WB	EB	WB		EB	WB	EB	WB	
7:00 AM	1	2	2	0	***5***	0	0	0	0	***0***
7:15 AM	2	3	1	8	***14***	2	0	0	0	***2***
7:30 AM	5	6	5	2	***18***	0	1	2	0	***3***
7:45 AM	3	1	2	4	***10***	0	0	0	0	***0***
8:00 AM	3	2	3	0	***8***	0	0	2	1	***3***
8:15 AM	4	3	4	3	***14***	0	0	0	0	***0***
8:30 AM	0	0	4	3	***7***	0	1	0	1	***2***
8:45 AM	0	0	2	1	***3***	0	1	0	1	***2***
9:00 AM	8	2	1	0	***11***	1	1	1	0	***3***
9:15 AM	0	1	0	0	***1***	1	1	0	1	***3***
9:30 AM	1	0	4	0	***5***	0	0	1	1	***2***
9:45 AM	2	1	1	3	***7***	0	0	2	3	***5***
Totals	***29***	***21***	***29***	***24***	***103***	***4***	***5***	***8***	***8***	***25***
3:00 PM	6	9	0	3	***18***	1	0	1	3	***5***
3:15 PM	0	0	7	4	***11***	1	0	1	1	***3***
3:30 PM	0	1	2	0	***3***	0	1	2	0	***3***
3:45 PM	2	0	1	0	***3***	0	0	0	0	***0***
4:00 PM	1	7	2	4	***14***	0	0	0	0	***0***
4:15 PM	0	1	2	5	***8***	0	3	1	1	***5***
4:30 PM	0	2	0	3	***5***	1	1	0	0	***2***
4:45 PM	1	3	5	*2*	***11***	*2*	*1*	*0*	*1*	***4***
5:00 PM	1	1	1	3	***6***	0	0	0	0	***0***
5:15 PM	1	0	0	0	***1***	0	1	2	1	***4***
5:30 PM	0	0	1	2	***3***	1	1	1	1	***4***
5:45 PM	2	2	1	1	***6***	0	1	0	0	***1***
Totals	***14***	***26***	***22***	***27***	***89***	***6***	***9***	***8***	***8***	***31***
Grand Total	***43***	***47***	***51***	***51***	***192***	***10***	***14***	***16***	***16***	***56***

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	35	3	0	0	0	0	0	0	0	0	0	0	**38**
00:15	0	36	3	0	0	0	0	0	0	0	0	0	0	**39**
00:30	0	29	2	0	0	0	0	0	0	0	0	0	0	**31**
00:45	0	27	3	0	0	0	0	0	0	0	0	0	0	**30**
01:00	0	16	4	0	0	0	0	0	0	0	0	0	0	**20**
01:15	0	26	4	0	0	1	0	0	0	0	0	0	0	**31**
01:30	0	18	1	0	0	0	0	0	0	0	0	0	0	**19**
01:45	0	19	2	0	0	0	0	0	0	0	0	0	0	**21**
02:00	0	18	1	0	0	0	0	0	0	0	0	0	0	**19**
02:15	0	16	4	0	0	0	0	0	0	0	0	0	0	**20**
02:30	0	12	1	0	0	0	0	0	0	0	0	0	0	**13**
02:45	0	13	2	0	0	0	0	0	0	0	0	0	0	**15**
03:00	0	20	1	0	0	0	0	0	0	0	0	0	0	**21**
03:15	0	12	1	0	0	0	0	0	1	0	0	0	0	**14**
03:30	0	10	2	0	0	0	0	0	0	0	0	0	0	**12**
03:45	0	15	1	0	0	0	0	0	0	0	0	0	0	**16**
04:00	0	11	2	0	1	0	0	0	0	0	0	0	0	**14**
04:15	0	21	2	0	0	0	0	0	0	0	0	0	0	**23**
04:30	0	18	3	2	0	0	0	0	0	0	0	0	0	**23**
04:45	0	29	4	0	0	0	0	0	0	0	0	0	0	**33**
05:00	0	35	6	0	0	0	0	0	0	0	0	0	0	**41**
05:15	0	27	9	1	0	0	0	0	0	0	0	0	0	**37**
05:30	0	27	3	1	0	0	0	0	0	0	0	0	0	**31**
05:45	0	39	7	0	0	0	0	0	0	0	0	0	0	**46**
06:00	0	52	7	1	0	0	0	0	0	0	0	0	0	**60**
06:15	0	58	9	2	0	2	0	0	0	0	0	0	0	**71**
06:30	0	65	11	1	1	0	0	0	0	0	0	0	0	**78**
06:45	1	89	16	2	0	0	0	0	0	0	0	0	0	**108**
07:00	0	100	15	2	2	0	0	0	0	0	0	0	0	**119**
07:15	0	111	18	1	1	1	0	0	0	0	0	0	0	**132**
07:30	0	159	19	2	1	1	0	0	0	0	0	0	0	**182**
07:45	0	189	23	1	2	0	0	0	0	0	0	0	0	**215**
08:00	0	144	23	4	1	0	0	0	1	0	0	0	0	**173**
08:15	0	118	26	2	2	0	0	0	0	0	0	0	0	**148**
08:30	0	117	11	2	2	0	0	0	0	0	0	0	0	**132**
08:45	0	121	13	2	1	0	0	0	0	0	0	0	0	**137**
09:00	0	92	15	4	1	0	0	0	0	0	0	0	0	**112**
09:15	0	94	18	1	3	0	0	0	0	0	0	0	0	**116**
09:30	0	93	14	1	1	1	0	0	0	0	0	0	0	**110**
09:45	0	108	12	2	3	0	0	1	0	0	0	0	0	**126**
10:00	0	103	13	3	2	0	0	0	0	0	0	0	0	**121**
10:15	0	95	10	0	0	0	0	0	1	0	0	0	0	**106**
10:30	0	114	14	1	4	1	0	0	0	0	0	0	0	**134**
10:45	0	112	13	2	4	0	0	0	0	0	0	0	0	**131**
11:00	1	114	17	1	2	0	0	0	0	0	0	0	0	**135**
11:15	0	114	17	3	2	0	0	0	0	0	0	0	0	**136**
11:30	0	125	18	1	4	0	0	0	0	0	0	0	0	**148**
11:45	0	127	15	2	1	0	0	0	0	0	0	0	0	**145**
12:00 PM	0	118	13	1	1	0	0	0	0	0	0	0	0	**133**
12:15	0	142	14	4	2	0	0	0	0	0	0	0	0	**162**
12:30	0	144	17	1	1	0	0	0	0	0	0	0	0	**163**
12:45	0	122	23	1	0	0	0	0	0	0	0	0	0	**146**
13:00	0	153	25	1	2	0	0	0	0	0	0	0	0	**181**
13:15	0	109	13	3	0	0	0	0	0	0	0	0	0	**125**
13:30	0	158	19	1	2	1	0	0	0	0	0	0	0	**181**
13:45	0	138	18	1	3	0	0	0	0	0	0	0	0	**160**
14:00	0	156	18	3	2	0	0	0	0	0	0	0	0	**179**
14:15	0	154	30	3	2	0	0	0	0	0	0	0	0	**189**
14:30	0	188	29	2	1	0	0	1	0	0	0	0	0	**221**
14:45	1	192	26	1	3	1	0	0	0	0	0	0	0	**224**
15:00	0	226	26	2	2	0	0	0	0	0	0	0	0	**256**
15:15	0	201	27	3	1	2	0	0	0	0	0	0	0	**234**
15:30	0	177	24	1	2	0	0	0	0	0	0	0	0	**204**
15:45	0	215	35	2	3	0	0	0	0	0	0	0	0	**255**
16:00	0	228	27	3	4	1	0	0	0	0	0	0	0	**263**
16:15	0	210	26	2	2	0	0	0	0	0	0	0	0	**240**
16:30	0	235	30	0	1	0	0	0	0	0	0	0	0	**266**
16:45	0	220	33	1	5	0	0	0	0	0	0	0	0	**259**
17:00	1	227	36	1	0	0	0	0	0	0	0	0	0	**265**
17:15	0	224	33	1	2	0	0	0	0	0	0	0	0	**260**
17:30	0	236	21	2	2	0	0	0	0	0	0	0	0	**261**
17:45	0	194	30	3	1	0	0	0	1	0	0	0	0	**229**
18:00	0	215	23	2	3	0	0	0	0	0	0	0	0	**243**
18:15	0	181	29	2	1	0	0	0	0	0	0	0	0	**213**
18:30	0	166	18	2	2	0	0	0	0	0	0	0	0	**188**
18:45	0	143	18	1	1	0	0	0	0	0	0	0	0	**163**
19:00	1	138	18	1	1	0	0	0	0	0	0	0	0	**159**
19:15	0	141	15	0	0	0	0	0	0	0	0	0	0	**156**
19:30	0	137	14	2	8	0	0	0	0	0	0	0	0	**161**
19:45	0	157	18	2	1	0	0	0	0	0	0	0	0	**178**
20:00	0	111	12	1	3	0	0	0	0	0	0	0	0	**127**
20:15	0	111	15	1	1	0	0	0	0	0	0	0	0	**128**
20:30	0	115	12	2	2	0	0	0	0	0	0	0	0	**131**
20:45	0	113	11	1	1	0	0	0	0	0	0	0	0	**126**
21:00	1	120	14	1	1	0	0	0	0	0	0	0	0	**137**
21:15	0	105	8	1	0	0	0	0	0	0	0	0	0	**114**
21:30	0	92	10	0	0	0	0	0	0	0	0	0	0	**102**
21:45	0	101	8	1	2	0	0	0	0	0	0	0	0	**112**
22:00	0	83	5	0	0	0	0	0	0	0	0	0	0	**88**
22:15	0	71	6	1	0	0	0	0	0	0	0	0	0	**78**
22:30	0	50	9	0	1	0	0	0	0	0	0	0	0	**60**
22:45	0	50	4	0	0	0	0	0	0	0	0	0	0	**54**
23:00	0	45	2	0	0	0	0	0	0	0	0	0	0	**47**
23:15	0	48	4	1	1	0	0	0	0	0	0	0	0	**54**
23:30	0	48	3	0	0	0	0	0	0	0	0	0	0	**51**
23:45	0	41	5	0	1	0	0	0	0	0	0	0	0	**47**
Totals	**6**	**10092**	**1312**	**112**	**115**	**12**		**2**	**4**					**11655**
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	3143	438	47	41	7	0	1	3	0	0	0	0	3682
% AM	0%	27%	4%	0%	0%	0%		0%	0%					32%
AM Peak Hour	06:00	07:30	07:30	08:00	10:30	05:30		09:00	02:30					07:30
Volume	1	610	91	10	12	2		1	1					718
PM Volumes	4	6949	874	65	74	5	0	1	1	0	0	0	0	7973
% PM	0%	60%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	14:00	16:45	16:30	13:45	19:30	14:30		13:45	17:00					16:30
Volume	1	907	132	9	13	3		1	1					1050

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1238	⟷	11%	1251	⟷	11%	2043	⟷	18%	7123	⟷	61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	27	4	0	0	0	0	0	0	0	0	0	0	**31**
00:15	0	21	4	0	0	0	0	0	0	0	0	0	0	**25**
00:30	0	20	1	0	0	0	0	0	0	0	0	0	0	**21**
00:45	0	15	3	0	0	0	0	0	0	0	0	0	0	**18**
01:00	0	9	2	0	0	0	0	0	0	0	0	0	0	**11**
01:15	0	11	1	0	0	0	0	0	0	0	0	0	0	**12**
01:30	0	18	3	0	0	0	0	0	0	0	0	0	0	**21**
01:45	0	9	1	0	0	0	0	0	0	0	0	0	0	**10**
02:00	0	16	1	0	1	0	0	0	0	0	0	0	0	**18**
02:15	0	11	2	0	0	0	0	0	0	0	0	0	0	**13**
02:30	0	20	2	0	0	0	0	0	0	0	0	0	0	**22**
02:45	0	13	1	0	0	0	0	0	0	0	0	0	0	**14**
03:00	0	21	2	0	0	0	0	0	0	0	0	0	0	**23**
03:15	0	21	2	0	0	0	0	0	0	0	0	0	0	**23**
03:30	0	20	4	0	0	0	0	0	0	0	0	0	0	**24**
03:45	0	20	1	0	0	0	0	0	0	0	0	0	0	**21**
04:00	0	19	4	0	0	0	0	0	0	0	0	0	0	**23**
04:15	0	36	7	0	1	0	0	0	0	0	0	0	0	**44**
04:30	0	48	7	0	1	0	0	0	0	0	0	0	0	**56**
04:45	0	62	15	1	2	0	0	1	0	0	0	0	0	**81**
05:00	0	44	6	1	0	0	0	0	0	0	0	0	0	**51**
05:15	0	81	11	0	1	0	0	0	0	0	0	0	0	**93**
05:30	0	103	16	3	2	0	0	0	0	0	0	0	0	**124**
05:45	0	107	17	2	1	1	0	0	0	0	0	0	0	**128**
06:00	0	82	10	1	2	0	0	0	0	0	0	0	0	**95**
06:15	0	97	15	1	1	0	0	0	0	0	0	0	0	**114**
06:30	0	119	20	2	3	0	0	0	1	0	0	0	0	**145**
06:45	0	136	19	3	6	2	0	0	0	0	0	0	0	**166**
07:00	0	137	19	3	6	1	0	1	0	0	0	0	0	**167**
07:15	0	176	29	1	3	1	0	0	0	0	0	0	0	**210**
07:30	0	226	37	1	5	0	1	0	0	0	0	0	0	**270**
07:45	0	243	40	4	8	2	1	0	0	0	0	0	0	**298**
08:00	2	201	40	2	7	1	1	0	0	0	0	0	0	**254**
08:15	0	183	29	4	6	2	0	0	1	0	0	0	0	**225**
08:30	0	141	22	1	2	0	0	0	1	0	0	0	0	**167**
08:45	0	125	19	2	4	0	0	0	0	0	0	0	0	**150**
09:00	0	112	22	1	4	0	0	0	2	0	0	0	0	**141**
09:15	0	92	13	1	6	0	0	0	0	0	0	0	0	**112**
09:30	0	100	15	2	3	0	0	0	0	0	0	0	0	**120**
09:45	0	102	13	2	2	0	0	0	0	0	0	0	0	**119**
10:00	0	97	16	1	3	0	0	0	0	0	0	0	0	**117**
10:15	0	107	21	3	2	1	0	0	0	0	0	0	0	**134**
10:30	0	130	19	1	3	0	0	0	1	0	0	0	0	**154**
10:45	0	92	16	2	2	0	0	0	0	0	0	0	0	**112**
11:00	0	101	15	1	1	0	0	0	0	0	0	0	0	**118**
11:15	0	118	17	1	5	1	0	0	0	0	0	0	0	**142**
11:30	1	116	20	1	1	3	1	0	0	0	0	0	0	**143**
11:45	0	117	18	1	2	1	0	0	0	0	0	0	0	**139**
12:00 PM	0	122	19	4	3	0	0	0	0	0	0	0	0	**148**
12:15	0	116	25	1	3	0	0	0	0	0	0	0	0	**145**
12:30	0	116	20	4	5	1	0	0	0	0	0	0	0	**146**
12:45	0	121	22	3	5	0	0	0	0	0	0	0	0	**151**
13:00	0	138	22	3	4	0	0	0	0	0	0	0	0	**167**
13:15	1	121	16	1	3	0	0	0	1	0	0	0	0	**143**
13:30	0	143	24	1	3	1	0	0	0	0	0	0	0	**172**
13:45	0	132	18	3	4	0	0	0	0	0	0	0	0	**157**
14:00	0	122	19	1	1	0	1	0	1	0	0	0	0	**145**
14:15	0	144	26	4	7	0	0	0	1	0	0	0	0	**182**
14:30	0	157	29	1	3	1	0	0	1	0	0	0	0	**192**
14:45	0	175	23	3	5	0	0	0	0	0	0	0	0	**206**
15:00	1	159	23	2	2	0	0	0	0	0	0	0	0	**187**
15:15	0	145	18	2	3	0	0	0	0	0	0	0	0	**168**
15:30	0	169	23	3	4	1	0	0	0	0	0	0	0	**200**
15:45	0	153	26	2	5	0	0	0	0	0	0	0	0	**186**
16:00	0	144	23	3	3	0	0	0	1	0	0	0	0	**174**
16:15	0	143	18	1	2	0	0	0	0	0	0	0	0	**164**
16:30	0	130	18	1	4	0	0	0	0	0	0	0	0	**153**
16:45	0	138	22	2	8	1	0	0	0	0	0	0	0	**171**
17:00	0	135	20	2	4	0	0	0	0	0	0	0	0	**161**
17:15	2	141	19	1	2	2	1	1	0	0	0	0	0	**169**
17:30	0	141	17	2	0	0	0	0	0	0	0	0	0	**160**
17:45	1	141	19	1	6	1	0	0	0	0	0	0	0	**169**
18:00	0	119	27	1	1	0	0	0	0	0	0	0	0	**148**
18:15	0	147	20	2	2	0	0	0	0	0	0	0	0	**171**
18:30	0	118	21	2	1	0	0	0	0	0	0	0	0	**142**
18:45	0	114	12	1	2	0	0	0	0	0	0	0	0	**129**
19:00	0	133	19	1	3	0	1	0	0	0	0	0	0	**157**
19:15	0	135	12	2	0	0	0	0	0	0	0	0	0	**149**
19:30	0	123	16	1	1	0	0	0	0	0	0	0	0	**141**
19:45	0	96	19	1	0	0	0	0	0	0	0	0	0	**116**
20:00	0	95	13	1	1	0	1	0	1	0	0	0	0	**112**
20:15	0	94	10	2	2	0	0	0	0	0	0	0	0	**108**
20:30	0	87	11	1	2	0	0	0	0	0	0	0	0	**101**
20:45	0	73	11	0	0	0	0	0	0	0	0	0	0	**84**
21:00	0	71	9	1	2	0	0	0	0	0	0	0	0	**83**
21:15	0	72	6	1	2	1	0	0	0	0	0	0	0	**82**
21:30	0	65	10	0	2	0	0	0	0	0	0	0	0	**77**
21:45	0	67	7	1	1	0	0	0	0	0	0	0	0	**76**
22:00	0	57	7	0	2	0	0	0	0	0	0	0	0	**66**
22:15	0	39	3	0	0	0	0	0	0	0	0	0	0	**42**
22:30	0	45	9	0	1	0	0	0	0	0	0	0	0	**55**
22:45	0	36	2	1	0	0	0	0	0	0	0	0	0	**39**
23:00	0	33	3	0	0	0	0	0	1	0	0	0	0	**37**
23:15	0	36	4	0	0	0	0	0	0	0	0	0	0	**40**
23:30	0	30	2	1	0	0	0	0	0	0	0	0	0	**33**
23:45	0	25	3	0	1	0	0	0	0	0	0	0	0	**29**
Totals	**8**	**9178**	**1386**	**120**	**211**	**25**	**8**	**3**	**13**					**10952**
% of Totals	0%	84%	13%	1%	2%	0%	0%	0%	0%					100%

AM Volumes	3	3922	621	49	96	16	4	2	6	0	0	0	0	4719
% AM	0%	36%	6%	0%	1%	0%	0%	0%	0%					43%
AM Peak Hour	07:15	07:30	07:15	07:30	07:30	07:30	07:15	04:00	08:15					07:30
Volume	2	853	146	11	26	5	3	1	4					1047
PM Volumes	5	5256	765	71	115	9	4	1	7	0	0	0	0	6233
% PM	0%	48%	7%	1%	1%	0%	0%	0%	0%					57%
PM Peak Hour	17:00	14:45	14:15	12:00	16:15	16:30	13:15	16:30	13:45					14:15
Volume	3	648	101	12	18	3	1	1	3					767

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1741	⟷	16%	1229	⟷	11%	1321	⟷	12%	6661	⟷	61%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	62	7	0	0	0	0	0	0	0	0	0	0	69
00:15	0	57	7	0	0	0	0	0	0	0	0	0	0	64
00:30	0	49	3	0	0	0	0	0	0	0	0	0	0	52
00:45	0	42	6	0	0	0	0	0	0	0	0	0	0	48
01:00	0	25	6	0	0	0	0	0	0	0	0	0	0	31
01:15	0	37	5	0	0	1	0	0	0	0	0	0	0	43
01:30	0	36	4	0	0	0	0	0	0	0	0	0	0	40
01:45	0	28	3	0	0	0	0	0	0	0	0	0	0	31
02:00	0	34	2	0	1	0	0	0	0	0	0	0	0	37
02:15	0	27	6	0	0	0	0	0	0	0	0	0	0	33
02:30	0	32	3	0	0	0	0	0	0	0	0	0	0	35
02:45	0	26	3	0	0	0	0	0	0	0	0	0	0	29
03:00	0	41	3	0	0	0	0	0	0	0	0	0	0	44
03:15	0	33	3	0	0	0	0	0	1	0	0	0	0	37
03:30	0	30	6	0	0	0	0	0	0	0	0	0	0	36
03:45	0	35	2	0	0	0	0	0	0	0	0	0	0	37
04:00	0	30	6	0	1	0	0	0	0	0	0	0	0	37
04:15	0	57	9	0	1	0	0	0	0	0	0	0	0	67
04:30	0	66	10	2	1	0	0	0	0	0	0	0	0	79
04:45	0	91	19	1	2	0	0	1	0	0	0	0	0	114
05:00	0	79	12	1	0	0	0	0	0	0	0	0	0	92
05:15	0	108	20	1	1	0	0	0	0	0	0	0	0	130
05:30	0	130	19	4	2	0	0	0	0	0	0	0	0	155
05:45	0	146	24	2	1	1	0	0	0	0	0	0	0	174
06:00	0	134	17	2	2	0	0	0	0	0	0	0	0	155
06:15	0	155	24	3	1	2	0	0	0	0	0	0	0	185
06:30	0	184	31	3	4	0	0	0	1	0	0	0	0	223
06:45	1	225	35	5	6	2	0	0	0	0	0	0	0	274
07:00	0	237	34	5	8	1	0	1	0	0	0	0	0	286
07:15	0	287	47	2	4	2	0	0	0	0	0	0	0	342
07:30	0	385	56	3	6	1	1	0	0	0	0	0	0	452
07:45	0	432	63	5	10	2	1	0	0	0	0	0	0	513
08:00	2	345	63	6	8	1	1	0	1	0	0	0	0	427
08:15	0	301	55	6	8	2	0	0	1	0	0	0	0	373
08:30	0	258	33	3	4	0	0	0	1	0	0	0	0	299
08:45	0	246	32	4	5	0	0	0	0	0	0	0	0	287
09:00	0	204	37	5	5	0	0	0	2	0	0	0	0	253
09:15	0	186	31	2	9	0	0	0	0	0	0	0	0	228
09:30	0	193	29	3	4	1	0	0	0	0	0	0	0	230
09:45	0	210	25	4	5	0	0	1	0	0	0	0	0	245
10:00	0	200	29	4	5	0	0	0	0	0	0	0	0	238
10:15	0	202	31	3	2	1	0	0	1	0	0	0	0	240
10:30	0	244	33	2	7	1	0	0	1	0	0	0	0	288
10:45	0	204	29	4	6	0	0	0	0	0	0	0	0	243
11:00	1	215	32	2	3	0	0	0	0	0	0	0	0	253
11:15	0	232	34	4	7	1	0	0	0	0	0	0	0	278
11:30	1	241	38	2	5	3	1	0	0	0	0	0	0	291
11:45	0	244	33	3	3	1	0	0	0	0	0	0	0	284
12:00 PM	0	240	32	5	4	0	0	0	0	0	0	0	0	281
12:15	0	258	39	5	5	0	0	0	0	0	0	0	0	307
12:30	0	260	37	5	6	1	0	0	0	0	0	0	0	309
12:45	0	243	45	4	5	0	0	0	0	0	0	0	0	297
13:00	0	291	47	4	6	0	0	0	0	0	0	0	0	348
13:15	1	230	29	4	3	0	0	0	1	0	0	0	0	268
13:30	0	301	43	2	5	2	0	0	0	0	0	0	0	353
13:45	0	270	36	4	7	0	0	0	0	0	0	0	0	317
14:00	0	278	37	4	3	0	1	0	1	0	0	0	0	324
14:15	0	298	56	7	9	0	0	0	1	0	0	0	0	371
14:30	0	345	58	3	4	1	0	1	1	0	0	0	0	413
14:45	1	367	49	4	8	1	0	0	0	0	0	0	0	430
15:00	1	385	49	4	4	0	0	0	0	0	0	0	0	443
15:15	0	346	45	5	4	2	0	0	0	0	0	0	0	402
15:30	0	346	47	4	6	1	0	0	0	0	0	0	0	404
15:45	0	368	61	4	8	0	0	0	0	0	0	0	0	441
16:00	0	372	50	6	7	1	0	0	1	0	0	0	0	437
16:15	0	353	44	3	4	0	0	0	0	0	0	0	0	404
16:30	0	365	48	1	5	0	0	0	0	0	0	0	0	419
16:45	0	358	55	3	13	1	0	0	0	0	0	0	0	430
17:00	1	362	56	3	4	0	0	0	0	0	0	0	0	426
17:15	2	365	52	2	4	2	1	1	0	0	0	0	0	429
17:30	0	377	38	4	2	0	0	0	0	0	0	0	0	421
17:45	1	335	49	4	7	1	0	0	1	0	0	0	0	398
18:00	0	334	50	3	4	0	0	0	0	0	0	0	0	391
18:15	0	328	49	4	3	0	0	0	0	0	0	0	0	384
18:30	0	284	39	4	3	0	0	0	0	0	0	0	0	330
18:45	0	257	30	2	3	0	0	0	0	0	0	0	0	292
19:00	1	271	37	2	4	0	1	0	0	0	0	0	0	316
19:15	0	276	27	2	0	0	0	0	0	0	0	0	0	305
19:30	0	260	30	3	9	0	0	0	0	0	0	0	0	302
19:45	0	253	37	3	1	0	0	0	0	0	0	0	0	294
20:00	0	206	25	2	4	0	1	0	1	0	0	0	0	239
20:15	0	205	25	3	3	0	0	0	0	0	0	0	0	236
20:30	0	202	23	3	4	0	0	0	0	0	0	0	0	232
20:45	0	186	22	1	1	0	0	0	0	0	0	0	0	210
21:00	1	191	23	2	3	0	0	0	0	0	0	0	0	220
21:15	0	177	14	2	2	1	0	0	0	0	0	0	0	196
21:30	0	157	20	0	2	0	0	0	0	0	0	0	0	179
21:45	0	168	15	2	3	0	0	0	0	0	0	0	0	188
22:00	0	140	12	0	2	0	0	0	0	0	0	0	0	154
22:15	0	110	9	1	0	0	0	0	0	0	0	0	0	120
22:30	0	95	18	0	2	0	0	0	0	0	0	0	0	115
22:45	0	86	6	1	0	0	0	0	0	0	0	0	0	93
23:00	0	78	5	0	0	0	0	0	1	0	0	0	0	84
23:15	0	84	8	1	1	0	0	0	0	0	0	0	0	94
23:30	0	78	5	1	0	0	0	0	0	0	0	0	0	84
23:45	0	66	8	0	2	0	0	0	0	0	0	0	0	76
Totals	14	19270	2698	232	326	37	8	5	17					22607
% of Totals	0%	85%	12%	1%	1%	0%	0%	0%	0%					100%

AM Volumes	5	7065	1059	96	137	23	4	3	9	0	0	0	0	8401
% AM	0%	31%	5%	0%	1%	0%	0%	0%	0%					37%
AM Peak Hour	07:15	07:30	07:30	07:30	07:30	06:45	07:15	04:00	08:15					07:30
Volume	2	1463	237	20	32	6	3	1	4					1765
PM Volumes	9	12205	1639	136	189	14	4	2	8	0	0	0	0	14206
% PM	0%	54%	7%	1%	1%	0%	0%	0%	0%					63%
PM Peak Hour	17:00	16:45	14:15	12:00	16:00	14:30	13:15	13:45	13:45					16:45
Volume	4	1462	212	19	29	4	1	1	3					1706

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	2979		13%	2480		11%	3364		15%	13784		61%

Classification Definitions

1	Motorcycles	**4**	Buses	**7**	> =4-Axle Single Units	**10**	>=6-Axle Single Trailers	**13**	>=7-Axle Multi-Trailers
2	Passenger Cars	**5**	2-Axle, 6-Tire Single Units	**8**	<=4-Axle Single Trailers	**11**	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	**6**	3-Axle Single Units	**9**	5-Axle Single Trailers	**12**	6-Axle Multi-Trailers		

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	127	11	0	0	0	0	0	0	0	0	0	0	**138**
01:00	0	79	11	0	0	1	0	0	0	0	0	0	0	**91**
02:00	0	59	8	0	0	0	0	0	0	0	0	0	0	**67**
03:00	0	57	5	0	0	0	0	0	1	0	0	0	0	**63**
04:00	0	79	11	2	1	0	0	0	0	0	0	0	0	**93**
05:00	0	128	25	2	0	0	0	0	0	0	0	0	0	**155**
06:00	1	264	43	6	1	2	0	0	0	0	0	0	0	**317**
07:00	0	559	75	6	6	2	0	0	0	0	0	0	0	**648**
08:00	0	500	73	10	6	0	0	0	1	0	0	0	0	**590**
09:00	0	387	59	8	8	1	0	1	0	0	0	0	0	**464**
10:00	0	424	50	6	10	1	0	0	1	0	0	0	0	**492**
11:00	1	480	67	7	9	0	0	0	0	0	0	0	0	**564**
12:00 PM	0	526	67	7	4	0	0	0	0	0	0	0	0	**604**
13:00	0	558	75	6	7	1	0	0	0	0	0	0	0	**647**
14:00	1	690	103	9	8	1	0	1	0	0	0	0	0	**813**
15:00	0	819	112	8	8	2	0	0	0	0	0	0	0	**949**
16:00	0	893	116	6	12	1	0	0	0	0	0	0	0	**1028**
17:00	1	881	120	7	5	0	0	0	1	0	0	0	0	**1015**
18:00	0	705	88	7	7	0	0	0	0	0	0	0	0	**807**
19:00	1	573	65	5	10	0	0	0	0	0	0	0	0	**654**
20:00	0	450	50	5	7	0	0	0	0	0	0	0	0	**512**
21:00	1	418	40	3	3	0	0	0	0	0	0	0	0	**465**
22:00	0	254	24	1	1	0	0	0	0	0	0	0	0	**280**
23:00	0	182	14	1	2	0	0	0	0	0	0	0	0	**199**
Totals	6	10092	1312	112	115	12		2	4					11655
% of Totals	0%	87%	11%	1%	1%	0%		0%	0%					100%

AM Volumes	2	3143	438	47	41	7	0	1	3	0	0	0	0	3682
% AM	0%	27%	4%	0%	0%	0%		0%	0%					32%
AM Peak Hour	06:00	07:00	07:00	08:00	10:00	06:00		09:00	03:00					07:00
Volume	1	559	75	10	10	2		1	1					648
PM Volumes	4	6949	874	65	74	5	0	1	1	0	0	0	0	7973
% PM	0%	60%	7%	1%	1%	0%		0%	0%					68%
PM Peak Hour	14:00	16:00	17:00	14:00	16:00	15:00		14:00	17:00					16:00
Volume	1	893	120	9	12	2		1	1					1028

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	1238	↔	11%	1251	↔	11%	2043	↔	18%	7123	↔	61%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	83	12	0	0	0	0	0	0	0	0	0	0	**95**
01:00	0	47	7	0	0	0	0	0	0	0	0	0	0	**54**
02:00	0	60	6	0	1	0	0	0	0	0	0	0	0	**67**
03:00	0	82	9	0	0	0	0	0	0	0	0	0	0	**91**
04:00	0	165	33	1	4	0	0	1	0	0	0	0	0	**204**
05:00	0	335	50	6	4	1	0	0	0	0	0	0	0	**396**
06:00	0	434	64	7	12	2	0	0	1	0	0	0	0	**520**
07:00	0	782	125	9	22	4	2	1	0	0	0	0	0	**945**
08:00	2	650	110	9	19	3	1	0	2	0	0	0	0	**796**
09:00	0	406	63	6	15	0	0	0	2	0	0	0	0	**492**
10:00	0	426	72	7	10	1	0	0	1	0	0	0	0	**517**
11:00	1	452	70	4	9	5	1	0	0	0	0	0	0	**542**
12:00 PM	0	475	86	12	16	1	0	0	0	0	0	0	0	**590**
13:00	1	534	80	8	14	1	0	0	1	0	0	0	0	**639**
14:00	0	598	97	9	16	1	1	0	3	0	0	0	0	**725**
15:00	1	626	90	9	14	1	0	0	0	0	0	0	0	**741**
16:00	0	555	81	7	17	1	0	0	1	0	0	0	0	**662**
17:00	3	558	75	6	12	3	1	1	0	0	0	0	0	**659**
18:00	0	498	80	6	6	0	0	0	0	0	0	0	0	**590**
19:00	0	487	66	5	4	0	1	0	0	0	0	0	0	**563**
20:00	0	349	45	4	5	0	1	0	1	0	0	0	0	**405**
21:00	0	275	32	3	7	1	0	0	0	0	0	0	0	**318**
22:00	0	177	21	1	3	0	0	0	0	0	0	0	0	**202**
23:00	0	124	12	1	1	0	0	0	1	0	0	0	0	**139**
Totals	**8**	**9178**	**1386**	**120**	**211**	**25**	**8**	**3**	**13**					**10952**
% of Totals	0%	84%	13%	1%	2%	0%	0%	0%	0%					100%

AM Volumes	3	3922	621	49	96	16	4	2	6	0	0	0	0	4719
% AM	0%	36%	6%	0%	1%	0%	0%	0%	0%					43%
AM Peak Hour	08:00	07:00	07:00	07:00	07:00	11:00	07:00	04:00	08:00					07:00
Volume	2	782	125	9	22	5	2	1	2					945
PM Volumes	5	5256	765	71	115	9	4	1	7	0	0	0	0	6233
% PM	0%	48%	7%	1%	1%	0%	0%	0%	0%					57%
PM Peak Hour	17:00	15:00	14:00	12:00	16:00	17:00	14:00	17:00	14:00					15:00
Volume	3	626	97	12	17	3	1	1	3					741

Directional Peak Periods **All Classes**	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
	Volume		%	Volume		%	Volume		%	Volume		%
	1741	⟷	16%	1229	⟷	11%	1321	⟷	12%	6661	⟷	61%

Classification Definitions

1 Motorcycles
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8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

N Wilmington Ave Bet. W School St & W Magnolia St

Day: Tuesday
Date: 5/21/2019

City: Compton
Project #: CA19_5294_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
00:00 AM	0	210	23	0	0	0	0	0	0	0	0	0	0	233
01:00	0	126	18	0	0	1	0	0	0	0	0	0	0	145
02:00	0	119	14	0	1	0	0	0	0	0	0	0	0	134
03:00	0	139	14	0	0	0	0	0	1	0	0	0	0	154
04:00	0	244	44	3	5	0	0	1	0	0	0	0	0	297
05:00	0	463	75	8	4	1	0	0	0	0	0	0	0	551
06:00	1	698	107	13	13	4	0	0	1	0	0	0	0	837
07:00	0	1341	200	15	28	6	2	1	0	0	0	0	0	1593
08:00	2	1150	183	19	25	3	1	0	3	0	0	0	0	1386
09:00	0	793	122	14	23	1	0	1	2	0	0	0	0	956
10:00	0	850	122	13	20	2	0	0	2	0	0	0	0	1009
11:00	2	932	137	11	18	5	1	0	0	0	0	0	0	1106
12:00 PM	0	1001	153	19	20	1	0	0	0	0	0	0	0	1194
13:00	1	1092	155	14	21	2	0	0	1	0	0	0	0	1286
14:00	1	1288	200	18	24	2	1	1	3	0	0	0	0	1538
15:00	1	1445	202	17	22	3	0	0	0	0	0	0	0	1690
16:00	0	1448	197	13	29	2	0	0	1	0	0	0	0	1690
17:00	4	1439	195	13	17	3	1	1	1	0	0	0	0	1674
18:00	0	1203	168	13	13	0	0	0	0	0	0	0	0	1397
19:00	1	1060	131	10	14	0	1	0	0	0	0	0	0	1217
20:00	0	799	95	9	12	0	1	0	1	0	0	0	0	917
21:00	1	693	72	6	10	1	0	0	0	0	0	0	0	783
22:00	0	431	45	2	4	0	0	0	0	0	0	0	0	482
23:00	0	306	26	2	3	0	0	0	1	0	0	0	0	338
Totals	14	19270	2698	232	326	37	8	5	17					22607
% of Totals	0%	85%	12%	1%	1%	0%	0%	0%	0%					100%

AM Volumes	5	7065	1059	96	137	23	4	3	9	0	0	0	0	8401
% AM	0%	31%	5%	0%	1%	0%	0%	0%	0%					37%
AM Peak Hour	08:00	07:00	07:00	08:00	07:00	07:00	07:00	04:00	08:00					07:00
Volume	2	1341	200	19	28	6	2	1	3					1593
PM Volumes	9	12205	1639	136	189	14	4	2	8	0	0	0	0	14206
% PM	0%	54%	7%	1%	1%	0%	0%	0%	0%					63%
PM Peak Hour	17:00	16:00	15:00	12:00	16:00	15:00	14:00	14:00	14:00					15:00
Volume	4	1448	202	19	29	3	1	1	3					1690

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume		%	Volume		%	Volume		%	Volume		%
	2979	↔	13%	2480	↔	11%	3364	↔	15%	13784	↔	61%

Classification Definitions

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11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

DAILY TOTALS	NB	SB	EB	WB	To
	11,655	10,952	0	0	22,

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOT
00:00	38		31		0	0	69		12:00	133		148		0	0	281
00:15	39		25		0	0	64		12:15	162		145		0	0	307
00:30	31		21		0	0	52		12:30	163		146		0	0	309
00:45	30	138	18	95	0	0	48	233	12:45	146	604	151	590	0	0	297
01:00	20		11		0	0	31		13:00	181		167		0	0	348
01:15	31		12		0	0	43		13:15	125		143		0	0	268
01:30	19		21		0	0	40		13:30	181		172		0	0	353
01:45	21	91	10	54	0	0	31	145	13:45	160	647	157	639	0	0	317
02:00	19		18		0	0	37		14:00	179		145		0	0	324
02:15	20		13		0	0	33		14:15	189		182		0	0	371
02:30	13		22		0	0	35		14:30	221		192		0	0	413
02:45	15	67	14	67	0	0	29	134	14:45	224	813	206	725	0	0	430
03:00	21		23		0	0	44		15:00	256		187		0	0	443
03:15	14		23		0	0	37		15:15	234		168		0	0	402
03:30	12		24		0	0	36		15:30	204		200		0	0	404
03:45	16	63	21	91	0	0	37	154	15:45	255	949	186	741	0	0	441
04:00	14		23		0	0	37		16:00	263		174		0	0	437
04:15	23		44		0	0	67		16:15	240		164		0	0	404
04:30	23		56		0	0	79		16:30	266		153		0	0	419
04:45	33	93	81	204	0	0	114	297	16:45	259	1028	171	662	0	0	430
05:00	41		51		0	0	92		17:00	265		161		0	0	426
05:15	37		93		0	0	130		17:15	260		169		0	0	429
05:30	31		124		0	0	155		17:30	261		160		0	0	421
05:45	46	155	128	396	0	0	174	551	17:45	229	1015	169	659	0	0	398
06:00	60		95		0	0	155		18:00	243		148		0	0	391
06:15	71		114		0	0	185		18:15	213		171		0	0	384
06:30	78		145		0	0	223		18:30	188		142		0	0	330
06:45	108	317	166	520	0	0	274	837	18:45	163	807	129	590	0	0	292
07:00	119		167		0	0	286		19:00	159		157		0	0	316
07:15	132		210		0	0	342		19:15	156		149		0	0	305
07:30	182		270		0	0	452		19:30	161		141		0	0	302
07:45	215	648	298	945	0	0	513	1593	19:45	178	654	116	563	0	0	294
08:00	173		254		0	0	427		20:00	127		112		0	0	239
08:15	148		225		0	0	373		20:15	128		108		0	0	236
08:30	132		167		0	0	299		20:30	131		101		0	0	232
08:45	137	590	150	796	0	0	287	1386	20:45	126	512	84	405	0	0	210
09:00	112		141		0	0	253		21:00	137		83		0	0	220
09:15	116		112		0	0	228		21:15	114		82		0	0	196
09:30	110		120		0	0	230		21:30	102		77		0	0	179
09:45	126	464	119	492	0	0	245	956	21:45	112	465	76	318	0	0	188
10:00	121		117		0	0	238		22:00	88		66		0	0	154
10:15	106		134		0	0	240		22:15	78		42		0	0	120
10:30	134		154		0	0	288		22:30	60		55		0	0	115
10:45	131	492	112	517	0	0	243	1009	22:45	54	280	39	202	0	0	93
11:00	135		118		0	0	253		23:00	47		37		0	0	84
11:15	136		142		0	0	278		23:15	54		40		0	0	94
11:30	148		143		0	0	291		23:30	51		33		0	0	84
11:45	145	564	139	542	0	0	284	1106	23:45	47	199	29	139	0	0	76
TOTALS		3682		4719				**8401**	**TOTALS**		7973		6233			
SPLIT %		43.8%		56.2%				**37.2%**	**SPLIT %**		56.1%		43.9%			

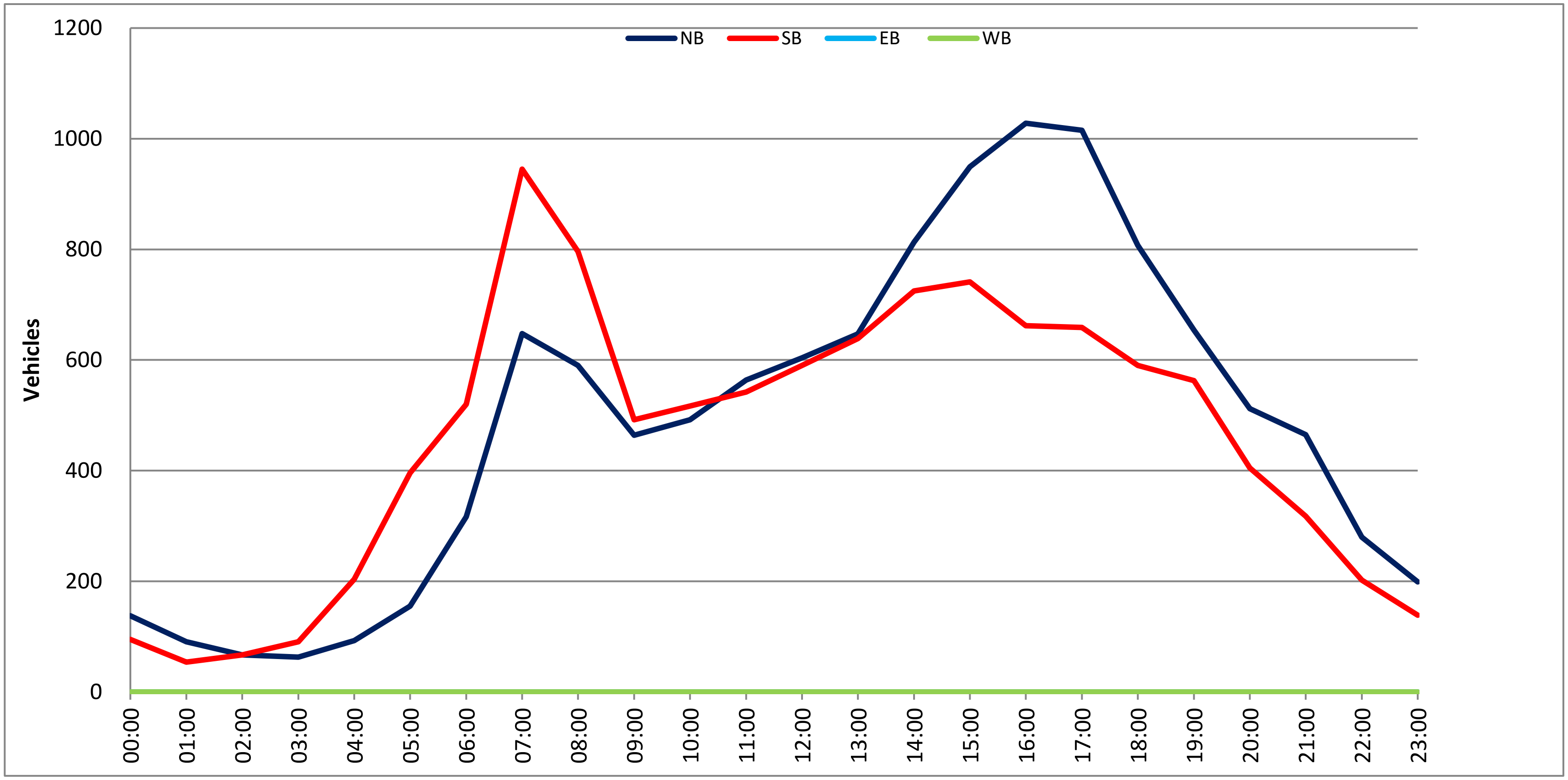
DAILY TOTALS	NB	SB	EB	WB	To
	11,655	10,952	0	0	22,

	NB	SB	EB	WB	TOTAL		NB	SB	EB	WB
AM Peak Hour	07:30	07:30			**07:30**	**PM Peak Hour**	16:30	14:15		
AM Pk Volume	718	1047			**1765**	**PM Pk Volume**	1050	767		
Pk Hr Factor	0.835	0.878			**0.860**	**Pk Hr Factor**	0.987	0.931		
7 - 9 Volume	1238	1741	0	0	**2979**	**4 - 6 Volume**	2043	1321	0	0
7 - 9 Peak Hour	07:30	07:30			**07:30**	**4 - 6 Peak Hour**	16:30	16:00		
7 - 9 Pk Volume	718	1047	0	0	**1765**	**4 - 6 Pk Volume**	1050	662	0	0
Pk Hr Factor	0.835	0.878	0.000	0.000	**0.860**	**Pk Hr Factor**	0.987	0.951	0.000	0.000

Prepared by NDS/ATD

Project #: CA19_5294_002 **City:** Compton

Location: N Wilmington Ave Bet. W School St & W **Date:** 5/21/2019



Prepared by National Data & Surveying Services

Screenline Pedestrian & Bike Study

Location: N Wilmington Ave Bet. W School St & W Magnolia St
City: Compton

Date: 05/21/2019
Day: Tuesday

TIME	Peds				TOTAL	Bikes				TOTAL
	Eastleg		Westleg			Eastleg		Westleg		
	NB	SB	NB	SB		NB	SB	NB	SB	
7:00 AM	1	2	1	6	10	0	0	0	1	1
7:15 AM	0	1	0	2	3	0	0	0	1	1
7:30 AM	4	0	0	0	4	1	0	0	0	1
7:45 AM	3	0	3	2	8	0	0	0	0	0
8:00 AM	1	0	1	0	2	1	0	0	1	2
8:15 AM	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	2	0	0	2	1	0	0	0	1
8:45 AM	0	0	1	0	1	0	1	0	0	1
9:00 AM	0	2	1	0	3	1	0	0	0	1
9:15 AM	0	1	0	1	2	0	0	0	0	0
9:30 AM	0	0	0	0	0	1	0	0	0	1
9:45 AM	1	0	0	0	1	0	0	0	1	1
Totals	10	8	7	11	36	5	2	0	4	11
3:00 PM	0	2	3	1	6	0	1	0	0	1
3:15 PM	0	0	0	3	3	0	0	1	2	3
3:30 PM	0	2	3	2	7	2	0	0	0	2
3:45 PM	0	0	1	1	2	2	0	0	1	3
4:00 PM	1	2	5	1	9	0	0	0	0	0
4:15 PM	1	0	0	1	2	0	0	0	0	0
4:30 PM	0	0	1	0	1	2	1	0	0	3
4:45 PM	1	1	1	2	5	0	0	1	0	1
5:00 PM	4	2	5	1	12	0	1	1	1	3
5:15 PM	1	1	1	1	4	1	0	0	0	1
5:30 PM	1	0	0	0	1	0	0	1	1	2
5:45 PM	1	1	0	0	2	0	0	2	2	4
Totals	10	11	20	13	54	7	3	6	7	23
Grand Total	20	19	27	24	90	12	5	6	11	34