INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION
DE SOTO TRUNK LINE PROJECT

PREPARED BY

LOS ANGELES DEPARTMENT OF WATER AND POWER

Environmental Affairs

111 North Hope Street, Room 1044

Los Angeles, California 90012

WITH ASSISTANCE FROM

DUDEK

38 North Marengo Avenue

Pasadena, California 91101

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ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AB	Assembly Bill
AQMP	Air Quality Management Plan
bgs	below the ground surface
BMP	best management practice
CAAQS	California Ambient Air Quality Standards
CAL/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CalEEMod	California Emissions Estimator Model
CALINE4	California LINE Source Dispersion Model
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CH_4	methane
City	City of Los Angeles
CMA	Critical Movement Analysis
CMP	congestion management program
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
dB	decibel
dBA	A-weighted decibel
dca	dichloroethane
dce	dichloroethene
DPM	exhaust particulate matter
DTSC	Department of Toxic Substances Control
DWSRF	Drinking Water State Revolving Fund
EIR	Environmental Impact Report
EO	Executive Order
ERDIP	earthquake resistant ductile iron pipe
GHG	greenhouse gas
GWP	global warming potential
IS	Initial Study
LACM	Natural History Museum of Los Angeles County
LADOT	Los Angeles Department of Transportation
LADWP	Los Angeles Department of Water and Power
LA Metro	Los Angeles County Metropolitan Transportation Authority
L_{eq}	equivalent continuous sound level
LOS	level of service

Acronym/Abbreviation	Definition
LST	localized significance threshold
LUST	leaking underground storage tank
MLD	most likely descendant
MND	Mitigated Negative Declaration
MT	metric tons
MW	megawatts
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
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
O_3	ozone
PCE	passenger-car equivalence
pce	tetrachloroethylene
PM_{10}	particulate matter with a diameter less than or equal to 10 microns (coarse particulate matter)
$PM_{2.5}$	particulate matter with a diameter less than or equal to 2.5 microns (fine particulate matter)
ppm	parts per million
PRIMP	Paleontological Resources Impact Mitigation Program
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SF_6	sulfur hexafluoride
SO_2	sulfur dioxide
Sox	oxides of sulfur
SR-118	State Route 118
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TCA	1,1,1-trichloroethane
TCR	tribal cultural resource
V/C	volume-to-capacity
VHFHSZ	Very High Fire Hazard Severity Zone
VOC	volatile organic compound
WSP	welded steel pipe

PREFACE

An Initial Study/Mitigated Negative Declaration (IS/MND) and a Notice of Intent to Adopt an MND (NOI) were released for public review for the previously proposed De Soto Trunk Line Project (proposed project) by the Los Angeles Department of Water and Power (LADWP) in November 2018. Subsequent to the release of the November 2018 IS/MND and NOI, changes were made to the design of the proposed project. These changes are summarized below.

Proposed Project Modifications

The proposed project (under both the previously proposed design described in the November 2018 IS/MND and the revised design) would involve replacing portions of existing potable water trunk lines in the western San Fernando Valley within the City of Los Angeles (City). Specifically, portions of the De Soto Trunk Line, Roscoe Trunk Line, Canoga Topham Trunk Line, and Ventura Trunk Line would be abandoned and replaced. Changes in the project design are detailed below.

- **De Soto Trunk Line:** Under the November 2018 IS/MND, the replacement De Soto Trunk Line was going to be installed generally parallel to the existing trunk line, along De Soto Avenue. Under the revised design, the replacement trunk line would be installed along Mason Avenue, a north–south roadway approximately 0.5 mile east of and parallel to De Soto Avenue. Pipeline connections would be installed along two east–west trending streets (Devonshire Street and Roscoe Boulevard), providing the necessary connections between De Soto Avenue and Mason Avenue. (These connections would be considered part of the De Soto Trunk Line.) The length of the replacement pipeline and the types of construction work required for installation would be similar to those of the previously proposed design.
- **Canoga Topham & Ventura Trunk Lines:** Under the November 2018 IS/MND, sections of the De Soto, Canoga Topham, and Ventura trunk lines would be abandoned and replaced at the intersection of De Soto Avenue and Victory Boulevard, totaling approximately 900 feet of pipeline replacements. Under the revised design, replacements at the De Soto Avenue/Victory Boulevard intersection would remain largely the same as those described for the previously proposed design, with the exception of minor decreases in pipeline diameter for some of the replacement pipelines.

Several other changes would result from the revised design, namely, minor changes in the construction scenario (e.g., a later construction start date and a longer construction duration) and minor changes in the diameter for some of the replacement pipelines. Other aspects of the project, such as construction equipment, construction methodologies, and maintenance activities would remain generally the same as those described in the November 2018 IS/MND.

Recirculation

In accordance with Section 15073.5 of the Guidelines for implementing the California Environmental Quality Act (CEQA; California Code of Regulations Title 14 § 15000 et seq.), LADWP is recirculating the CEQA document for

the De Soto Trunk Line Project. As such, LADWP has revised the November 2018 IS/MND and NOI based on the changes that were made to the project and is re-releasing the documents for public review. The document that follows constitutes the IS/MND for the currently proposed De Soto Trunk Line Project.

Revisions to the CEQA Guidelines

Since the November 2018 IS/MND was released from public review, the state has adopted updates to the CEQA Guidelines to add efficiency and clarity to aspects of the guidelines and to incorporate recent case law and legislation that had not yet been reflected in the text of the guidelines. The recently adopted updates also include revisions to Appendix G of the CEQA Guidelines, which consists of environmental checklist questions that are used by many lead agencies as the framework for environmental documents prepared pursuant to CEQA.

The revised CEQA Guidelines were adopted on December 28, 2018, after the November 2018 IS/MND and NOI were released for public review. As such, the environmental checklist questions used in the November 2018 IS/MND were based on the version of the CEQA Guidelines and Appendix G that was in place when the IS/MND and NOI were released for public review. Section 15007(c) of the CEQA Guidelines states that "If a document meets the content requirements in effect when the document is sent out for public review, the document shall not need to be revised to conform to any new content requirements in Guideline amendments taking effect before the document is finally approved." Because the IS/MND and NOI for the proposed project were released for public review prior to adoption of the Guideline amendments, the analysis in this recirculated IS/MND does not need to reflect the revised Guidelines. Additionally, the legislation and court decisions that are reflected in the updates were already in effect at the time the IS/MND was circulated in November 2018. As such, the November 2018 IS/MND and this recirculated IS/MND are in compliance with the content requirements of the 2018 CEQA Guidelines revisions. For these reasons, no revisions are required in the CEQA analysis of the project as a result of the CEQA Guidelines updates. The thresholds used in this recirculated IS/MND are therefore consistent with those of the November 2018 IS/MND (which were obtained from Appendix G of the CEQA Guidelines, prior to the adoption of the December 2018 revisions).

1 INTRODUCTION

1.1 Project Overview

The De Soto Trunk Line Project (proposed project) is a 54- and 48-inch-diameter welded steel pipe (WSP) and earthquake resistant ductile iron pipe (ERDIP) proposed by the Los Angeles Department of Water and Power (LADWP). The project would involve replacing approximately 13,500 feet (2.6 miles) of the existing riveted steel De Soto Trunk Line, a potable water trunk line installed in 1917, and approximately 2,700 feet (0.5 mile) of the existing riveted steel Roscoe Trunk Line, installed in 1917 and 1931 and slip-lined with high-density polyethylene in 1998. The project would also involve approximately 900 feet (0.17 mile) of pipeline replacements at the intersection of De Soto Avenue and Victory Boulevard. (At this intersection, sections of the De Soto, Canoga Topham, and Ventura trunk lines would be replaced.)

The existing trunk lines, which vary in size from 24 inches to 54 inches in diameter, are located in the western portion of the San Fernando Valley within the City of Los Angeles (City). The De Soto Trunk Line spans north to south along De Soto Avenue from the De Soto Reservoir (northern terminus) to Victory Boulevard (southern terminus). The Roscoe Trunk Line spans east to west from Louise Avenue (eastern terminus) to Fallbrook Avenue (western terminus); however, the portion of the trunk line west of De Soto Avenue is currently out of service. The Canoga Topham Trunk Line spans east to west on Victory Boulevard from De Soto Avenue (western terminus) to Canoga Avenue, and then continues north to south on Canoga Avenue from Victory Boulevard to Ventura Boulevard. The Ventura Trunk Line spans west to east on Victory Boulevard from De Soto Avenue (eastern terminus) to Tampa Avenue, and then continues on Tampa Avenue from Victory Boulevard to Ventura Boulevard.

The proposed limits of the existing De Soto Trunk Line to be abandoned extend along De Soto Avenue from Devonshire Street to Roscoe Boulevard. The proposed limits of the existing Roscoe Trunk Line to be abandoned extend along Roscoe Boulevard from De Soto Avenue to Mason Avenue. Portions of several trunk lines would also be abandoned at the De Soto Avenue/Victory Boulevard intersection. The portions of the existing trunk lines that are proposed for replacement are aging, deteriorating, and nearing the end of their service life. As such, LADWP is proposing to replace these segments with new pipeline. The segments of the De Soto Trunk Line that would be replaced are 36 inches, 39 inches, 42 inches, 45 inches, 52 inches, and 54 inches in diameter. The segment of the Roscoe Trunk Line that would be replaced is 34 inches in diameter. (Upon replacement, the new section of pipeline along Roscoe Boulevard would be considered part of the De Soto Trunk Line.) The segment of the Canoga Topham Trunk Line that would be replaced is 36 inches in diameter; and the segments of the Ventura Trunk Line that would be replaced are 18 inches and 24 inches in diameter. These segments would be replaced with 54-inch-diameter WSP and ERDIP (for the De Soto Trunk Line), 48-inch-diameter WSP and ERDIP (for the Roscoe Trunk Line), and 36-inch-diameter WSP (for the trunk line replacements at the Victory Boulevard/De Soto Avenue intersection). These proposed replacements would increase the safety, capacity, and reliability of LADWP's water system in the western San Fernando Valley. The proposed project would also include installation of maintenance/access holes, isolation valves, blow-offs, air/vacuum valves, and flowmeters that are required for the operation, monitoring, and maintenance of the trunk lines.

1.2 California Environmental Quality Act

The California Environmental Quality Act (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, Section 21065). LADWP, as a municipal utility, would implement and operate the proposed project and will therefore act as the CEQA lead agency. LADWP would also fund the proposed project but may also seek funding from available sources, which may include the State Water Resources Control Board's (SWRCB) Drinking Water State Revolving Fund (DWSRF). The SWRCB uses the CEQA review process and compliance with federal environmental laws and regulations to satisfy the environmental requirements for the DWSRF Program Operating Agreement between the United States Environmental Protection Agency and the SWRCB. As a result, and in addition to the CEQA review process, federal crosscutting requirements are often a part of the environmental review for projects that are funded through the DWSRF Program. Therefore, applications for funding must include proof of CEQA compliance and of compliance with federal requirements. Collectively, the process is termed "CEQA+" due to the addition of federal crosscutting studies to CEQA requirements.

An Initial Study has been prepared by LADWP 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 Initial Study 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 Initial Study 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 this IS/MND, all of the project's potentially significant impacts would be reduced to less than significant levels through the implementation of mitigation measures. Consequently, the analysis contained herein concludes that an MND shall be prepared 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 the introduction for 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 less than significant. Section 4 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 that contain technical resource reports related to air quality and greenhouse gas (GHG) emissions, biological resources, and cultural resources, noise, and traffic. The technical resource reports have been prepared in compliance with CEQA+ federal crosscutting requirements, to support an application for SWRCB funding, in the event that such funding is pursued.

1.3 Project Location

At its northern extent, the project alignment begins at the intersection of De Soto Avenue and Devonshire Street, extending approximately 2,700 feet (0.5 mile) along Devonshire Street before turning south onto Mason Avenue. The alignment then extends approximately 13,500 feet (2.6 miles) south along Mason Avenue, until it reaches Roscoe Boulevard. At the Mason Avenue/Roscoe Boulevard intersection, the alignment turns to the west, extending approximately 2,700 feet (0.5 mile) along Roscoe Boulevard before terminating at De Soto Avenue (see Figure 1-1). The project also includes some pipeline work at the intersection of De Soto Avenue and Victory Boulevard, which is located approximately 2 miles south of the De Soto Avenue/Roscoe Boulevard intersection. Collectively, the areas where new pipelines are proposed will be termed "project alignment" in this IS/MND. The project would also involve pipeline abandonment along De Soto Avenue (from Devonshire Street to Roscoe Boulevard), along Roscoe Boulevard (from Mason Avenue to De Soto Avenue), and at the De Soto Avenue/Victory Boulevard intersection. Pipeline abandonment would involve filling the old pipe with cement slurry. This would require construction activity at the tie-in locations (i.e., the intersections of De Soto Avenue/Devonshire Street, De Soto Avenue/Roscoe Boulevard, Mason Avenue/Roscoe Boulevard, and De Soto Avenue/Victory Boulevard).

There is a potential construction staging area located at the De Soto Reservoir property, which is owned by LADWP and is currently used for water storage purposes. This area will be referred to as the "potential staging area" and is located approximately 1 mile north of the project alignment's northern extent. The project alignment and the potential staging area together will be called the "project site" for the purpose of this IS/MND. Major freeways in the project vicinity include State Route 118 (SR-118), which extends east to west across the northern portion of the San Fernando Valley and is located approximately 1.1 mile north of the project alignment's northern extent. Additionally, U.S. Route 101 is located approximately 1.4 mile south of the De Soto Avenue/Victory Boulevard intersection.

The project alignment is primarily located in the Chatsworth–Porter Ranch Community Plan Area. Roscoe Boulevard delineates the boundary between the Chatsworth–Porter Ranch Community Plan Area and the Canoga Park–Winnetka–Woodland Hills–West Hills Community Plan Area, located to the south. As such, the southern half of Roscoe Boulevard and the properties on the south side of the roadway, as well as the De Soto Avenue/Victory Boulevard intersection, are within the Canoga Park–Winnetka–Woodland Hills–West Hills Community Plan Area. The potential staging area is within the Chatsworth–Porter Ranch Community Plan Area.

1.4 Environmental Setting

The proposed project would occur within the public right-of-way for Devonshire Street, Mason Avenue, Roscoe Boulevard, Victory Boulevard, and small portions of De Soto Avenue. These roadways are designated as Major Highways

in the County of Los Angeles General Plan, with the exception of Mason Avenue, which is a Secondary Highway (County of Los Angeles 2015).

De Soto Avenue (north of Vanowen Street), Roscoe Boulevard, and Victory Boulevard (east of De Soto Avenue) are categorized by the City of Los Angeles as "Boulevard II" roadways; south of Vanowen Street, De Soto Avenue is categorized as a "Boulevard II Modified" roadway, and west of De Soto Avenue, Victory Boulevard is categorized as a "Boulevard I Modified" roadway. Mason Avenue is categorized as an "Avenue II" roadway, and Devonshire Street is categorized as an "Avenue I" roadway (City of Los Angeles 2017a, 2017b).

From Devonshire Street to Victory Boulevard, De Soto Avenue is six lanes in width with a center left-turn lane dividing the opposing lanes and sidewalks on both sides of the street. On-street parking is restricted to particular times, which are specified on signage along the roadway. From De Soto Avenue to Mason Avenue, Devonshire Street is four lanes in width with a center left-turn lane dividing opposing lanes and sidewalks on both sides of the street. There is a dedicated bike lane on both sides of the roadway. On-street parking is generally permitted along both sides of the roadway. From Devonshire Street to Roscoe Boulevard, Mason Avenue is four lanes in width with a center left-turn lane dividing opposing lanes and sidewalks on both sides of the street. On-street parking is generally permitted along both sides of the roadway. From Mason Avenue to De Soto Avenue, Roscoe Boulevard is six lanes in width with a center left-turn lane dividing the opposing lanes and sidewalks on both sides of the street. On-street parking is restricted to particular times, which are specified on signage along the roadway. From Canoga Avenue to Tampa Avenue, Victory Boulevard is also six lanes in width with a center left-turn lane dividing the opposing lanes and sidewalks on both sides of the street. No on-street parking is provided. Land uses surrounding the alignment are generally residences and businesses. See Figure 1-2 and Figure 1-3 for details on the land uses within, adjacent to, and near the De Soto Trunk Line Project alignment.

The proposed project would intersect one rail line operated by the Union Pacific Railroad, one bus rapid transit line operated by the Los Angeles County Metropolitan Transportation Authority (LA Metro), and two channelized waterways maintained by the Los Angeles County Flood Control District. The project alignment along Mason Avenue would pass under the Union Pacific Railroad tracks between Prairie Street and Corisco Street. The project would also pass under the Browns Creek Channel where it intersects Roscoe Boulevard east of De Soto Avenue. Just north of the De Soto Avenue/Victory Boulevard intersection, the project would extend under LA Metro's Orange Line Busway. Along Victory Boulevard near the De Soto Avenue/Victory Boulevard intersection, the project would be located near the Kelvin Channel.

SOURCE: OpenStreetMap

Los Angeles Department of Water & Power

0 5 1 Mile

FIGURE 1-1

Project Location

De Soto Trunk Line Project

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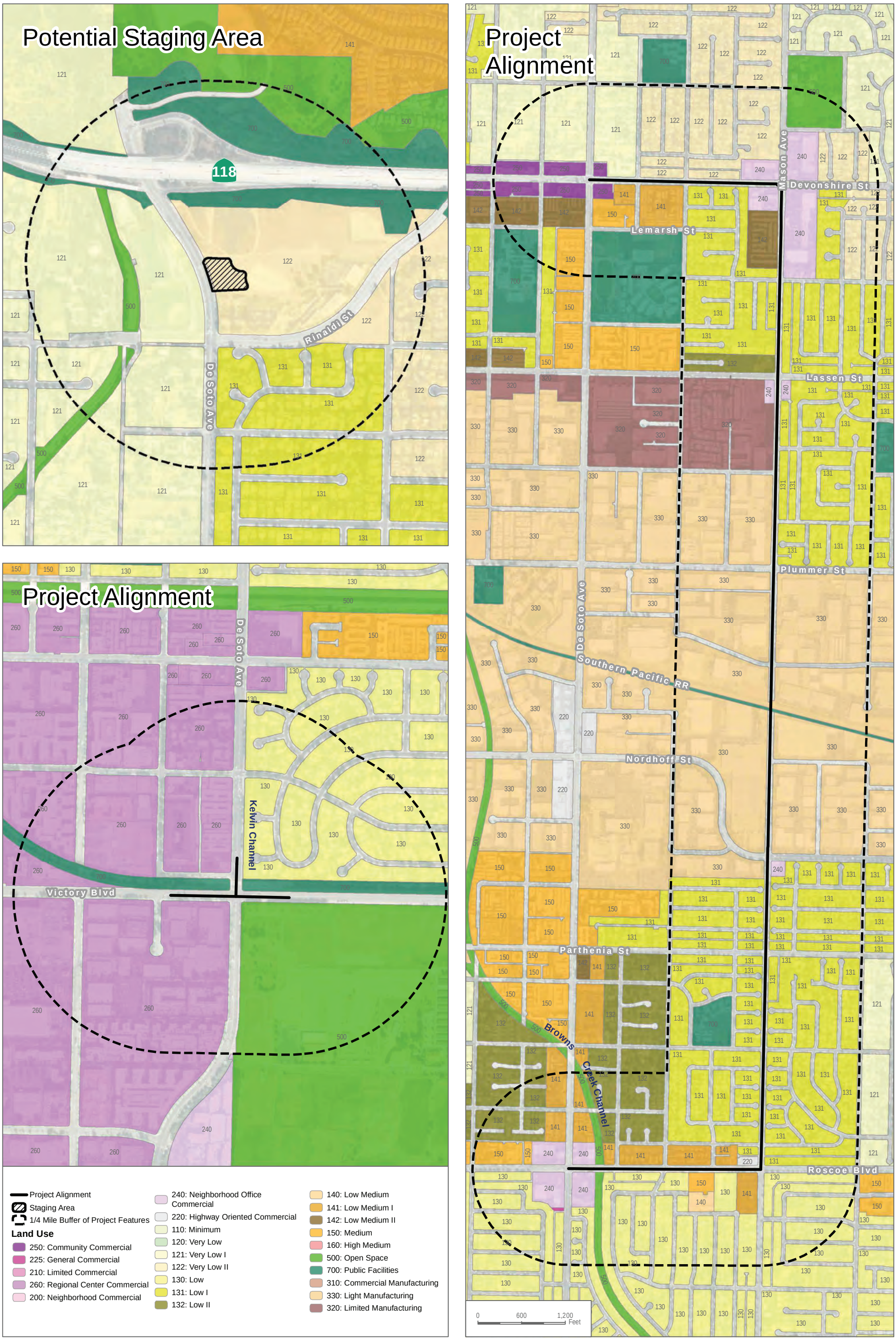

SOURCE: Esri and Digital Globe, City of Los Angeles, CAMS Streets 2011

LA DWP Los Angeles Department of Water & Power

FIGURE 1-2

Surrounding Land Use

De Soto Trunk Line Project

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Potential Staging Area

Project Alignment

Project Alignment

Project Alignment

118
Rinaldi St
De Soto Ave
Mason Ave
Devonshire St
Lemarsh St
Lassen St
Plummer St
Southern Pacific RR
Nordhoff St
Parthenia St
Roscoe Blvd
Victory Blvd
Kelvin Channel
Browns Creek Channel

- Project Alignment
- Staging Area
- 1/4 Mile Buffer of Project Features

Zoning

- Agricultural
- Commercial
- Industrial
- Single Family Residential
- Multiple Family Residential
- Residential Estate
- Open Space
- Parking
- Public Facilities
- Warner Center Specific Plan

0 600 1,200 Feet

0 330 660 Feet

SOURCE: Esri and Digital Globe, City of Los Angeles, CAMS Streets 2011

LA DWP Los Angeles Department of Water & Power

FIGURE 1-3

Zoning

De Soto Trunk Line Project

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1.5 References

City of Los Angeles. 2017a. *Chatsworth–Porter Ranch Circulation*. Department of City Planning, Information Technologies Division. February 2, 2017. Accessed June 14, 2019. https://planning.lacity.org/complan/valley/chtpage.htm.

City of Los Angeles. 2017b. *Canoga Park–Winnetka–Woodland Hills–West Hills Circulation*. Department of City Planning, Information Technologies Division. February 8, 2017. Accessed June 14, 2019. https://planning.lacity.org/complan/valley/cpkpage.htm.

County of Los Angeles. 2015. "Figure 7.3 Highway Plan Policy Map" in *Los Angeles County General Plan*. Adopted October 6, 2015. Accessed June 14, 2019. http://planning.lacounty.gov/generalplan/generalplan.

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2 PROJECT DESCRIPTION

2.1 Background

The existing De Soto Trunk Line is located within De Soto Avenue, extending from the De Soto Reservoir (northern terminus) to Victory Boulevard (southern terminus). The riveted steel pipe was installed in 1917 and varies in diameter from 36 inches to 54 inches. Its function is to transmit potable water from the Rinaldi and Granada Trunk Lines in the north to the area of West San Fernando Valley to the west/southwest of the De Soto Trunk Line. The De Soto Trunk Line also provides suction to Wells Drive and Winnetka Pump Stations and to Girard Pump Station. Additionally, the De Soto Trunk Line provides supplementary water supply to an area of West San Fernando Valley to the east/southwest of the De Soto Trunk Line through regulator stations near the intersection of De Soto Avenue and Roscoe Boulevard and near the intersection of Saticoy Street and Mason Avenue.

Portions of the De Soto Trunk Line have already been replaced due to a history of breakage. Between 1980 and 1985, approximately 6,850 feet of riveted steel pipe from Roscoe Boulevard to Victory Boulevard was replaced with new WSP. The pipe had undergone severe deterioration caused by corrosive soil conditions. In addition, a series of breaks and pipe ruptures, which occurred in the early 1980s, subsequently prompted the additional replacement of approximately 3,400 feet of the De Soto Trunk Line between Chatsworth Street and Lemarsh Street. During repair, visual inspection showed a complete absence of metal in the main pipe, leaving only cement lining to contain water. The highly corrosive soil in this area had caused the pipe to become structurally unsound. The De Soto Trunk Line between Chatsworth Street and Lemarsh Street was replaced in the 1980s. However, the portion of the De Soto Trunk Line extending from Lemarsh Street to Roscoe Boulevard still dates to 1917. This portion of the De Soto Trunk Line is aging and carries an increased liability to operations due to the amount of damage and disruption of service that would result in the event of breakage. The proposed project would replace this portion of the existing De Soto Trunk Line with an upsized diameter pipeline installed along Mason Avenue to satisfy the future operational needs and increase the reliability of service to the San Fernando Valley area. While the replacement trunk line would be routed along Mason Avenue instead of De Soto Avenue, it would provide the same connections and serve the same area as the existing De Soto Trunk Line.

The existing Roscoe Trunk Line consists of riveted steel pipe and WSP and was installed in 1917 and 1931. The trunk line originally ranged between 39 inches to 48 inches in diameter but was slip-lined with 34-inch-diameter high-density polyethylene pipe in 1998. The portion of the Roscoe Trunk Line to be replaced as part of the proposed project is located between De Soto Avenue and Mason Avenue. At De Soto Avenue, the existing Roscoe Trunk Line is connected to the existing De Soto Trunk Line. The existing De Soto Trunk Line feeds the existing Roscoe Trunk Line through the De Soto and Roscoe Regulator Station. Replacing the existing Roscoe Trunk Line from De Soto Avenue to Mason Avenue is necessary to increase reliability and operational flexibility and would also provide a tie-in location for a future trunk line. (Upon replacement, the new section of pipeline along Roscoe Boulevard would be considered part of the De Soto Trunk Line.)

The existing Canoga Topham Trunk Line consists of WSP installed in 1937 and lined with cement mortar in 1975. The trunk line ranges between 24 inches to 36 inches in diameter. The portion of the Canoga Topham Trunk Line to be replaced as part of the proposed project is located at the intersection of De Soto Avenue and Victory Boulevard. At De Soto Avenue, the existing Canoga Topham Trunk Line is connected to the existing De Soto Trunk Line. The existing De Soto Trunk Line feeds the existing Canoga Topham Trunk Line. Replacing the existing Canoga Topham Trunk Line at the intersection of De Soto Avenue and Victory Boulevard is necessary to increase reliability and operational flexibility at the intersection.

The existing Ventura Trunk Line consists of riveted steel pipe and WSP installed in 1917 and 1967, respectively. The trunk line is 18 inches and 24 inches in diameter. The portion of the Ventura Trunk Line to be replaced as part of the proposed project is located at the intersection of De Soto Avenue and Victory Boulevard. At De Soto Avenue, the existing Ventura Trunk Line is connected to the existing De Soto Trunk Line. The existing De Soto Trunk Line feeds the existing Ventura Trunk Line. Replacing the existing Ventura Trunk Line at the intersection of De Soto Avenue and Victory Boulevard is necessary to increase reliability and operational flexibility and would also provide a tie-in location for a future trunk line.

2.2 Project Design

The De Soto Trunk Line Project consists of installing approximately 2,700 feet of 54-inch-diameter WSP and ERDIP along Devonshire Street from De Soto Avenue to Mason Avenue; approximately 13,500 feet of 54-inch-diameter WSP and ERDIP along Mason Avenue from Devonshire Street to Roscoe Boulevard; approximately 2,700 feet of 48-inch-diameter WSP and ERDIP along Roscoe Boulevard from Mason Avenue to De Soto Avenue; and approximately 900 feet of 36-inch-diameter WSP at the intersection of De Soto Avenue and Victory Boulevard.

To determine the appropriate size for the replacement pipes, LADWP analyzed the operating criteria for the pipelines, including the service areas' current and future demand. The predicted ultimate maximum day peak hour demand was used for the analysis, and 54-inch-diameter, 48-inch-diameter, and 36-inch-diameter pipes were determined to be sufficient. The proposed 54-inch-diameter replacement De Soto Trunk Line would be consistent with the size of pipe installed in the 1980s along De Soto Avenue between Chatsworth Street and Lemarsh Street.

2.3 Construction

The existing De Soto, Roscoe, Canoga Topham, and Ventura trunk lines would remain in service during construction. Minimal interruptions in water service may occur during shutdowns needed for mainline connections and tie-ins to existing trunk lines. Affected customers would be notified in advance of any brief service interruptions. The replacement pipe would be installed within existing public right-of-way along the proposed alignment. A representative cross section of the proposed pipeline is shown in Figure 2-1, which contains further details on the location of the proposed pipeline within the roadway, as well as the existing utilities within the roadway. Underground gas lines, water lines, fiber optics, and power lines may require relocation. Utility relocations would be accommodated within the proposed alignment (i.e., they would not result in additional impacts outside of the trunk line replacement boundaries). Construction staging would occur along the project alignment (i.e., Devonshire Street, Mason Avenue, Roscoe Boulevard, De Soto Avenue, and Victory Boulevard), with some encroachment occurring along sidewalks. Some driveways may be temporarily blocked during this process. The De Soto Reservoir property located to the north of the proposed project's northern terminus may also be used as a construction staging area for long-term storage. The De Soto Reservoir property is owned by LADWP and is currently used for water storage purposes. As described in Section 1.3, this area will be referred to as the "potential staging area." No permanent land use changes would occur at the potential staging area as part of this project. Therefore, this area is analyzed in the IS/MND relative to temporary construction impacts only.

An overview of the project alignment is shown in Figure 1-1, with additional detail provided in Figure 1-2 and Figure 1-3. At its northern terminus, the new pipeline would be tied into the existing 54-inch-diameter WSP at the intersection of De Soto Avenue and Devonshire Street. The proposed project would continue east approximately 2,700 feet to the intersection of Devonshire Street and Mason Avenue. The proposed project would then continue south for approximately 13,500 along Mason Avenue. Along Roscoe Boulevard, between De Soto Avenue and Mason Avenue, the Roscoe Trunk Line would be replaced. The replacement line (which would be considered part of the De Soto Trunk Line) would tie into the existing De Soto Trunk Line at the De Soto Avenue/Roscoe Boulevard intersection, and into the existing Roscoe Trunk Line near the Mason Avenue/Roscoe Boulevard intersection. The proposed project would also install 36-inch-diameter WSP at the intersection of De Soto Avenue and Victory Boulevard, including 400 feet along De Soto Avenue (northern terminus) for connection with the existing De Soto Trunk Line, 150 feet along Victory Boulevard (western terminus) for connection with the existing Canoga Topham Trunk Line, and 350 feet along Victory Boulevard (eastern terminus) for a connection to the existing Ventura Trunk Line and a 36-inch stub-out for a future trunk line.

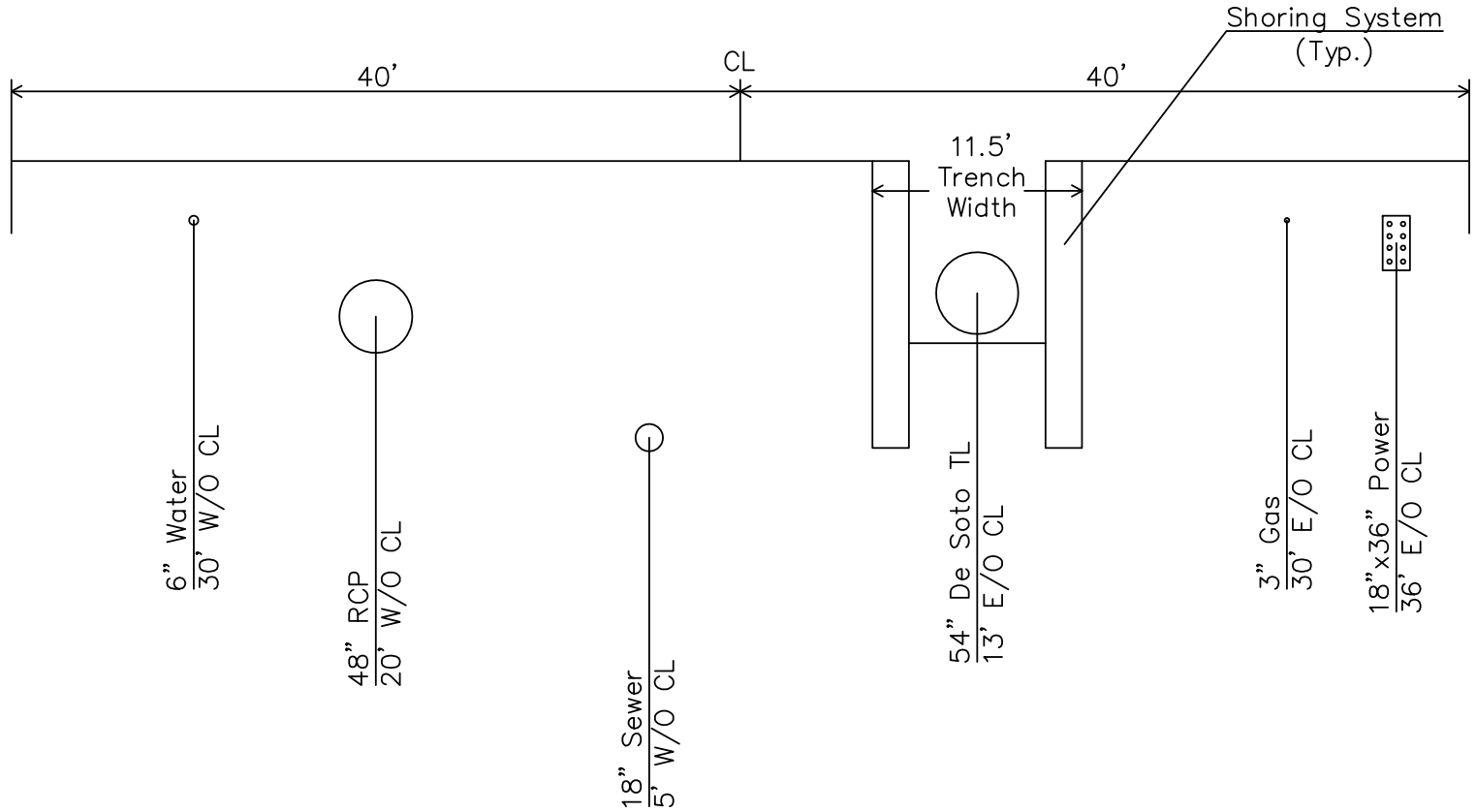
During the tie-in operations, a small portion of the existing pipe would be exposed. That length would be removed to install a typical 45° tie-in piece for the new line connection. WSP and ERDIP have been selected as the proposed pipe materials.

The existing pipe segments that are no longer in service would be bulkheaded, filled with slurry, backfilled, and abandoned in place. Prior to this process, the decommissioned pipe segments would be flushed of water. This would involve construction activities at the tie-in locations (i.e., the intersection of De Soto Avenue/Devonshire Street, the

intersection of De Soto Avenue/Roscoe Boulevard, the intersection of Roscoe Boulevard/Mason Avenue, and the intersection of De Soto Avenue/Victory Boulevard).

Construction Methods

Construction of the proposed project would occur along the existing public right-of-way of Devonshire Street, Mason Avenue, Roscoe Boulevard, De Soto Avenue, and Victory Boulevard using open-trench and pipe-jacking construction methods. Figure 2-2 shows which portions of the project would be installed using open-trench methods and which portions would be installed with pipe jacking.



NOTE: Distances between utility lines (e.g. 5' W/O CL)
and street centerline (CL) vary based on cross section location.

SOURCE: LADWP 2020

FIGURE 2-1

Representative Pipeline Cross Section

De Soto Trunk Line Project

Los Angeles Department of Water & Power

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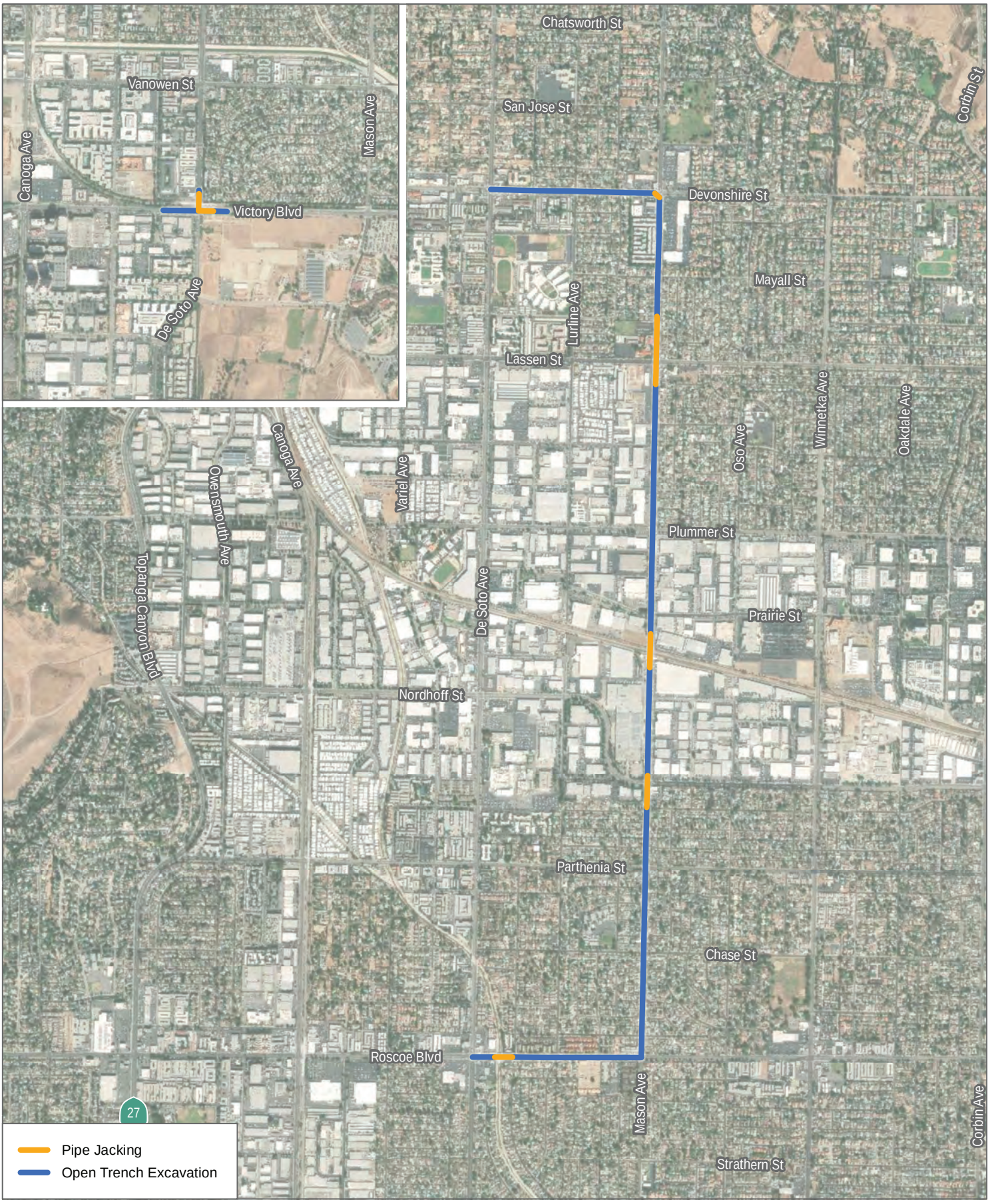

SOURCE: Esri and Digital Globe, Open Street Map 2019

LA DWP Los Angeles Department of Water & Power

0 1,000 2,000 Feet

FIGURE 2-2

Construction Methods

De Soto Trunk Line Project

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The general process for both open-trench and pipe-jacking construction methods consists of utility clearance/mark-out activities, site preparation, excavation, shoring, pipe installation, backfilling, and work area street restoration. Both construction methods would require on-site and off-site staging areas to temporarily store supplies and materials. (Off-site staging areas would generally consist of the De Soto Reservoir laydown area shown on Figure 1-1 and the sidewalks along Devonshire Street, Mason Avenue, Roscoe Boulevard, De Soto Avenue, and Victory Boulevard.) Approximately 300,000 square feet of roadway would be repaved along the entirety of the alignment.

Open-trench construction activities would last for approximately 55 months assuming two crews of approximately 10 workers each. Pipe-jacking activities would last approximately 37 months assuming one crew of approximately 6 workers. Open-trench and pipe-jacking activities could occur simultaneously at different segments of the alignment. As such, the maximum number of workers along the alignment at one time would be 26 workers, when open-trench crews and pipe-jacking crews would be working simultaneously.

Table 2-1. Construction Workers, Vendor Trips, and Equipment Use per Day

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	*Average Daily Vendor Truck Trips*	*Total Haul Truck Trips*	*Equipment Type*	*Quantity*	*Usage Hours*
Open-trench pipe installation	40	28	5,100	Excavator	1	8
				Crane	1	5
				Crane	1	6
				Generator	1	8
				Backhoe	1	8
				Front-end loader	1	8
				Welder	1	8
				Paving equipment	1	8
				Saw	1	8
				Plate compactor	1	8
				Roller	1	8
				Forklift	1	8
				Air compressor	1	8

Table 2-1. Construction Workers, Vendor Trips, and Equipment Use per Day

Construction Phase	One-Way Vehicle Trips			Equipment		
	Average Daily Worker Trips	*Average Daily Vendor Truck Trips*	*Total Haul Truck Trips*	*Equipment Type*	*Quantity*	*Usage Hours*
Pipe jacking	12	18	1,040	*Construction of Jacking and Receiving Pits*		
				Excavator	1	8
				Crane	1	5
				Crane	1	6
				Generator	1	8
				Backhoe	1	8
				Front-end loader	1	8
				Welder	1	8
				Paving equipment	1	8
				Saw	1	8
				Plate compactor	1	8
				Roller	1	8
				Forklift	1	8
				Air compressor	1	8
				Pipe Installation via Jacking		
				Excavator	1	8
				Tunnel-boring machine (electric)	1	8
				Generator	1	8
				Lubrication pump (electric)	1	8
				High-pressure water pump	1	3
				Crane	1	6

Open-Trench Excavation

Open-trench excavation is a construction method typically used to install pipelines and their appurtenances. In general, the process consists of site preparation, excavation and shoring, pipe installation and backfilling, and work site restoration. Construction would occur within the public right-of-way, within an approximately 1,000-foot-long work area. Two-way travel along the affected roadways would be maintained throughout construction. Construction would primarily occur on the east or west side of the street. The maximum length of open trench at any one time would be approximately 100 feet. As described above, open-trench activities would occur for a total of 55 months. The trenches would be barricaded along the perimeter with chain-linked fences and concrete traffic barriers to prevent vehicles and pedestrians from entering the work area. During the open-trench construction processes, approximately 120 cubic yards of excavated material are expected to be removed and hauled off per day. The following is a description of the phases of construction for open-trench excavation.

Site Preparation. Traffic control plans would be prepared in coordination with the City of Los Angeles Department of Transportation (LADOT) to delineate traffic lanes around work areas. The existing pavement along the project alignment would be cut with a concrete/asphalt saw cutter and then removed using equipment such as jackhammers, pavement breakers, excavators, and/or loaders. The pavement would be removed from the project site and recycled, reused as a backfill material, reused as pavement base material, or transported to an appropriate facility for recycling or disposal.

Excavation and Shoring. A trench would be excavated along the alignment using backhoes, excavators, or other types of excavation equipment. Portions of the trench adjacent to utilities may be manually excavated. Excavated soil would be reused as backfill material or hauled off site.

A typical trench would be 11.5 feet wide and 10 feet deep. Where perpendicular substructures must be avoided, trenches may be excavated deeper or shallower, as necessary. As noted above, the work area required for trenching would be approximately 1,000 feet long per work area; however, only 100 feet of trench would be left open at any one time. As the trench/pit is excavated, the walls are typically supported, or shored, with hydraulic jacks or trench boxes. (Trenches greater than 5 feet in depth require shoring to prevent caving or collapse, per the requirements of the California Department of Industrial Relations, Division of Occupational Safety and Health [CAL/OSHA]). Steel or timber sheeting between H-beams (e.g., beam and plate) may also be used for shoring. Other similar shoring methods may be utilized. Utilities not relocated prior to trenching would be supported as excavation and shoring occurs.

If construction occurs in areas with high groundwater, the groundwater would be removed during the excavation of the trenches, usually by pumping it from the ground through dewatering wells that have been drilled along the alignment. The extracted groundwater would be treated for any contaminants, if present, before being discharged to the storm drain system or to the sewer system under Regional Water Quality Control Board (RWQCB) permit requirements.

Pipe Installation and Backfilling. Once the trench has been excavated and shored, pipe laying would commence. Bedding material (crushed rock, sand, or slurry) would be placed and compacted at the bottom of the trench. Pipe segments would then be lowered into the trench and placed on the bedding. The segments would be welded or mechanically connected to one another at the joints. Approximately 18 linear feet of pipe would be installed per day by each construction crew. Assuming two crews would be working at the same time, an average of 36 linear feet of pipe would be installed per day. Prior to backfilling, appurtenant structures would be installed as necessitated by design. After laying the pipe, the trench would be backfilled with crushed aggregate base, crushed miscellaneous base, slurry, or previously excavated materials from the work area.

Work Site Restoration. Any portion of the roadway damaged as a result of construction activities would be repaved and restored in accordance with all applicable City of Los Angeles Department of Public Works standards. Once the pavement has been restored, traffic delineation (restriping) would also be restored.

Construction Equipment. Examples of equipment typically used for open-trench construction are listed below:

- Excavator
- Hauling trucks
- Cooling and cutting water truck
- Crane

- Backhoe
- Front end loader
- Welding equipment
- Welder truck
- Paving equipment
- Dump truck
- Water truck
- Street sweeper
- Service utility truck
- Saw cutting equipment
- Plate compactor
- Pavement roller/compactor
- Forklift
- Trailer
- Blower
- Power generators
- Small tools
- Shoring equipment
- Air compressor

Pipe-Jacking Methods

Pipe jacking, which is a form of tunneling, would be used to reduce traffic disruptions at busy intersections and to extend underneath features along the alignment that would not be suitable for open-trench construction. Pipe jacking would be used at the following intersections and crossings to minimize traffic disruptions and to avoid areas where open trenching would not be feasible. (Also refer to Figure 2-2, which shows these locations.)

- Devonshire Street and Mason Avenue
- Lassen Street and Mason Avenue
- Union Pacific Railroad tracks and Mason Avenue
- Nordhoff Street and Mason Avenue
- Browns Creek Channel crossing at Roscoe Boulevard
- De Soto Avenue and Victory Boulevard (2 jacking locations)

The pipe-jacking process would take less than 6 months at each of the pipe-jacking areas listed above, for a total of approximately 37 months of pipe jacking.

The installation of pipelines using pipe jacking would avoid the continuous surface disruption that would be required for open-trench construction. However, some surface disruption would still occur, since "jacking" and "receiving" pits would be used and would be excavated along the project alignment. Pipe jacking involves a horizontal auger boring machine that is advanced in a tunnel bore to remove material ahead of or inside the jacking pipe. Powerful hydraulic jacks are used to push a steel jacking pipe from a launch (bore) pit to a receiving pit. As the tunneling machine is driven forward, a jacking pipe is added into the

pipe string. The following is a description of the phases of construction for pipe jacking. During the pipe-jacking process, approximately 40 cubic yards of excavated materials are expected to be removed and hauled off per day.

Site Preparation. Traffic control plans would be prepared in coordination with LADOT to delineate traffic lanes around work areas and to address any turn-lane pockets affected by the proposed project at major intersections. In preparation of excavating the jacking and receiving pits, the pavement would first be cut using a concrete/asphalt saw cutter or pavement breaker. As with open-trench excavation, the pavement would be removed from the project site and recycled, reused as a backfill material, reused as pavement base material, or transported to an appropriate facility for recycling or disposal.

Excavation and Shoring. A jacking pit and a receiving pit would generally be used for each jacking location, one at each end of the pipe segment. The distance between the pits would typically range from 250 feet to 1,000 feet, but may be longer or shorter depending on soil or other site conditions.

Jacking pits would be approximately 20 feet wide, 42 feet long, and 35 feet deep. Receiving pits would be approximately 15 feet wide, 40 feet long, and 35 feet deep. The pits would be excavated with backhoes and other excavation equipment. The excavated soil would be hauled to an off-site disposal facility or reused as backfill material. As excavation occurs, the pits would be shored using a beam-and-plate shoring system.

Pipe Installation. After construction and shoring of the pits, a horizontal hydraulic jack would be placed at the bottom of the jacking pit. A steel casing would be lowered into the pit with a crane and placed on the jack. (For pipe jacking along Mason Avenue, the steel casing would measure 72 inches on its inner diameter; for pipe jacking along Roscoe Boulevard, the steel casing would measure 66 inches on its inner diameter; for pipe jacking at the intersection of Victory Boulevard and De Soto Avenue, the steel casing would measure 54 inches on its inner diameter.) A simple cutting shield would be placed in front of the pipe segment to cut through the soil. As the jack pushes the steel casing and cutting shield into the soil, the soil would be removed from within the leading casing with an auger or boring machine, either by hand or on a conveyor. Pipe jacking uses water that is pumped down the drill stem to run the drill head, lubricate the drill pipe, maintain the borehole, and remove bore cuttings. Depending on soil conditions, bentonite would be added to the water to help lubricate the pilot pipe, maintain the stability of the borehole, and keep the hole drilled open. The water and clay would be mixed on site in a mixer attached to or as part of the bore machine. Earth cuttings from the borehole and the water/clay mixture would return to the bore entry pit, where it would be pumped into a receiving tank. Once a casing segment is pushed into the soil, a new segment would be lowered, set in place, and welded to the casing that has been pushed. Installation of the steel casing would be expected to progress at approximately 40 feet per day. Once the casing has been installed, the carrier pipe would be lowered and placed on the jacks, which would push the pipe into the steel casing using casing spacers.

Work Site Restoration. After completion of the pipe installation along the jacking locations, the shoring system would be disassembled as the pits are backfilled, the soil would be compacted, and pavement would be restored. Once the pavement restoration is complete, traffic delineation (restriping) would be restored.

Construction Equipment. The same equipment fleet required for open-trench construction would be required to construct the jacking pits and receiving pits, since those construction activities are similar (see the list of equipment above under "Open-Trench Excavation"). The following additional equipment would generally be required for the pipe-jacking process:

- Excavator
- Dump trunk
- Tunnel boring machine
- Power generators and electrical systems
- Control systems
- Power cables
- Cooling and cutting water truck
- Lubrication pump
- Pipe-jacking frame
- High pressure water pump
- Hauling trucks
- Utility truck
- Crane

Hydrostatic Testing and Pipeline Disinfection

Hydrostatic testing would be conducted periodically throughout construction. Approximately 3,000 linear feet of new pipeline would be tested at a time. Once hydrostatic testing is completed, the new pipelines would be disinfected. Hydrostatic test water and disinfectant water would be discharged to the sewer system or the storm drain system in accordance with SWRCB permit requirements (see Section 2.6). The total amount of water required for these processes over the course of construction would be approximately 5 million gallons (2.5 million gallons for hydrostatic testing and 2.5 million gallons for disinfection).

Construction Schedule

The anticipated construction duration for the project is from 2023 to 2028. Construction would occur between the hours of 7:00 am and 7:00 pm, Monday through Friday, and between 8:00 am and 5:00 pm on Saturdays, if weekend work is necessary. In the event that construction is required to extend beyond these times, extended hours permits would be required. Nighttime and weekend construction, while infrequent, may occur. Specifically, construction activities at major intersections, such as De Soto Avenue and Roscoe Boulevard, may require nighttime and weekend work to avoid peak commute hours. Approval from LADOT would be required for nighttime and/or weekend work. Other situations may arise that require extended work hours, including hydrostatic testing and shutdowns to complete tie-ins. Below is the anticipated construction schedule:

- Fall 2023: Mobilization.
- Fall 2023: Begin construction.

- Fall 2023–Winter 2028: Open trench pipe installation (55 months); pipe jacking (37 months); and hydrostatic testing. These activities may overlap and occur simultaneously during portions of the construction period. This phase would also include utility relocations, which would occur throughout this phase as needed.
- Winter 2028: Commissioning (pipe disinfection, tie-ins to existing trunk lines, slurry fill of abandoned pipe).

2.4 Operations and Maintenance

The proposed replacement pipelines are anticipated to have an operational life of 100 years, and replacement valves are anticipated to have an operational life of 50 years. The pipelines would be underground and would not be visible from the ground level during operation. Several 6-inch air/vacuum valves would be installed along the sidewalks, spaced at various intervals along the alignment. (Air/vacuum valves are installed at local high points along the pipe alignment in order to keep all air out of the pipe. Air/vacuums have dimensions similar to those of a typical fire hydrant and are common sidewalk appurtenances in urban areas.)

Operational activities would be limited to scheduled maintenance and repair. Maintenance activities would be minimal and would be similar to those that occur under existing conditions. Maintenance would include exercising valves and replacing or repairing worn appurtenances to ensure proper performance over the life of the facilities. No permanent workers would be required to operate or maintain the proposed project. Activities associated with long-term operations and maintenance would, therefore, be minimal.

2.5 Best Practices

To reduce traffic and transportation impacts, the construction of the proposed project would be conducted in accordance with the Standard Specifications for Public Works Construction (Greenbook), and traffic control plans designed or approved by LADOT, to allow acceptable levels of service, traffic safety, and emergency access to the site during construction. Equipment necessary for traffic control includes changeable message signs, delineators, arrow boards, and K-Rails. The Traffic Control Plan for the proposed project would be coordinated with LADOT. Other construction practices would include dust control and noise control. Dust control would involve use of a water truck during construction activities that would expose soils. Noise control activities would include installation of temporary sound barrier walls as appropriate to comply with the City of Los Angeles Noise Ordinance.

Proper drainage would prevent stagnant water and flooding within the work area. If excessive runoff water is anticipated due to a construction activity or rainfall, sandbags or other methods would be implemented in accordance with stormwater regulations.

The new pipeline design would include seismic resiliency analysis for all applicable project components. All phases of the project would be required to conform to safety regulations, including those from CAL/OSHA.

2.6 Approvals Required for the 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.

LADWP is the lead agency for the proposed project pursuant to CEQA Guidelines Section 15367. The proposed project would require the following discretionary approvals from LADWP:

- Adoption of the MND by the City of Los Angeles Board of Water and Power Commissioners and approval of the project.

Approvals from other regulatory agencies or entities may also be required as follows:

- **U.S. Army Corps of Engineers:** Section 408 Permit
- **California Department of Industrial Relations, Division of Occupational Safety and Health, Mining and Tunneling Unit:**
  - Permit for construction of trenches or excavations 5 feet or deeper that will be entered by construction workers
  - Tunnel classifications for construction operations covered under Section 8400 through 8469, Tunnel Safety Orders, of the California Code of Regulations
- **State Water Resources Control Board:**
  - Notice of Intent to comply with the General Construction Activity National Pollutant Discharge Elimination System (NPDES) Permit (Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ, NPDES No. CAS000002)
- **Los Angeles Regional Water Quality Control Board:**
  - Notice of Intent to comply with the Waste Discharge Requirements for the Discharge of Groundwater from Construction and Project Dewatering to Surface Waters in the Coastal Watersheds of Los Angeles and Ventura Counties (Los Angeles RWQCB Order No. Order No. R4-2018-0125)
- **Los Angeles County Department of Public Works Flood Control:** Utility Crossing Permit for access and modification to the Browns Creek Channel and Kelvin Channel
- **Railway easement:** Encroachment permit for pipe jacking under the Union Pacific Railroad
- **Los Angeles County Department of Public Works Easement:** Easement for pipe jacking under the Browns Creek Channel and Kelvin Channel
- **City of Los Angeles:** Coordination with the Bureau of Street Services, Bureau of Engineering, Department of Transportation, Bureau of Sanitation, and Police Department

3 INITIAL STUDY CHECKLIST

The following discussion of potential environmental effects was completed in accordance with Section 15063(d)(3) of the CEQA Guidelines (2018)[1] to determine if the proposed project may have a significant effect on the environment.

1. Project title:

De Soto Trunk Line Project

2. Lead agency name and address:

Los Angeles Department of Water and Power
Environmental Affairs Division
111 North Hope Street, Room 1044
Los Angeles, California 90012

3. Contact person and phone number:

Christopher Lopez
Environmental Planning and Assessment
Los Angeles Department of Water and Power
(213) 367-3509

4. Project location:

Devonshire Street (from De Soto Avenue to Mason Avenue and at the intersection of Victory Boulevard); Mason Avenue (from Devonshire Street to Roscoe Boulevard); Roscoe Boulevard (from Mason Avenue to De Soto Avenue) totaling approximately 3.8 miles
Los Angeles, California

5. Project sponsor's name and address:

Los Angeles Department of Water and Power
111 North Hope Street
Los Angeles, California 90012

6. City Council Districts:

District 3 and District 12

[1] As explained in the Preface for this IS/MND, the 2018 CEQA Guidelines are used instead of the updated, 2019 version because this document was originally released for public review in 2018, prior to the adoption of the updated guidelines.

7. Neighborhood Council Districts:

Chatsworth Neighborhood Council, Canoga Park Neighborhood Council, Winnetka Neighborhood Council, and Woodland Hills-Warner Center Neighborhood Council

8. General plan designation:

- De Soto Avenue, Roscoe Boulevard, and Victory Boulevard are designated as "Boulevard II," "Boulevard II Modified," and "Boulevard I Modified" roadways in the City of Los Angeles' circulation maps. Mason Avenue is categorized as an "Avenue II" roadway, and Devonshire Street is categorized as an "Avenue I" roadway in the City's circulation maps. De Soto Avenue, Roscoe Boulevard, Victory Boulevard, and Devonshire Street are designated as Major Highways in the County of Los Angeles General Plan. Mason Avenue is categorized as a Secondary Highway in the County General Plan.
- City of Los Angeles General Plan designations for parcels fronting the portions of Devonshire Street, Mason Avenue, Roscoe Boulevard, De Soto Avenue, and Victory Boulevard that would be affected by the project: Very Low I Residential, Community Commercial, Low Medium I Residential, Very Low II Residential, Low I Residential, Neighborhood Office Commercial, Low Medium II Residential, Low II Residential, Limited Manufacturing, Light Manufacturing, Highway Oriented Commercial, Low Residential, Medium Residential, Open Space, Regional Center Commercial
- City of Los Angeles General Plan designation for the potential construction staging area at the De Soto Reservoir property: Very Low II Residential

9. Zoning:

- City of Los Angeles zoning for parcels fronting the portions of Devonshire Street, Mason Avenue, Roscoe Boulevard, De Soto Avenue, and Victory Boulevard that would be affected by the project: Agricultural, Residential Estate, Parking, Commercial, Multiple Family Residential, Industrial, Open Space, Warner Center Specific Plan
- City of Los Angeles General Plan designation for the potential construction staging area at the De Soto Reservoir property: Agricultural

10. Description of project:

Refer to Chapter 2.0 of this IS/MND

11. Surrounding land uses and setting:

Refer to Section 1.4 of this IS/MND

12. Other public agencies whose approval is required:

- U.S. Army Corps of Engineers
- California Department of Industrial Relations, Division of Occupational Safety and Health, Mining and Tunneling Unit
- State Water Resources Control Board
- Los Angeles Regional Water Quality Control Board
- Los Angeles County Department of Public Works
- Union Pacific Railroad
- City of Los Angeles

13. 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, has consultation begun?

To date, two California Native American tribes have requested consultation. Consultation with these tribes has begun and is currently ongoing. See Section 3.17 for details.

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 21083.3.2.) 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.

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 checklists on the following pages.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ 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 and Traffic	☐ Tribal Cultural Resources	☐ Utilities and Service Systems
☐ Mandatory Findings of Significance		

DETERMINATION

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.

Nadia J Parker — 3/18/20

Signature — 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

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☒
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. The proposed project would be located in a developed urban area surrounded by single- and multi-family residences, commercial uses, and various public facilities (e.g., schools). No scenic vistas exist within the project site or within the vicinity of the project that could be adversely affected by the project. Furthermore, operation of the proposed project would occur passively belowground; therefore, the construction and operation of the proposed project would not have any effect on scenic vistas. No impacts would occur.

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 nearest officially designated State Scenic Highway is a portion of State Highway 2 that extends through the San Gabriel Mountains, beginning just north of the City of La Cañada Flintridge (Caltrans 2011). The portion of State Highway 2 that is officially designated as a State Scenic Highway is located approximately 22 miles east of the project alignment. Due to this distance, the project alignment is not within the viewshed of this State Scenic Highway. Therefore, no impact on scenic resources within a state scenic highway would occur as a result of the proposed project.

c) Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

No Impact. The proposed project would be constructed underground and would not be visible once completed. Minor appurtenant facilities such as maintenance/access holes, valves, and cabinets would be visible above ground. However, these structures would be low-profile and would not substantially contrast with the surrounding urban built-up environment. During the construction phase, the visual character of the area would be temporarily affected. However, once installed in the street, the new trunk line segments would have no effect on the visual character or quality of the area.

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

Less Than Significant Impact. The project alignment extends along major roadways that are surrounded with a variety of urban uses, including residences, businesses, and public facilities. As such, external and internal night and day illumination is already in place within the project area. The proposed project would involve the construction and operation of underground water pipelines. The construction phase may involve standard traffic control and safety measures, such as barriers, reflective signs, and flashing warnings that would be implemented as necessary. These traffic control and safety measures are common in urban environments and they would not introduce a new source of light or glare that would adversely affect views in the project area. Furthermore, a majority of construction would take place during the day, so traffic control measures would not typically affect nighttime views. Construction activities at major intersections may require night work in order to avoid peak commute hours, which would require localized construction lighting. Other situations may arise that require extended work hours and nighttime lighting, including hydrostatic testing and shutdowns to complete tie-ins. However, night work would be confined to these situations only and would be temporary. Once construction is complete, the replaced trunk line segments would be entirely underground with the exception of minor appurtenant facilities such as maintenance/access holes, valves, and cabinets, none of which would include light fixtures. Any minor light and glare-related impacts would therefore be confined to the construction phase and would be less than significant.

References

Caltrans (California Department of Transportation). 2011. California Scenic Highway Mapping System. Last updated September 7, 2011. Accessed August 26, 2015. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm.

3.2 Agriculture and Forestry Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 and surrounding areas are characterized by features typical of an urban landscape. As shown on the Los Angeles County Important Farmland map, the project area does not include any sites mapped by the Farmland Mapping and Monitoring Program as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. However, the improvements at the intersection of De Soto Avenue and Victory Boulevard would occur just to the northwest of Pierce College, a community college with an agricultural program. Portions of the campus are designated as Farmland by the state (FMMP 2019). However, the activities at the intersection of De Soto Avenue and Victory Boulevard would not occur on the Pierce College campus. As such, the nearby Farmland would not be affected by the project such that it would be converted to a non-agricultural use.

Implementation of the proposed project would not involve changes that could result in conversion of farmland to non-agricultural use, as the project involves replacing pipelines within paved roadways. Therefore, no impact would occur.

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

No Impact. Several properties along Mason Avenue are zoned A2 (Agricultural Zone) (City of Los Angeles 2019). However, the proposed project would occur within the roadway and would not change the land uses on any surrounding parcels. Construction of the proposed project could involve temporary disturbances, such as noise, dust, and changes in traffic patterns, which could affect surrounding properties. However, the nearby A2-zoned properties are developed with church facilities, surface parking, and a grass lawn. No major, active agricultural operations exist along the project alignment. As such, while agriculturally zoned areas exist within the project area, the proposed project would not conflict with this zoning. As shown on the Los Angeles County Williamson Act Fiscal Year 2015/2016 map, no areas that are under a Williamson Act contract exist in the project area or in the vicinity of the project area (California Department of Conservation 2016). For these reasons, implementation of the proposed project would not conflict with existing zoning for agricultural use, nor would it conflict with a Williamson Act contract, as none exist in the vicinity. No impact to Williamson Act contract lands or land zoned for agricultural uses 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 proposed project is located within a roadway that is surrounded with residential, commercial, and public facilities land uses. No forest land, timberland, or Timberland Production areas or areas zoned for those purposes are located within or adjacent to the project area. Therefore, the proposed project would not conflict with existing zoning for forest land, timberland, or Timberland Production areas, or result in the loss or conversion of forest lands to non-forest uses, as none exist. The project would be implemented within an existing roadway that is surrounded by fully developed areas. No impact to forest land or timberland would occur.

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

No Impact. As characterized above, no forest land is located within the project area or in the vicinity of the project area, as the area is urbanized and developed with commercial, residential, and public facilities uses. 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, no farmland or forest land is located in the project area or within the vicinity of the project area, as the area is urbanized and developed with commercial, residential, and public facilities uses. No farmland or forest land would be converted or otherwise affected by the proposed project, and no impact would occur.

References

California Department of Conservation. 2016. *Los Angeles County Williamson Act FY 2015/2016*. [map]. 1:120,000. Sacramento, CA: California Department of Conservation, Division of Land Resource Protection. 2016. Accessed August 28, 2019. https://www.conservation.ca.gov/dlrp/wa/Pages/stats_reports.aspx.

City of Los Angeles. 2019. Zimas "Generalized Zoning." Web Map Application. Accessed July 5, 2017. http://zimas.lacity.org/.

FMMP (Farmland Mapping and Monitoring Program). 2019. California Important Farmland Finder. Web Map Application. Accessed August 28, 2019. https://maps.conservation.ca.gov/DLRP/CIFF/.

3.3 Air Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☒	☐
c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☒	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
e) Create objectionable odors 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 proposed project site is located within the South Coast Air Basin (SCAB) under the jurisdiction of the South Coast Air Quality Management District (SCAQMD), which is the local agency responsible for administration and enforcement of air quality regulations for the area. The SCAQMD has established criteria for determining consistency with its Air Quality Management Plan (AQMP), currently the 2016 AQMP, in Chapter 12, Sections 12.2 and 12.3, of the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993). The criteria are as follows:

- **Consistency Criterion No. 1:** 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 specified in the AQMP.
- **Consistency Criterion No. 2:** Whether the project would exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Relative to Consistency Criterion No. 1, a detailed air quality analysis was prepared for the proposed project that evaluated the potential for adverse impacts to air quality due to construction and operational emissions (see Appendix A). Impacts were evaluated for their significance based on the SCAQMD mass daily criteria air pollutant thresholds (SCAQMD 1993, as revised in April 2019). Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. 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 are as follows: volatile organic compounds (VOCs) (also referred to as reactive organic gases) and oxides of nitrogen (NOx), which are important because they are precursors to O_3, as well as CO, sulfur oxides (SOx), PM_{10}, and $PM_{2.5}$. Section 3.3(b) evaluates the proposed project's potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation. As substantiated in Section 3.3(b), the proposed project would not result in an exceedance of SCAQMD thresholds during construction for any criteria air pollutant. Therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations and would not conflict with Consistency Criterion No. 1 of the SCAQMD CEQA Air Quality Handbook.

The second criterion regarding the project's potential to exceed the assumptions in the AQMP is primarily assessed by determining whether the project is consistent with existing land use designations and the project's potential to generate population growth. While striving to achieve the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) through a variety of air quality control measures, the 2016 AQMP also accommodates planned growth in the SCAB. Proposed projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors (e.g., population, employment) 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 proposed project would replace existing water conveyance pipelines. After construction is complete, the pipeline would be underground within existing roadways and therefore would not change, affect, or conflict with the existing zoning or land use designations in the project area that were used to develop the assumptions in the 2016 AQMP. Additionally, the proposed project would not directly or indirectly promote population growth in the region (see Section 3.13 of this document for details). Therefore, the proposed project would not exceed the assumptions of the 2016 AQMP. Accordingly, the proposed project would meet Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook.

For the reasons described above, the proposed project would not conflict with or obstruct implementation of the AQMP. Therefore, impacts would be less than significant.

b) Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. Construction of the proposed project 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, vendor trucks, and worker vehicle trips). Criteria air pollutant emissions associated with temporary pipeline construction activities were quantified using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 (CAPCOA 2017). Construction emissions were calculated for the estimated worst-case day over the construction period associated with each phase and reported as the maximum daily emissions estimated during each year of construction (2023 through 2028). Construction schedule assumptions, including phase type, duration, and sequencing, were based on information provided by LADWP and are intended to represent a reasonable scenario based on the best information available. Default values provided in CalEEMod were used where detailed proposed project information was not available.

Regarding NAAQS and CAAQS attainment status,[2] the SCAB is designated as a nonattainment area for federal and state O_3 standards and federal and state $PM_{2.5}$ standards (CARB 2016; EPA 2016a). The SCAB is designated as a nonattainment area for state PM_{10} standards; however, it is designated as an attainment area for federal PM_{10} standards. The SCAB is designated as an attainment area for federal and state CO standards, federal and state NO_2

[2] An area is designated as in attainment when it is in compliance with the NAAQS and/or the CAAQS. These standards are set by the Environmental Protection Agency and California Air Resources Board (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.

standards, and state SO_2 standards. Although the SCAB has been designated as nonattainment for the federal rolling 3-month average lead standard, it is designated attainment for the state lead standard.[3]

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 April 2019, which set forth quantitative emissions significance thresholds below which a project would not have a significant impact on ambient air quality under project-level and cumulative conditions (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 $PM_{2.5}$.

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. The project would be required to comply with SCAQMD Rule 403 to control dust emissions during any dust-generating activities. 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. The application of asphalt pavement would also produce VOC emissions; however, LADWP or its construction contractor would be required to procure asphalt from a supplier in compliance with the requirements of SCAQMD's Rules 1108 (Cutback Asphalt) and/or 1108.1 (Emulsified Asphalt). LADWP or its construction contractor would also be required to comply with SCAQMD's Rule 1166 (VOC Emissions from Decontamination of Soil) if impacted soil is encountered. The project may also be required to comply with SCAQMD Rule 1403 (Asbestos Emissions) in the event that any asbestos containing materials are disturbed during construction. Rule 1403 establishes survey, notification, and work practice requirements to prevent asbestos emissions during construction activities.

Table 3.3-1 presents the estimated maximum daily construction emissions generated during construction of the proposed project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix A.

[3] 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.

Table 3.3-1. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

Year	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	pounds per day					
2023	2.59	23.06	24.14	0.06	2.61	1.32
2024	2.44	21.49	23.91	0.06	1.72	1.02
2025	4.52	39.20	47.66	0.11	3.21	1.85
2026	4.51	39.15	47.55	0.11	2.66	1.71
2027	4.50	39.10	47.46	0.11	2.66	1.71
2028	4.87	42.70	52.43	0.12	3.71	2.07
Maximum Daily Emissions	4.87	42.70	52.43	0.12	3.71	2.07
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No

Notes: VOC = volatile organic compound; NOx = oxides of nitrogen; CO = carbon monoxide; SOx = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
The values shown are the maximum summer or winter daily emissions results from CalEEMod. These emissions reflect compliance with SCAQMD Rule 403 (Fugitive Dust) and Rule 1113 (Architectural Coatings).

As shown in Table 3.3-1, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years. Construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions. As such, impacts related to construction would be less than significant.

The proposed replacement pipeline segments are anticipated to have an operational life of 100 years, and replacement valves are anticipated to have an operational life of 50 years. The pipelines would be underground and would not be visible from ground level during operation. Several 6-inch air/vacuum valves would be installed along the sidewalks, spaced at various intervals along the alignment. Operational activities would be limited to scheduled maintenance and repair of the pipeline. Maintenance activities would be minimal and would be similar to those that occur under existing conditions. Maintenance includes exercising valves and replacing or repairing worn appurtenances to ensure proper performance over the life of the facilities. No permanent workers would be required to operate or maintain the proposed project. Activities associated with long-term operations and maintenance were not quantified as they would not increase over current conditions. Therefore, there would not be any new emissions associated with operation of the proposed project. No operational impacts would occur, and construction-related impacts would be less than significant.

c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

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 relevant in the determination of whether a proposed project's individual emissions would have a cumulatively significant impact on air quality.

In considering cumulative impacts from the proposed project, the analysis must specifically evaluate a proposed project's contribution to the cumulative increase in pollutants for which the SCAB is designated as nonattainment for the CAAQS and NAAQS. If a proposed project's emissions would exceed the SCAQMD significance thresholds, it would be considered to have a cumulatively considerable contribution to nonattainment status in the SCAB. If a proposed project does not exceed thresholds and is determined to have less than significant project-specific impacts, it may still contribute to a significant cumulative impact on air quality. The basis for analyzing the proposed project's cumulatively considerable contribution is if the proposed project's contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

As discussed 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 $PM_{2.5}$. The nonattainment status 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. Construction of the proposed 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 3.3-1, project-generated construction emissions would not exceed the SCAQMD emission-based significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, or $PM_{2.5}$. During operations, the project would not generate an increase in emissions. Because the proposed project's emissions would not exceed the SCAQMD significance thresholds, it would not be expected to have a cumulatively considerable contribution to nonattainment status in the SCAB.

However, cumulative localized impacts could still potentially occur if project construction were to occur concurrently with another off-site project. Construction schedules for potential future projects near the proposed project site are currently unknown; therefore, potential construction impacts associated with two or more simultaneous proposed projects would be considered speculative.[4] However, future proposed projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation if the proposed project would exceed SCAQMD thresholds. 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.

[4] 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.

For the reasons discussed above, the proposed project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants. Impacts would be less than significant.

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

Less Than Significant Impact. 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 proposed project alignment is adjacent to residential buildings, as close as 20 feet to construction activities.

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) 6. As mentioned previously, the closest sensitive receptors are residences located 20 feet from proposed construction activities. The shortest receptor distance available in the SCAQMD LST Methodology is 25 meters (82 feet) and is what was conservatively assumed for this analysis. A one-acre site was used as it is the most conservative threshold.

Construction activities associated with the proposed project would result in temporary sources of on-site fugitive dust and construction equipment emissions. Off-site emissions from vendor trucks, haul trucks, and worker vehicle trips are not included in the LST analysis because they would occur off site. The maximum daily on-site construction emissions generated during construction of the proposed project is presented in Table 3.3-2, and compared to the SCAQMD localized significance criteria for SRA 6 to determine whether project-generated on-site construction emissions would result in potential LST impacts.

Table 3.3-2. Construction Localized Significance Thresholds Analysis

Maximum On-site Emissions	NO_2	CO	PM_{10}	$PM_{2.5}$
	pounds per day			
Construction Emissions	41.35	50.52	1.62	1.52
SCAQMD LST	*103*	*426*	*4*	*3*
LST Exceeded?	No	No	No	No

Source: SCAQMD 2009.
See Appendix A for detailed results.
Notes: Localized significance thresholds are shown for a 1-acre proposed project site corresponding to a distance to a sensitive receptor of 25 meters. These estimates reflect control of fugitive dust required by SCAQMD Rule 403.

As shown in Table 3.3-2, construction activities would not generate emissions in excess of site-specific LSTs; therefore, site-specific impacts during construction of the proposed project would be less than significant. In addition, diesel equipment would also be subject to the California Air Resources Board (CARB) air toxic control measures for in-use off-road diesel fleets, which would minimize exhaust particulate matter (DPM) emissions.

Health Impacts of Toxic Air Contaminants

In addition to impacts from criteria pollutants, proposed project impacts may include emissions of pollutants identified by the state and federal government as toxic air contaminants (TACs) or hazardous air pollutants. 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. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and aimed at TACs that are a problem in California. The state has formally identified more than 200 substances as TACs, including the federal hazardous air pollutants, and is adopting appropriate control measures for sources of these TACs. TACs that would potentially be emitted during construction activities associated with the proposed project would be diesel particulate matter. The following measures are required by state law to reduce DPM emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, Section 2449), the purpose of which is to reduce DPM and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, Section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading must be limited to 5 minutes; electric auxiliary power units must be used whenever possible.

The greatest potential for TAC emissions during construction would be DPM emissions from heavy equipment operations and heavy-duty trucks during construction of the proposed project and the associated health impacts to sensitive receptors. The closest sensitive receptors would be residents located along the alignment. As shown in Table 3.3-2, maximum daily PM_{10} or $PM_{2.5}$ emissions (which are representative of DPM) that are generated by construction equipment and hauling soil, combined with fugitive dust generated by equipment operation and vehicle travel, would be well below the SCAQMD significance thresholds. Moreover, construction of the proposed project would last no longer than approximately 1 week in a particular location (for open trench) or approximately 6 months in one location (for pipe jacking), after which the construction activities would move to the next location. The project would also not emit any new TAC emissions during operation. Therefore, impacts related to TACs would be less than significant.

Health Impacts of Carbon Monoxide

Projects contributing to adverse traffic impacts may result in the formation of CO hotspots. To verify that the proposed project would not cause or contribute to a violation of CO standards, a screening evaluation of the potential for CO hotspots was conducted. The traffic impact assessment conducted for this project (see Section

3.16) evaluates whether there would be a decrease in the level of service (LOS) (i.e., increased congestion) at the intersections affected by the proposed project during construction.

The potential for CO hotspots is evaluated in this document using the results of the traffic impact assessment presented in Section 3.16. The California Department of Transportation Institute of Transportation Studies' *Transportation Proposed Project-Level Carbon Monoxide Protocol* (CO Protocol; Caltrans 2010) is used in this CO hotspots evaluation. For projects located within an area designated as "attainment" or "unclassified" under the CAAQS or NAAQS, the CO Protocol identifies screening criteria for consideration of CO hotspots. As described above, the SCAB is designated as an attainment area for federal and state CO standards. As such, the screening criteria can be used.

The first screening criteria focuses on projects that are likely to worsen air quality, which would occur if: (a) a project significantly increases the percentage of vehicles operating in cold start mode (by more than 2%), (b) a project significantly increases traffic volumes (by more than 5%), and/or (c) a project worsens traffic flow. In addition to consideration of decreased air quality, CO hotspots are also typically evaluated when (1) the LOS of an intersection or roadway decreases to LOS E or worse; (2) signalization and/or channelization is added to an intersection; and (3) sensitive receptors such as residences, schools, and hospitals are located in the vicinity of the affected intersection or roadway segment.

The proposed project's traffic impact assessment evaluated 12 intersections. As determined by the traffic impact assessment using the Intersection Capacity Utilization method, the following intersections under the Cumulative Year (2026) would operate at LOS E or worse during the AM and PM peak hours:

- Mason Avenue/Parthenia Street (LOS E in AM)
- De Soto Avenue/Victory Boulevard (LOS E in AM and LOS E in PM)

The screening evaluation presents LOS with project improvements (mitigation), whether the recommended improvements (mitigation measures) are feasible, and whether a quantitative CO hotspots analysis may be required. According to the CO Protocol, there is a cap on the number of intersections that need to be analyzed for any one project. For a single project with multiple intersections, only the three intersections representing the worst LOS ratings, and, to the extent they are different intersections, the three intersections representing the highest traffic volumes, need be analyzed. For each intersection that fails a screening test as described in the protocol, an additional intersection should be analyzed (Caltrans 2010).

Based on the CO hotspot screening evaluation (see Attachment 3 of Appendix A), both of the above intersections (Mason Avenue/Parthenia Street and De Soto Avenue/Victory Boulevard) were evaluated for CO hotspots. The potential impacts on local CO levels were assessed at these intersections with the Caltrans CL4 interface based on the California LINE Source Dispersion Model (CALINE4), which allows microscale CO concentrations to be estimated along each roadway corridor or near intersections (Caltrans 1998a).

The emissions factor used in this model represents the weighted average emissions rate of the local South Coast Air Basin vehicle fleet expressed in grams per mile per vehicle. Consistent with the traffic impact analysis, emissions factors for 2026 were used for the analysis. Emissions factors for 2026 were predicted by EMFAC2017 based on a 5-mile-per-hour (mph) average speed for all of the intersections for approach and departure segments. The hourly traffic volume anticipated to travel on each link, in units of vehicles per hour, was based on the traffic report. Modeling assumptions are outlined in Appendix A.

Four receptor locations at each intersection were modeled to determine CO ambient concentrations. A receptor was assumed on the sidewalk at each corner of the modeled intersections, for a total of four receptors adjacent to the intersection, to represent the future possibility of extended outdoor exposure. CO concentrations were modeled at these locations to assess the maximum potential CO exposure that could occur in 2026. A receptor height of 5.9 feet (1.8 meters) was used in accordance with Caltrans recommendations for all receptor locations (Caltrans 1998b).

The SCAQMD provides projected future concentrations of CO emissions to assist with CO Hotspots Analysis. The projected future 1-hour CO background concentration of 6.6 parts per million (ppm) for 2020 for the Reseda monitoring station (which is the closest air quality monitoring station to the project area) was assumed in the CALINE4 model for 2020 (SCAQMD 2002a). The maximum CO concentration measured at the Reseda monitoring station over the last 3 years was 3.4 ppm, which was measured in 2018; as such, the SCAQMD projected 1-hour CO ambient concentration of 6.6 ppm is a conservative assumption. This 8-hour average CO concentration was added to the SCAQMD projected 8-hour CO ambient concentration of 5.5 ppm for 2020 from the Reseda monitoring station to compare to the CAAQS (SCAQMD 2002b).

The results of the model are shown in Table 3.3-3, CALINE4 Predicted Carbon Monoxide Concentrations. Model input and output data are provided in Attachment 3 of Appendix A.

Table 3.3-3. CALINE4 Predicted Carbon Monoxide Concentrations

Intersection	Maximum Modeled Impact (ppm)	
	1-hour	*8-hour*
Mason Avenue/Parthenia Street (AM)	7.2	5.92
De Soto Avenue/Victory Boulevard (AM)	7.4	6.06

Source: Caltrans 1998a (CALINE4).
Notes: CO = carbon monoxide; ppm = parts per million.

As shown in Table 3.3-3, the maximum CO concentration predicted for the 1-hour averaging period at the studied intersections would be 7.4 ppm, which is below the 1-hour CO CAAQS of 20 ppm (CARB 2016). The maximum predicted 8-hour CO concentration of 6.06 ppm at the studied intersections would be below the 8-hour CO CAAQS of 9.0 ppm (CARB 2016). Neither the 1-hour nor 8-hour CAAQS would be equaled or exceeded at any of the intersections studied. Accordingly, the project would not cause or contribute to violations of the CAAQS, and would not result in exposure of sensitive receptors to localized high

concentrations of CO. As such, impacts would be less than significant to sensitive receptors with regard to potential CO hotspots resulting from project contribution to cumulative traffic-related air quality impacts.

Health Impacts of Other Criteria Air Pollutants

Emissions from construction and operation of the proposed project would not exceed the SCAQMD thresholds for criteria air pollutants (VOC, CO, SO_x, NO_x, $PM_{10,}$ or $PM_{2.5}$). VOC emissions would be associated with motor vehicles, construction equipment, and architectural coatings; however, proposed project-generated VOC emissions would not result in the exceedances of the SCAQMD thresholds. Generally, the VOCs in architectural coatings are of relatively low toxicity. Additionally, SCAQMD Rule 1113 restricts the VOC content of coatings for construction application. LADWP and/or its construction contractor would be required to comply with SCAQMD Rule 1113.

VOCs and NO_x are precursors to O_3, for which the SCAB is designated as nonattainment under the NAAQS and CAAQS. Health effects from O_3 are generally associated with reduced lung function. The contribution of VOCs 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 from the source location, allowing time for the photochemical reactions to occur. The potential for a project to exacerbate O_3 concentrations also depends on the time of year that the precursor emissions would occur. Exceedances of O_3 standards tend to occur between April and October, when solar radiation is highest. The effects of a single project's emissions of O_3 precursors is speculative due to the lack of quantitative methods to assess this impact. Nonetheless, the VOC and NO_x emissions associated with proposed project construction could minimally contribute to regional O_3 concentrations and associated health impacts. However, as emissions thresholds were not exceeded for VOC and NO_x, health effects would be considered less than significant.

The SCAB is designated as nonattainment for PM_{10} under the CAAQS and nonattainment for $PM_{2.5}$ under the NAAQS and CAAQS. Particulate matter contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing (EPA 2016b). However, construction of the proposed project would also not exceed SCAQMD thresholds for PM_{10} or $PM_{2.5}$. As such, the project would not contribute to exceedances of the NAAQS and CAAQS for particulate matter, nor would it obstruct the SCAB from coming into attainment for these pollutants. The proposed project would also not result in substantial DPM emissions during construction, and therefore, would not result in significant health effects related to DPM exposure. Additionally, the proposed project would be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction, health impacts would be considered less than significant.

Construction of the proposed project would not contribute to exceedances of the NAAQS and CAAQS for NO_2. Health impacts that result from NO_2 and NO_x include respiratory irritation, which could be experienced by nearby receptors during the periods of heaviest use of off-road construction equipment. However, proposed project construction would be relatively short term, and off-road construction equipment would be operating at various portions of the alignment and would not be concentrated in one portion of the site at any one time. In addition, existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards. Construction of the proposed project would not require use of any stationary sources that would create substantial, localized NO_x impacts. Therefore, potential health impacts associated with NO_2 and NO_x would be considered less than significant.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The potential for CO hotspots during construction is discussed above and impacts were determined to be less than significant. Thus, the proposed project's CO emissions would not contribute to significant health effects associated with this pollutant.

In summary, the proposed project would not result in a potentially significant contribution to regional concentrations of non-attainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Therefore, the potential health impacts associated with criteria air pollutants are considered less than significant.

e) Would the project create objectionable odors affecting a substantial number of people?

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

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the proposed project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment, architectural coatings, and asphalt pavement application. Such odors would disperse rapidly from the proposed project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, 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). The proposed project would not create any new sources of odor during operation. Therefore, proposed project operations would result in an odor impact that is less than significant.

References

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3.4 Biological Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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?	☐	☐	☐	☒

This section is based on a Biological Technical Report prepared by Dudek for the proposed project (see Appendix B), which analyzed the proposed project alignment and potential staging area (project site), as well as a 500-foot buffer surrounding the project site. The project site and buffer are called the "action area" for the purposes of the biological resources analysis.

The proposed project is located within a heavily urbanized area dominated by residential, commercial, and industrial development. Vegetation cover within the action area is predominantly composed of ornamental plantings and landscaping, with minimal native vegetation remaining. The project alignment crosses the Union Pacific Railroad tracks, the LA Metro Orange Line Busway, and Browns Creek Channel. Browns Creek Channel is a concrete-lined channel that is maintained by the Los Angeles County Flood Control District where it crosses the project site.

The LADWP De Soto Reservoir is located approximately 15 feet east of the potential staging area north of the project alignment, and is separated from the potential staging area by an existing access road. De Soto Reservoir is a covered, concrete-lined, drinking supply reservoir which is disconnected from and independent of downstream natural waters such as streams and creeks. As such, the reservoir neither intercepts waters of the United States or waters of the state, nor does it convey flows to any downstream waters.

The nearest open space areas to the proposed project are associated with the Santa Susana Mountains, located north and west of the action area. The Santa Susana Pass State Historic Park is located approximately 2 miles west of the project site, and Stoney Point Park is located approximately 0.7 miles west of the proposed staging area for the project site. The Chatsworth Reservoir Nature Preserve is located within the foothills of the Simi Hills approximately 1.1 miles west of the project alignment.

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?

No Impact. Developed land dominated by residential and commercial development (including paved roadways) occurs throughout the action area. These areas support limited natural ecological processes, native vegetation, or habitat for wildlife species. The project site is surrounded by dense development on all sides, lacking habitat to support special-status wildlife species. The only vegetation present within the project site is limited to isolated, ruderal non-native grassland habitat present within the potential staging area location. This habitat is too compacted and routinely disturbed to provide suitable habitat to support special-status wildlife species. Thus, special-status wildlife species have a low or no potential to occur within the project site. As such, no impacts to special-status species are anticipated.

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. The project site does not support any sensitive vegetation communities. The majority of the proposed project alignment occurs within paved City streets, and the potential staging area is dominated by compacted and routinely disturbed non-native grassland, neither of which is recognized as a sensitive vegetation community. As such, implementation of the proposed project would not result in temporary or permanent direct impacts to sensitive vegetation communities.

The project site does not support any sensitive vegetation communities; thus, indirect impacts to sensitive vegetation communities are not anticipated to occur during proposed project activities. The proposed action area is located within an urban setting dominated by dense residential and commercial development and ornamental landscaping. The only native California Department of Fish and Wildlife ranked vegetation community within the proposed action area is California buckwheat scrub, which occurs approximately 30 feet north of the potential staging area. However, California buckwheat scrub is not considered a sensitive vegetation community.

Other vegetation communities and land covers identified within the action area are composed of disturbed habitats including compacted and routinely disturbed non-native grasslands, dense stands of upland mustard (semi-natural stands), concrete channels (which would not be impacted), disturbed habitat, ornamental plantings, and developed areas. As such, short-term and long-term indirect impacts to sensitive vegetation communities are not anticipated to occur. No impacts would occur.

c) Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. One concrete-lined channel, Browns Creek Channel (maintained by the Los Angeles County Flood Control District) occurs within the action area. The project is proposed to cross Browns Creek Channel east of the intersection of Roscoe Boulevard and De Soto Avenue. Browns Creek Channel is composed of reinforced cement concrete in this area and does not support vegetation. Pipe jacking would be used where the project alignment crosses underneath Browns Creek Channel; thus, the channel is not anticipated to be impacted by the proposed project. As such, no impacts would occur to protected wetlands.

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 proposed project site occurs within an urban setting and would neither interfere with or remove access to established native resident or migratory wildlife corridors nor impede the use of native wildlife nursery sites. The project site and study area does not reside within any designated wildlife corridors

or habitat linkages identified in the South Coast Missing Linkages project (South Coast Wildlands 2008), California Essential Habitat Connectivity project (Spencer et al. 2010), or as recognized by the City (City of Los Angeles 2006a). Urban-adapted wildlife species (i.e., striped skunk, raccoon, and opossum) may use the study area for local movement, but these species are primarily nocturnal and limited nighttime work and lighting is expected, as project construction would generally occur between 7:00 am and 7:00 pm. Therefore, direct and/or indirect impacts to wildlife corridors and habitat linkages are not anticipated.

The trees and shrubs throughout the project site provide limited nesting habitat for bird species protected under the Migratory Bird Treaty Act (16 USC 703-712) and California Fish and Game Code Sections 3503.5, 3503, and 3513. Given the heavily urbanized setting and associated noise prevalent within the action area, the proposed project activities are not anticipated to result in direct and/or indirect impacts to nesting birds throughout the alignment. Impacts would therefore 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 City of Los Angeles Protected Tree Ordinance, as modified by Ordinance 177404, provides guidelines for the preservation of Southern California native tree species measuring four inches or more in cumulative diameter, as measured at 4.5 feet above the ground level at the base of the tree (City of Los Angeles 2006b). Trees protected under this ordinance include all oak trees indigenous to California (excluding the scrub oak *Quercus dumosa*), southern California black walnut, California sycamore (*Platanus racemosa*), and California bay (*Umbellularia californica*).

No City-protected trees were observed within the project site or within the visually accessible portions of the action area. Therefore, direct and/or indirect impacts to City-protected trees are not anticipated, and no impacts 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. Species or habitats covered within any Habitat Conservation Plan, Critical Habitat Designations, Natural Community Conservation Plans, Significant Ecological Areas, or other approved conservation plans have not been identified within the action area (CDFW 2019). As such, the proposed project would not be located within an area affected by or subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

References

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3.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

a) Would the project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Less Than Significant Impact. No historical resources were identified within the project alignment or potential staging area. As such, the proposed project would not directly affect historical resources. However, many of the buildings adjacent to the project alignment were built more than 50 years ago and, therefore, have the potential to

be considered historical resources pursuant to Section 15064.5 of the CEQA Guidelines. (While some historical resources are also considered archaeological resources, such resources are addressed in Section 3.5(b), as part of the discussion of archaeological resources.) Such buildings could be indirectly affected by the project, due to their proximity to proposed project activities. Because all project work would be completed below ground, no permanent visual impacts would occur to the adjacent buildings. However, proposed project construction activities would result in groundborne vibrations in close proximity to these historic-age buildings. As such, the cultural resources assessment for the proposed project (contained in this document as Appendix C) includes an assessment of indirect impacts from groundborne vibration for the proposed construction methods and associated equipment. The assessment concludes that the proposed project would not adversely affect any adjacent buildings or structures, due to the proposed construction methods and the underlying subsurface geologic conditions. For these reason, impacts would be less than significant.

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

Less Than Significant with Mitigation Incorporated. No newly or previously recorded archaeological resources were identified within the project alignment or potential staging area during the California Historical Resources Information System records search. Additionally, no newly or previously recorded cultural resources were identified during the Native American Heritage Commission (NAHC) Sacred Lands File search (see Appendix C for details on the records searches). All excavation activities associated with the proposed project would be limited to the previously disturbed, underground portions of the public right-of-way. The De Soto Reservoir property, owned by LADWP and located to the north of the proposed project's northern terminus, may be used for construction staging; however, no excavation is anticipated at this location. It is possible that previously undiscovered intact archaeological deposits are present at subsurface levels and could be uncovered during ground-disturbing activities. As such, mitigation measure MM-CUL-1 is provided to address potentially significant impacts to inadvertent discoveries during construction. Impacts related to archaeological resources would therefore be less than significant with mitigation incorporated.

MM-CUL-1: Inadvertent Discovery of Archaeological Resources

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 (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, or data recovery, may be warranted.

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

Less Than Significant with Mitigation Incorporated. The proposed project site is located in Chatsworth, Winnetka, and Canoga Park, within the flat-lying areas east, northeast, and southeast of Chatsworth Reservoir. In this area, surface-mapped sedimentary deposits, derived as alluvial fan deposits from the Santa Susana Mountains to the north, were transported to their current location in part by Browns Creek Channel, which traverses the southern portion of the project area (Dibblee and Ehrenspeck 1992; McLeod 2017). The entire proposed project site is mapped as younger Quaternary alluvium, consisting of alluvial gravel and sand, according to published mapping by Dibblee and Ehrenspeck (1992) at a scale of 1: 24,000. These Holocene, or Recent, deposits presumably overlie older, Pleistocene, or "Ice-Age" deposits at an unknown depth (Dibblee and Ehrenspeck 1992; McLeod 2017). The coarse-grained, younger, alluvial deposits have low paleontological resource sensitivity. However, older, finer-grained Pleistocene age deposits in this area have produced scientifically significant vertebrates and have moderate to high paleontological resource sensitivity (McLeod 2017).

Past excavation and trenching activities in the area surrounding the proposed project site have encountered paleontological resources in older Quaternary alluvial deposits. Paleontological records search results for the project area were received from the Natural History Museum of Los Angeles County (LACM) on October 24, 2017. According to the records search results, the closest fossil locality to the proposed project site within older Quaternary alluvial deposits is located near the intersection of Farralone Avenue and Plummer Street, west of the proposed project area. This locality (LACM 1817) yielded a specimen of fossil horse (*Equus)* at a shallow depth of three feet below the ground surface (bgs). In Santa Susana Pass, northwest of the proposed project site, locality LACM 1406 yielded a specimen of fossil mastodon (*Mammut*) from stream bed deposits. An extinct bison (*Bison*) specimen was recovered from the west side of Van Norman Reservoir at locality LACM 3397 from 75 feet bgs, while mammoth (*Mammuthus*) and bison (*Bison*) remains were recovered from the east side of Van Norman Reservoir within terrace deposits at locality LACM 7152. Localities are also recorded southeast of the proposed project area, near the Sepulveda Dam Recreation Area. In this area, locality LACM 3822 produced extinct peccary (*Platygonus*), camel (*Camelops*), and bison (*Bison*) at depths of 75-100 feet bgs. Another locality, LACM 6208, yielded prehistoric bison (*Bison*) remains at a depth of 20 feet bgs near the intersection of Kester Avenue and Burbank Boulevard. Further south, near the intersection of Kester Avenue and Otsego Street, a specimen of fossil horse was recovered at a depth of 14 feet bgs. South of Woodland Hills, off Mulholland Highway, LACM 1213 yielded specimens of fossil horse (*Equus*) and ground sloth (*Paramylodon*). In Hidden Hills, off Long Valley Road, a skeleton of a fossil mastodon (*Mammut*) was recovered (McLeod 2017).

No paleontological resources were identified within the proposed project area as a result of the institutional records search and desktop geological review. Furthermore, the proposed project site is located within an area that has been previously developed and is likely underlain by fill materials, at least in part. As such, the proposed project alignment is not anticipated to be underlain by unique geologic features. While the proposed project area has been

heavily disturbed by urban development over the years, intact paleontological resources may be present below the original layer of fill material. Given the proximity of past fossil discoveries in the surrounding area and the underlying alluvial fan deposits, the proposed project area is moderately to highly sensitive for supporting paleontological resources. In the event that intact paleontological resources are located on the proposed project site, ground-disturbing activities associated with construction of the proposed project, such as grading during site preparation, have the potential to destroy a unique paleontological resource or site. Without mitigation, the potential damage to paleontological resources during construction would be a potentially significant impact. However, upon implementation of MM-CUL-2, impacts would be reduced to below a level of significance. No effects would occur during operation, since no excavations would occur having the potential to destroy a paleontological resource or unique geologic feature. Impacts of the proposed project are therefore considered less than significant with mitigation incorporated**.**

MM-CUL-2: Paleontological Monitoring

Prior to commencement of any grading activity for the proposed project, the Los Angeles Department of Water and Power shall retain a qualified paleontologist. The paleontologist shall prepare a Paleontological Resources Impact Mitigation Program (PRIMP) for the proposed project. The PRIMP shall be consistent with the guidelines of the Society of Vertebrate Paleontology (SVP 2010). The qualified paleontologist shall attend the preconstruction meeting and be on site during all rough grading and other significant ground-disturbing activities in previously undisturbed older Quaternary alluvial deposits, if encountered. These deposits may be encountered at depth below the ground surface. In the event that paleontological resources (e.g., fossils) are unearthed during grading, the paleontology 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.

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

Less Than Significant with Mitigation Incorporated. No prehistoric or historic burials were identified within the project area as a result of the records search. However, the possibility of encountering human remains within the proposed project area exists. The discovery of human remains would require handling in accordance with California Public Resources Code 5097.98, which states that in the event that 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 the unexpected event that human remains are unearthed during construction activities, impacts would be potentially significant. However, upon implementation of MM-CUL-3, impacts would be reduced to below a level of significance. Impacts to human remains are therefore less than significant with mitigation incorporated.

MM-CUL-3: Inadvertent Discovery of Human Remains

In accordance with Section 7050.5 of the California Health and Safety Code, if human remains are found, the County Coroner shall be immediately notified of the discovery. No further excavation or disturbance of the project site or any nearby area reasonably suspected to overlie adjacent remains shall occur until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she shall notify the Native American Heritage Commission in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the Native American Heritage Commission must immediately notify those persons it believes to be the most likely descendant (MLD) from the deceased Native American. Other tribes consulting on the project under Assembly Bill 52 may also be notified, at the discretion of the identified MLD and the Los Angeles Department of Water and Power. The MLD shall complete their inspection within 48 hours of being granted access to the site. The MLD would then determine, in consultation with the property owner, the disposition of the human remains.

References

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3.6 Geology and Soils

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial 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?	☐	☐	☐	☒

a) Would the project expose people or structures to 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 Alquist-Priolo Earthquake Fault Zoning Act (1972) and the Seismic Hazards Mapping Act (1990) direct the State Geologist to delineate regulatory zones to assist cities and counties in preventing the construction of buildings used for human occupancy on the surface trace of active faults. The project does not propose any buildings for human occupancy, and the project site is not located within an Alquist-Priolo Earthquake Fault Zone (County of Los Angeles 2014). In addition, project construction and operation would not increase or exacerbate the potential for fault rupture to occur and therefore would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving surface rupture. As such, the construction and operation of the proposed project would not expose people or structures to potential adverse effects from the rupture of a known earthquake fault and no impact would occur.

ii) Strong seismic ground shaking?

Less Than Significant Impact. Seismic activity is typical for Southern California, and strong seismic activities at nearby faults may result in groundshaking in the project vicinity. The nearest earthquake faults are the Chatsworth fault, located approximately 0.5 miles west of the project alignment, and the Northridge Hills fault, located approximately 0.25 miles south of the potential staging area (USGS 2018). The potential for seismic activity in the project area is not anticipated to be any greater than in any other areas of the City of Los Angeles. The degree of ground shaking that is felt at a given site depends on the distance from the earthquake source, the magnitude of the earthquake, the type of subsurface material on which the site is situated, and topography. The project would not permanently add any people or aboveground structures to the project area. The proposed trunk line segments would be located underground, thus minimizing the potential for aboveground impacts to structures and human safety. However, ground shaking can result in severe damage to pipelines if they are subjected to strong horizontal movement that exceeds what they are designed to withstand. Ground shaking could result in pipeline breakage and associated safety hazards for people in the area (e.g., temporary flooding and/or temporary service outages). However, the proposed pipeline and appurtenant structures would be constructed in compliance with earthquake-resistant standards as required by the LADWP Engineering Standards Manual, as well as project-specific geotechnical recommendations. Furthermore, although the proposed project could be subject to severe seismic shaking, the project would not increase or exacerbate the potential for earthquakes to occur. In the event of pipeline breakage during ground shaking, flooding may occur in the project area. However, safety valves throughout the water distribution system may be

shut off (as deemed necessary by LADWP in response to a loss of pressure), which would isolate the break. The volume of potable water released in such an event would therefore be limited to the amount of water contained in the section of pipeline between the shut-off valves, which would not be expected to yield enough water to pose a significant risk to life or property. Additionally, adherence to seismic standards and geotechnical engineering recommendations would reduce the potential for pipe breakage during a seismic event to the extent practicable. For these reasons, impacts would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction is the transformation of loose sediment or soil into a fluid state, usually as a result of ground shaking. Soils that are most susceptible to liquefaction are poorly consolidated and water-saturated soils. Liquefaction can cause significant earthquake-related damage because structures located on ground that liquefies can collapse or sink into the ground. Liquefaction during large earthquakes can disrupt pipelines and road networks. According to the State of California Earthquake Zones of Required Investigation Maps, the project alignment is partially located within a designated liquefaction zone (California Geological Survey 1998a, 1998b). The project would not permanently add any people or aboveground structures to the project area, and the proposed trunk line segments would be located underground, thus minimizing the potential for aboveground impacts to structures and human safety. However, in the event of liquefaction or other types of seismic-related ground failure along or near the project alignment, the structural integrity of the pipeline could be compromised, posing a potential risk to the pipeline and causing potential safety hazards for people in the area in the event of pipeline breakage (e.g., flooding and/or temporary service outages). However, the proposed trunk line segments and appurtenant structures would be constructed in compliance with earthquake-resistant standards as required by the LADWP Engineering Standards Manual, as well as project-specific geotechnical recommendations. With appropriate design precautions, the potential for liquefaction, seismically induced settlement, or other seismic-related ground failure to adversely affect the replacement pipelines would be minimal. Furthermore, although portions of the project alignment could be subject to seismic-related ground failure, the project would not increase or exacerbate the potential for seismic-related ground failure to occur. In the event of pipeline breakage during seismic-related ground failure, flooding may occur in the project area. However, safety valves throughout the water distribution system may be shut off (as deemed necessary by LADWP in response to a loss of pressure), which would isolate the break. The volume of potable water released in such an event would therefore be limited to the amount of water contained in the section of pipeline between the shut-off valves, which would not be expected to yield enough water to pose a significant risk to life or property. Additionally, adherence to seismic standards and geotechnical engineering recommendations would reduce the potential for pipe breakage during a seismic event to the extent practicable. Impacts related to liquefaction and other types of seismic-related ground failure would therefore be less than significant.

iv) Landslides?

No Impact. The project area is not located within an area identified as being susceptible to earthquake-induced landslides on maps prepared by the state (California Geological Survey 1998a, 1998b). As such, landslides are unlikely to occur in the project area. Therefore, no impact would occur.

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

Less Than Significant Impact. The proposed project would be located within previously developed or disturbed areas, consisting primarily of a paved roadway. However, construction activities including trenching and excavation would produce exposed soils that could be impacted by short-term erosion during windy conditions and construction vehicles traveling through the site. Rain events could erode the temporarily exposed soils, creating sediment-laden runoff. However, LADWP or its construction contractor would be required to implement a Stormwater Pollution Prevention Plan (SWPPP) in compliance with the NPDES requirements for stormwater discharges at construction sites. SWPPPs are required to include erosion control measures, such as covering exposed soil stockpiles, lining the perimeter of construction areas with sediment barriers, and protecting storm drain inlets. These measures would control and reduce erosion and loss of topsoil. Once construction is complete, the replaced pipelines would be located entirely underground, and additional operational impacts related to soil erosion or loss of topsoil would not occur. Implementation of the SWPPP and associated erosion control measures would limit impacts related to soil erosion, loss of topsoil, short-term erosion caused by construction activity, and runoff. Therefore, impacts related to soil erosion or the 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. The project area has relatively flat topography and is not located on a geologic unit or soil that is unstable, with the exception of the liquefaction zone discussed in Section 3.6(a) above. Landslide, lateral spreading, subsidence, and collapse are not expected to occur at the proposed project site, because the area was graded when the streets and surrounding uses were originally constructed. As indicated in Section 3.6(a) above, there is a limited liquefaction hazard in portions of the project alignment, but adherence to applicable construction specifications would reduce this hazard to acceptable levels. Construction and operation of the proposed project would not be expected to cause local geologic units or soils to become unstable and would not be expected to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. The proposed pipeline and appurtenant structures would be constructed in compliance with geotechnical engineering standards as required by the LADWP Engineering Standards Manual, as well as project-specific geotechnical recommendations.

In the event of pipeline breakage due to geologic instability, flooding may occur in the project area. However, safety valves throughout the water distribution system may be shut off (as deemed necessary by LADWP in response to a loss of pressure), which would isolate the break. The volume of potable water released in such an event would therefore be limited to the amount of water contained in the section of pipeline between the shut-off valves, which would not be expected to yield enough water to pose a significant risk to life or property. Additionally, the potential for geologic instability to compromise the pipeline would be addressed and minimized to the extent practicable through proper site-specific engineering and construction design. Therefore, construction and operation of the proposed project would not be expected to cause local geologic units or soils to become unstable and would not be expected to result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Impacts would be less than significant.

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

Less Than Significant Impact. Expansive soils can undergo significant volume change with changes in moisture content. They shrink and harden when dried and expand and soften when wetted. Some soils underlying the project alignment could exhibit moderate shrink-swell potential (as is characteristic of expansive soils) when exposed to moisture (e.g., groundwater, percolating surface runoff) (County of Los Angeles 2014). Soil expansion or shrinkage in the soils surrounding the proposed pipeline could compromise the structural integrity of the pipeline, causing potential safety risks for the pipeline and for people in the area (e.g., flooding and/or temporary service outages). While the proposed pipeline could potentially be exposed to soil expansion, the trenches where the pipeline is installed would be backfilled with material that would be designed to offset any expansive soils present in the area. The proposed pipeline and appurtenant structures would be constructed in compliance with geotechnical engineering standards as required by the LADWP Engineering Standards Manual, as well as project-specific geotechnical recommendations. Furthermore, although the project could be subject to soil expansion hazards, project construction and operation would not increase or exacerbate the potential for soils to expand or contract. In the event of pipeline breakage due to geologic instability, flooding may occur in the project area. However, safety valves throughout the water distribution system may be shut off (as deemed necessary by LADWP in response to a loss of pressure), which would isolate the break. The volume of potable water released in such an event would therefore be limited to the amount of water contained in the section of pipeline between the shut-off valves, which would not be expected to yield enough water to pose a significant risk to life or property. Additionally, the potential for expansive soils to compromise the pipeline would be addressed and minimized to the extent practicable through proper site-specific engineering and construction design. For these reasons, impacts would be less than significant.

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. No septic tanks or alternative wastewater disposal systems are proposed. Therefore, no impact associated with the use of such systems would occur.

References

California Geological Survey. 1998a. *Earthquake Zones of Required Investigation – Oat Mountain Quadrangle*. Earthquake Fault Zones Official Map released January 1, 1976. Seismic Hazard Zones Map released February 1, 1998. Accessed August 28, 2019. http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm.

California Geological Survey. 1998b. *Earthquake Zones of Required Investigation – Canoga Park Quadrangle*. February 1, 1998. Accessed August 28, 2019. http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm.

County of Los Angeles. 2014. Figure 5.6-2 (Map of Seismic Hazards, Los Angeles County) in *Los Angeles County General Plan Update: Draft Environmental Impact Report.* Prepared by PlaceWorks. June 2014. Accessed August 28, 2019. http://planning.lacounty.gov/assets/upl/project/gp_2035_deir.pdf.

USGS (United States Geological Survey). 2019. Quaternary Faults & Folds in the U.S. Accessed August 28, 2019. https://earthquake.usgs.gov/learn/kml.php.

3.7 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Construction of the proposed project would result in GHG emissions, primarily due to off-road construction equipment, on-road vendor trucks, and worker vehicles. CalEEMod was used to calculate the annual GHG emissions based on the anticipated construction scenario for the project (CAPCOA 2017); see Appendix A.

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, perfluorocarbons, 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 hydrofluorocarbons, perfluorocarbons, 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 hydrofluorocarbons, perfluorocarbons, SF_6, and NF_3 in measurable quantities.

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 Version 2016.3.2, this GHG emissions analysis assumes 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).

Construction of the proposed project is anticipated to commence in 2023 and would end in 2028. On-site sources of GHG emissions from project construction would include off-road equipment, and off-site sources would include vendor trucks and worker vehicles. Table 3.7-1 presents construction emissions for the proposed project from on-site and off-site emission sources.

Table 3.7-1. Estimated Annual Construction GHG Emissions

Year	CO_2	CH_4	N_2O	CO_2e
	metric tons per year			
2023	164.38	0.03	0.00	165.06
2024	660.62	0.11	0.00	663.34
2025	708.14	0.12	0.00	711.06
2026	1,247.87	0.21	0.00	1,253.18
2027	1,245.21	0.21	0.00	1,250.50
2028*	810.30	0.29	0.00	818.97
			Total	4,862.11
			30-Year Amortization of Construction Emissions	162.07

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent.
* The emissions in 2028 include operational emissions results from CalEEMod to represent GHG emissions from water use during construction.
See Appendix A for complete results.

As shown in Table 3.7-1, the estimated total GHG emissions during construction of would be approximately 4,862 MT CO_2e over the construction period. Estimated project-generated construction emissions amortized over 30 years would be approximately 162 MT CO_2e per year. As with project-generated construction criteria air pollutant emissions, GHG emissions generated during construction of the proposed project would be short term in nature, lasting only for the duration of the construction period, and would not represent a long-

term source of GHG emissions. Once project construction is complete, operational activities associated with the proposed project would be minimal and would be similar to those that occur under existing conditions. As such, there would not be any new GHG emissions associated with operation of the proposed project. During construction, energy use associated with the project would primarily consist of petroleum consumption from off-road construction equipment, vendor trucks, haul trucks, and worker vehicles. Use of other forms of energy (e.g., electricity and natural gas) would be minimal to negligible. Once construction activities cease, petroleum use from off-road equipment and transportation vehicles would end. Energy use for maintenance purposes during project operation would not substantially change under the proposed project. Because of the short-term nature of construction and relatively small scale of the project, the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

The SCAQMD significance threshold for all non-industrial projects is 3,000 MT CO_2e per year. The project would not exceed this threshold and, therefore, GHG impacts would be less than significant.

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

Less Than Significant Impact. The proposed project would result in less than significant impacts related to conflicts with greenhouse gas emission reduction plans, for the reasons described below.

Consistency with the City of Los Angeles Sustainable City Plan

The City of Los Angeles' Sustainable City Plan is not a qualified GHG reduction plan according to the CEQA Guidelines Section 15183.5 and thus cannot be used in a cumulative impacts analysis to determine a project's significance. Therefore, this discussion of consistency is for informational purposes only. Table 3.7-2 provides an overview of the measures and goals set forth in the Sustainable City Plan and the project's consistency with these measures and goals. As shown in Table 3.7-2, the proposed project would not conflict with any of the GHG reduction measures or goals for renewable energy or energy efficiency set forth in the Sustainable City Plan. Thus, the proposed project would not conflict with this plan.

Table 3.7-2. Proposed Project Consistency with **the Sustainable City Plan's** GHG Emission Reduction Strategies

Sustainable City Plan Measure	Proposed Project Consistency
Water	
Reduce LADWP purchases of imported water by 50% by 2025 and source 50% of water locally by 2035.	Does not apply. The proposed project would not affect the source of water purchases and, therefore, would not interfere with implementation of this goal.
Reduce average per capita water use by 22.5% by 2025 and 25% by 2035.	Does not apply. The proposed project is necessary for the safety, adequate capacity, and reliability of LADWP's water system in the western San Fernando Valley. The project would not interfere with efforts to reduce per capita water use.

Table 3.7-2. Proposed Project Consistency with **the Sustainable City Plan's** GHG Emission Reduction Strategies

Sustainable City Plan Measure	Proposed Project Consistency
Solar Power	
Increase cumulative total megawatts (MW) of local solar photovoltaic power to 900-1,500 MW by 2025 and 1,500-1,800 MW by 2035.	Does not apply. The proposed project does not pertain to solar power and would not interfere with efforts to increase the use of solar power.
Increase cumulative total MW of energy storage capacity to at least 1,654-1,750 MW by 2025.	Does not apply. The proposed project does not pertain to energy storage and would not interfere with efforts to increase energy storage in the City.
Energy Efficient Buildings	
Reduce energy use per square foot below 2013 baseline for all building types by at least 14% by 2025 and 30% by 2035.	Does not apply. The proposed project involves underground pipeline replacements and would not involve any new building construction or building renovations. As such, the project would not interfere with efforts to reduce the energy use of buildings.
Use energy efficiency to deliver 15% of all LA's projected electricity needs by 2020.	Does not apply. Aside from temporary energy use to power equipment during construction, the proposed project would not use energy or electricity, as it would involve conveyance of potable water that is already flowing through LADWP's water distribution system. As such, measures for electricity efficiency would not apply to the project.
GHGs	
Reduce GHG emissions below 1990 baseline by at least 45% by 2025, 60% by 2035, and 80% by 2050.	Does not apply. The proposed project would not contribute to long-term GHG emission generation. As such, the proposed project would not interfere with efforts to reduce GHG emissions.
Improve GHG efficiency of LA's economy from 2009 levels by 55% by 2025 and 75% by 2035.	Does not apply. The proposed project would not contribute to long-term GHG emission generation. As such, the proposed project would not interfere with efforts to improve GHG efficiency.
Influence national and global action through the leadership of LA and other cities on climate change.	Does not apply. The proposed project would not interfere with efforts to influence action on climate change.
Have no ownership stake in coal-fired power plants by 2025.	Does not apply. The proposed project involves the replacement of potable water pipelines and, therefore, would not affect the ownership stake of coal-fired power plants.
Waste	
Increase landfill diversion rate to at least 90% by 2025 and 95% by 2035.	Consistent. The proposed project would produce waste during construction. Some construction debris, such as pavement and excavated soils, would be reused on site or recycled to the extent feasible. Wastes would be diverted from landfills to the extent practicable and in accordance with state law. The proposed project would not generate additional wastes during operation.
Increase proportion of waste production and recyclable commodities productively reused and/or repurposed within LA County to at least 25% by 2025 and 50% by 2035.	Does not apply. The proposed project involves the replacement of potable water pipelines and, therefore, would not interfere with efforts to increase reuse or repurposing of commodities. During construction, pavement and excavated soils would be reused on site or recycled as feasible. The proposed project would not generate additional wastes during operation.

Source: City of Los Angeles 2015

Consistency with the Southern California Association of Governments 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy

The Southern California Association of Governments 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a regional growth management strategy that targets per capita GHG reduction from passenger vehicles and light-duty trucks in the Southern California region. The 2016 RTP/SCS incorporates local land use projections and circulation networks from city and county general plans. The underlying purpose of the 2016 RTP/SCS is to provide direction and guidance by making the best transportation and land use choices for future development (SCAG 2016). The proposed project would not involve land use changes or land development; as such, the 2016 RTP/SCS is not directly applicable to the proposed project. Rather, the proposed project would involve replacing existing underground potable water pipelines. As such, implementation of the proposed project would not conflict with the goals of the 2016 RTP/SCS.

Consistency with CARB's Scoping Plan

The 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.[5] 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 Global Warming Potential 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 Standards), among others.

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of Assembly Bill (AB) 32 (Global Warming Solutions Act of 2006) and establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions. Table 3.7-3 highlights measures that have been, or will be, developed under the Scoping Plan and the proposed project's consistency with Scoping Plan measures. To the extent that these regulations are applicable to the proposed project, the proposed project would be required to comply with all regulations adopted in furtherance of the Scoping Plan, to the extent required by law.

[5] 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).

Table 3.7-3. Proposed Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Transportation Sector		
Advanced Clean Cars	T-1	Consistent. Worker vehicles and cars used by maintenance workers during operation would be in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Low Carbon Fuel Standard	T-2	Consistent. Motor vehicles driven by construction workers and maintenance workers would use fuels in compliance with the latest laws and regulations.
Regional Transportation-Related GHG Targets	T-3	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Advanced Clean Transit	—	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Last Mile Delivery	—	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Reduction in Vehicle Miles Traveled	—	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Vehicle Efficiency Measures 1. Tire Pressure 2. Fuel Efficiency Tire Program 3. Low-Friction Oil 4. Solar-Reflective Automotive Paint and Window Glazing	T-4	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Ship Electrification at Ports (Shore Power)	T-5	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Goods Movement Efficiency Measures 1. Port Drayage Trucks 2. Transport Refrigeration Units Cold Storage Prohibition 3. Cargo Handling Equipment, Anti-Idling, Hybrid, Electrification 4. Goods Movement Systemwide Efficiency Improvements 5. Commercial Harbor Craft Maintenance and Design Efficiency 6. Clean Ships 7. Vessel Speed Reduction	T-6	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Heavy-Duty Vehicle GHG Emission Reduction 1. Tractor-Trailer GHG Regulation 2. Heavy-Duty Greenhouse Gas Standards for New Vehicle and Engines (Phase I)	T-7	Not applicable. The proposed project would not prevent CARB from implementing this measure.

Table 3.7-3. Proposed Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Medium- and Heavy-Duty Vehicle Hybridization Voucher Incentive Proposed project	T-8	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Medium and Heavy-Duty GHG Phase 2	—	Not applicable. The proposed project would not prevent CARB from implementing this measure.
High-Speed Rail	T-9	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Electricity and Natural Gas Sector		
Energy Efficiency Measures (Electricity)	E-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Energy Efficiency (Natural Gas)	CR-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Solar Water Heating (California Solar Initiative Thermal Program)	CR-2	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Combined Heat and Power	E-2	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Renewable Portfolios Standard (33% by 2020)	E-3	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Renewable Portfolios Standard (50% by 2050)	—	Not applicable. The proposed project would not prevent CARB from implementing this measure.
SB 1 Million Solar Roofs (California Solar Initiative, New Solar Home Partnership, Public Utility Programs) and Earlier Solar Programs	E-4	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Water Sector		
Water Use Efficiency	W-1	The proposed project would use water for flushing the lines once they are installed. No water use is associated with operation of the project.
Water Recycling	W-2	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Water System Energy Efficiency	W-3	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Reuse Urban Runoff	W-4	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Renewable Energy Production	W-5	Not applicable. The proposed project would not prevent CARB from implementing this measure.

Table 3.7-3. Proposed Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Green Buildings		
1. State Green Building Initiative: Leading the Way with State Buildings (Greening New and Existing State Buildings)	GB-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.
2. Green Building Standards Code (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.
3. Beyond Code: Voluntary Programs at the Local Level (Greening New Public Schools, Residential and Commercial Buildings)	GB-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.
4. Greening Existing Buildings (Greening Existing Homes and Commercial Buildings)	GB-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Industry Sector		
Energy Efficiency and Co-Benefits Audits for Large Industrial Sources	I-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Oil and Gas Extraction GHG Emission Reduction	I-2	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Reduce GHG Emissions by 20% in Oil Refinery Sector	—	Not applicable. The proposed project would not prevent CARB from implementing this measure.
GHG Emissions Reduction from Natural Gas Transmission and Distribution	I-3	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Refinery Flare Recovery Process Improvements	I-4	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Work with the local air districts to evaluate amendments to their existing leak detection and repair rules for industrial facilities to include methane leaks	I-5	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Recycling and Waste Management Sector		
Landfill Methane Control Measure	RW-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Increasing the Efficiency of Landfill Methane Capture	RW-2	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Mandatory Commercial Recycling	RW-3	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Increase Production and Markets for Compost and Other Organics	RW-3	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Anaerobic/Aerobic Digestion	RW-3	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Extended Producer Responsibility	RW-3	Not applicable. The proposed project would not prevent CARB from implementing this measure.

Table 3.7-3. Proposed Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Proposed Project Consistency
Environmentally Preferable Purchasing	RW-3	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Forests Sector		
Sustainable Forest Target	F-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.
High GWP Gases Sector		
Motor Vehicle Air Conditioning Systems: Reduction of Refrigerant Emissions from Non-Professional Servicing	H-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.
SF_6 Limits in Non-Utility and Non-Semiconductor Applications	H-2	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Reduction of Perfluorocarbons in Semiconductor Manufacturing	H-3	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Limit High GWP Use in Consumer Products	H-4	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Stationary Equipment Refrigerant Management Program – Refrigerant Tracking/Reporting/Repair Program	H-6	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Stationary Equipment Refrigerant Management Program – Specifications for Commercial and Industrial Refrigeration	H-6	Not applicable. The proposed project would not prevent CARB from implementing this measure.
SF_6 Leak Reduction Gas Insulated Switchgear	H-6	Not applicable. The proposed project would not prevent CARB from implementing this measure.
40 percent reduction in methane and hydrofluorocarbon (HFC) emissions	—	Not applicable. The proposed project would not prevent CARB from implementing this measure.
50 percent reduction in black carbon emissions	—	Not applicable. The proposed project would not prevent CARB from implementing this measure.
Agriculture Sector		
Methane Capture at Large Dairies	A-1	Not applicable. The proposed project would not prevent CARB from implementing this measure.

Sources: CARB 2008; CARB 2017.
Notes: CARB = California Air Resources Board; GHG = greenhouse gas; GWP = global warming potential; SB = Senate Bill; SF_6 = sulfur hexafluoride

Based on the analysis in Table 3.7-3, the proposed project would not conflict with the applicable strategies and measures in the Scoping Plan.

The proposed project would not impede the attainment of the GHG reduction goals for 2030 or 2050 identified in Executive Order (EO) S-3-05 and Senate Bill (SB) 32. EO 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 with regard to 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). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping Plan states the following (CARB 2014):

> This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, 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 EO S-3-05. This is confirmed in the *Second Update*, which states (CARB 2017):

> The Proposed Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasibility 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 Proposed Plan is developed to be consistent with requirements set forth in AB 32, SB 32, and AB 197.

The proposed project would not interfere with implementation of any of the above-described GHG reduction goals for 2030 or 2050 because the proposed project would not exceed the SCAQMD's recommended draft interim threshold of 3,000 MT CO_2e per year (SCAQMD 2008). This threshold was established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by 2020. Because the proposed project would not exceed the threshold, this analysis provides support for the conclusion that the proposed project would not impede the state's trajectory toward the above-described statewide GHG reduction goals for 2030 or 2050.

In addition, as discussed previously, the proposed project is consistent with the GHG emission reduction measures in the Scoping Plan and would not conflict with the state's trajectory toward future GHG reductions. The specific path to compliance for the state in regards to the long-term goals will likely require development of technology or other changes that are not currently known or available and are therefore considered speculative at this time. The proposed project's consistency 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 EO 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 EO 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 state on its trajectory toward meeting these future GHG targets.

Based on the above considerations, the proposed project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs (including those involving renewable energy and energy efficiency). The proposed project would follow applicable energy standards and regulations. Impacts would be less than significant.

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3.8 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☒	☐	☐
d) Be located on a site 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 for people residing or working in the project area?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☒	☐

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. 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. In the event that use of such materials is required for maintenance, repairs, or inspections during operation, the amount would be minor and the materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Daily operation of the proposed project would not otherwise require transport, use, 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 with Mitigation Incorporated. As discussed under Section 3.8(a), construction would involve relatively small amounts of commonly used hazardous substances such as gasoline, diesel fuel, lubricating oil, grease, adhesive materials, solvents, and architectural coatings. These materials are not considered acutely hazardous and are used routinely throughout urban environments for 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. However, a described under Section 3.8(d), contaminated soil, soil vapor, and/or groundwater could be encountered during construction excavation. If not handled properly, contaminated soil, soil vapor, and/or groundwater could create a significant hazard to the public, construction workers on the proposed project, and/or the surrounding environment. MM-HAZ-1 would be required to ensure that such impacts are

avoided and/or minimized to the extent practicable. (See Section 3.8(d) for more details). Upon implementation of MM-HAZ-1, construction-related impacts would be less than significant with mitigation incorporated. In the event that use of such materials is required for maintenance, repairs, or inspections during operation, the amount would be minor and the materials would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Daily operation of the proposed project would not otherwise require the use, storage, or disposal of hazardous substances. Operational 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 with Mitigation Incorporated. There are several schools within 0.25 miles of the project site, including Sierra Canyon School, Saint John Eudes School, Chatsworth High School, Superior Street Elementary School, Limerick Avenue Elementary School, and Pierce College (California Department of Education 2014). Sierra Canyon School is located adjacent to the potential construction staging area at the De Soto Reservoir property. Saint John Eudes School is located on Mason Avenue, along the project alignment. Chatsworth High School, Superior Street Elementary School and Limerick Avenue Elementary School are offset from the project alignment by at least one city block. Pierce College is located directly along De Soto Avenue, adjacent to the proposed pipeline replacements at the De Soto Avenue/Victory Boulevard intersection. As discussed in Section 3.8(a), project construction would involve relatively small amounts of commonly used hazardous substances such as gasoline, diesel fuel, lubricating oil, grease, adhesive materials, solvents, and architectural coatings. In the event of an accidental release of fuels, oils, lubricants, or other hazardous materials associated with construction projects, hazardous emissions could occur within a quarter mile of a school. All spills would be quickly contained and cleaned up. Potential effects from these substances would only occur during construction activities or operational maintenance/repair/inspection activities, which would be temporary and localized. Hazardous substances would be transported and handled in accordance with all federal, state, and local laws regulating the management and use of hazardous materials. Use of these materials for their intended purpose and in accordance with applicable safety laws would not pose a significant risk to nearby schools. However, as discussed under Section 3.8(d), contaminated soil, soil vapor, and/or groundwater could be encountered during construction excavation. If not handled properly, contaminated soil, soil vapor, and/or groundwater could create a significant hazard to the public and/or the surrounding environment (which could include nearby schools, depending on the location of the release). MM-HAZ-1 would be required to ensure that such impacts are avoided and/or minimized to the extent practicable. (See Section 3.8(d) for more details). Upon implementation of MM-HAZ-1, construction-related impacts would be less than significant with mitigation incorporated.

Daily operation of the proposed project would not require the use, storage, or disposal of hazardous substances. If there were any emergency condition involving project operation, the result would involve the release of potable water. In the event of pipeline failure, safety valves throughout the water distribution

system may be shut off (as deemed necessary by LADWP) in response to a loss of pressure and to isolate the break. The volume of potable water released in such an event would be limited to the amount of water contained in the section of pipeline between the shut-off valves, which is not expected to yield enough water to pose a threat to life or property. Therefore, operational 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?

Less Than Significant with Mitigation Incorporated. Government Code Section 65962.5 requires the Department of Toxic Substances Control (DTSC), the State Department of Health Services, SWRCB, and the California Department of Resources Recycling and Recovery to compile and annually update lists of hazardous waste sites and lands designated as hazardous waste sites throughout the state. The resources listed below were reviewed for references to the project site to determine whether any hazardous materials sites are located on or near the project.

- List of hazardous waste and substances sites from the DTSC EnviroStor database
- List of leaking underground storage tank (LUST) sites from the SWRCB GeoTracker database
- List of solid waste disposal sites identified by SWRCB with waste constituents above hazardous waste levels outside the waste management unit
- List of "active" cease-and-desist orders and cleanup and abatement orders from SWRCB
- List of hazardous waste facilities subject to corrective action identified by DTSC

Searches of the above databases identified several sites in the area surrounding the project alignment that are listed as hazardous materials sites pursuant to Government Code Section 65962.5 (CalEPA 2019a, CalEPA 2019b, CalEPA 2019c, CalEPA 2019d, DTSC 2019a, DTSC 2019b, SWRCB 2019a, U.S. EPA 2019). Fifteen of these sites are located adjacent to the project alignment, as shown in Table 3.8-1. Of these sites, nine are LUST cleanup sites primarily involving contamination associated with gas station operations. The Los Angeles RWQCB and/or City of Los Angeles oversaw cleanup of these leaks, and all cases are closed. Three of the listed sites adjacent to the project alignment are voluntary cleanup sites. These sites are associated with historic railroad use along the former Southern Pacific Railroad alignment (now LA Metro's Orange Line Busway) and dry cleaning facilities. The voluntary cleanup actions at the former Southern Pacific Railroad alignment have been completed pursuant to DTSC oversight. The voluntary cleanup actions for the dry cleaners are ongoing with oversight from DTSC. Two of the sites are non-operating permitted hazardous waste sites and are marked as having corrective actions/clean-up programs. One of these sites (the property at 9334 Mason Avenue) is the location of a former Methode Electronic facility. The soil, soil gas, and groundwater have been contaminated primarily by VOCs. The VOCs groundwater plume has migrated off site during the last several years, but no groundwater remediation has been conducted. This site may pose

potential contamination concerns for excavation along the project alignment. Monitoring of the contamination is ongoing, with oversight from the RWQCB (SWRCB 2019b). Finally, one listed site (Hydraulics International at 9000 Mason Avenue) is a permitted hazardous materials site.

Table 3.8-1. Hazardous Materials Sites Adjacent to the Project Alignment

Site Type	Oversight Agency	Site Name and Location	Contaminants of Concern	Media of Concern	Cleanup Status
LUST cleanup	City of Los Angeles	Chevron 20904 Devonshire Street Chatsworth	Gasoline	Soil	Case closed as of 11/5/1996
LUST cleanup	City of Los Angeles	UNOCAL 20841 Devonshire Street Chatsworth	Aviation chemicals	Soil	Case closed as of 8/1/1997
LUST cleanup	RWQCB	Mobil 20505 Devonshire Street Chatsworth	Gasoline	Aquifer used for drinking water supply	Case closed as of 4/20/2015
LUST cleanup	City of Los Angeles	Arco 20455 Devonshire Street Chatsworth	Gasoline	Soil	Case closed as of 5/18/1998
Voluntary cleanup	DTSC	Palace Cleaner 10312 Mason Devonshire Plaza Chatsworth	1,1,1,2-tetrachloroethane; 1,1,2,2-tetrachloroethane; tetrachloroethylene (pce)	Soil, soil vapor	Active as of 1/13/2015
LUST cleanup	City of Los Angeles	Exxon 20516 Devonshire Street Chatsworth	Solvents/non-petroleum hydrocarbons	Soil	Case closed as of 2/2/1995
LUST cleanup	City of Los Angeles	Exxon 10241 Mason Avenue Chatsworth	Solvents/non-petroleum hydrocarbons	Soil	Case closed as of 6/9/1995
Voluntary cleanup	DTSC	Proodos Properties, Inc 9737 Mason Avenue Chatsworth	Under investigation (dry cleaning agents)	Soil, soil vapor	Active as of 12/26/2013
Tiered Permit, Non-Operating Permitted Site, Corrective Action	None identified	Chatsworth Products, Inc 9541 Mason Avenue Chatsworth	None identified	None identified	Inactive - needs evaluation

Table 3.8-1. Hazardous Materials Sites Adjacent to the Project Alignment

Site Type	Oversight Agency	Site Name and Location	Contaminants of Concern	Media of Concern	Cleanup Status
Tiered Permit, Non-Operating Permitted Site, Cleanup Program Site, Corrective Action	RWQCB	Graphic Research, Inc 9334 Mason Avenue Chatsworth	1,1,1-trichloroethane (tca), 1,4-dioxane, acetone, benzene, chromium vi, copper, dichloroethane (dca), dichloroethene (dce), freon, lead, nickel, other chlorinated hydrocarbons, other metal, other solvent or non-petroleum hydrocarbon, tetrachloroethylene (pce), toluene, trichloroethylene (tce)	Aquifer used for drinking water supply, indoor air, other groundwater (uses other than drinking water), soil, soil vapor	Open – verification monitoring
Tiered Permit	None identified	Hydraulics International, Inc 9000 Mason Avenue Chatsworth	None identified	None identified	None identified
LUST cleanup	RWQCB	Shell Station (former) 20505 Roscoe Boulevard Los Angeles	Gasoline	Aquifer used for drinking water supply	Case closed as of 8/19/2008
LUST cleanup	City of Los Angeles	Tosco 8308 De Soto Avenue Canoga Park	Toluene	Soil	Case closed as of 10/28/1998
LUST cleanup	RWQCB	Chevron (former) 20860 Roscoe Blvd Canoga Park	Gasoline	Aquifer used for drinking water supply	Case closed as of 8/29/1996
Voluntary cleanup	DTSC	14-mile right-of-way from Lankershim Blvd/ Chandler Blvd to Canoga Park Ave/ Victory Blvd North Hollywood to Woodland Hills	Arsenic, lead	Soil	No further action as of 10/29/2004

Sources: DTSC 2019a; SWRCB 2019a (GeoTracker and EnviroStor databases)

Once operational, the project would function in a similar manner as existing conditions and would not disturb any hazardous materials sites; therefore, potential risks associated with hazardous materials sites would be limited to the construction period. Construction activities would occur in close proximity to the sites listed in Table 3.8-1, and a number of these sites are active and are undergoing monitoring, cleanup, and/or evaluation. These sites may pose

a risk to soils and/or groundwater along the project alignment. If not handled properly, contaminated soil, soil vapor, and/or groundwater could create a significant hazard to the public, construction workers on the proposed project, and/or the surrounding environment. MM-HAZ-1 would be required to ensure that such impacts are avoided and/or minimized to the extent practicable. Upon implementation of MM-HAZ-1, potential construction impacts would be less than significant with mitigation incorporated.

MM-HAZ-1: Hazardous Materials Contingency Measures
Prior to construction, the Los Angeles Department of Water and Power (LADWP) shall implement contingency measures that address potential impacts in soil, soil vapor, and/or groundwater from releases on properties adjacent to the project alignment. These measures shall include but are not limited to the following:

- Identification of specific areas along the alignment where contamination may be encountered, through preparation of a supplemental site investigation.
- Training procedures for identification of contamination.
- Management, removal, disposal, and reporting of contaminated soils and/or groundwater in accordance with local and state regulations.
- Proper identification, removal, and reporting of environmental monitoring wells, if encountered.
- Health and safety measures, including periodic work breathing zone monitoring, if appropriate, and South Coast Air Quality Management District Rule 1166 monitoring for volatile organic compounds (using a handheld organic vapor analyzer), in the event impacted soils are encountered during excavation activities.

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 for people residing or working in the project area?

No Impact. The nearest airport to the project alignment is the Van Nuys Airport, located approximately 5 miles east of the project alignment. The proposed project area is located well outside of the planning boundary of the Van Nuys Airport (County of Los Angeles 2003). As such, the project area is not located within a 2-mile radius of any public airport, and no airport land use plans apply to the site. Therefore, the proposed project would not create an airplane safety hazard for people residing or working in the project area, and no impact would occur.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The project area is not located within the vicinity of a private airstrip (Airnav.com 2019). Therefore, no impact would occur.

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

Less Than Significant Impact. The City of Los Angeles has a Local Hazard Mitigation Plan, which includes a thorough hazard vulnerability analysis, community disaster mitigation priorities, and plans for disaster mitigation strategies and projects. The City adopted its current Local Hazard Mitigation Plan in January 2018 (City of Los Angeles 2018). Additionally, the Los Angeles County Department of Public Works designates disaster routes. De Soto Avenue and Mason Avenue are not designated as disaster routes; however, Devonshire Street, Nordhoff Street, and Victory Boulevard, which are east–west roadways that cross the project alignment, are designated as Secondary Disaster Routes (County of Los Angeles 2012). Construction at the De Soto Avenue/Victory Boulevard intersection would occur in part via pipe jacking, so full access diversions and roadway closures would not occur within the intersection. While some traffic interference may occur along Devonshire Street and at the Mason Avenue/Nordhoff Street intersection, two-way travel would be maintained, and interference would be temporary. As such, Devonshire Street, Nordhoff Street, and Victory Boulevard could continue to function as disaster routes during project construction, if necessary. Additionally, there are numerous east–west roadways in the project area similar to Devonshire Street, Nordhoff Street, and Victory Boulevard that could function as replacement routes in the event that a large-scale disaster requiring evacuation were to coincide with project construction.

Throughout construction, two-way travel along all affected roadways would be maintained. As such, emergency response and evacuation could still occur along De Soto Avenue, Mason Avenue, and cross streets throughout construction if necessary. Construction and operation of the proposed project would conform to all LADOT, City of Los Angeles Police Department, and City of Los Angeles Fire Department access standards to allow adequate emergency access along the impacted roadways. At the end of construction, the replaced trunk lines would be located underground. Minor appurtenant structures (namely, air/vacuum valves) may protrude abovegrade near the alignment; however, these structures would be small in size and would not obstruct emergency response or evacuation. The City's Local Hazard Mitigation Plan would proceed and be implemented with or without the proposed project. Impacts to emergency response plans and evacuation plans would be less than significant.

h) Would the project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Less Than Significant Impact. The proposed project is generally located in an urbanized environment with little potential for wildland fires. The northern terminus of the project alignment (at Devonshire Street) is approximately 0.7 mile south of the southern boundary of a designated Very High Fire Hazard Severity Zone (VHFHSZ), associated with the foothills of the Santa Susana Mountains to the north of the alignment. The potential staging area falls within this zone. This area is within a Local Responsibility Area (not a State Responsibility Area), meaning that the local government is responsible for fire protection. The nearest

VHFHSZ within a State Responsibility Area is north of SR-118 and approximately 0.5 miles north of the potential staging area (CAL FIRE 2019). The Pierce College campus, which is located at the southeast corner of the De Soto Avenue / Victory Boulevard intersection, is within a VHFHSZ mapped by the City (City of Los Angeles 2019; CAL FIRE 2019). As such, the proposed project is located partially within a VHFHSZ and is within the vicinity of a State Responsibility Area for wildfires. Potential wildland fire hazards could occur if the project were to introduce additional people or structures to an area that is susceptible to wildland fire hazards, if the project were to substantially impair an adopted emergency response plan or emergency evacuation plan within or near a fire hazard zone, if the project were to exacerbate wildfire risks, and/or if the project were to expose people or structures to post-fire hazards (e.g., landslides and flooding). While the project is in the vicinity of potential fire hazard areas, it is not expected to expose people or structures to a significant risk of loss, injury, or death involving wildland fire, nor is it expected to exacerbate the potential for wildfire to occur. Construction in each work area along the alignment would be temporary and would occur within an existing roadway that is surrounded by urban development. Activities within the potential staging area would consist primarily of vehicle parking and storage. While vehicle use and additional human activity in an area could increase the risk of fire ignition, the staging area is generally cutoff from the larger wildland areas to the north. A major freeway (SR-118) is located to the north, a covered reservoir is to the east, residential development is to the south, and a major roadway (De Soto Avenue) is to the west. As such, while the potential staging area is in the vicinity of wildland areas, it is isolated from those areas by major thoroughfares and development. Additionally, the City's Fire Code has brush clearance requirements for properties within VHFHSZs. It is expected that the De Soto Reservoir property (including the portion that may be used for construction staging for this project) has been and would continue to be maintained such that fire ignition hazards are minimized. Furthermore, active construction would not occur at the staging area, which would also reduce the potential for fire risk. For these reasons, project construction is unlikely to cause fuel ignition or to expose workers to wildland fire hazards. Furthermore, the project does not introduce new structures to the area that could be exposed to wildland fire hazards. 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. Operation of the replaced pipelines would occur passively below ground with little, if any, potential to cause or exacerbate wildland fires or their impacts to people or structures in the vicinity of the proposed project alignment. As explained under Section 3.8(g), the proposed project is not expected to substantially impair an adopted emergency response plan or emergency evacuation plan. As such, construction and operation of the proposed project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, either directly or indirectly. Therefore, impacts would be less than significant.

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3.9 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☒	☐
e) 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?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard	☐	☐	☐	☒

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

a) Would the project violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. Water quality impacts could occur if construction activities in the project area resulted in spilled or leaked petroleum products and/or entrainment of sediment, debris, or other construction-related materials into stormwater runoff. In addition, the project may involve certain non-stormwater discharges, including trench dewatering discharges and hydrostatic testing discharges, that, if improperly performed, could contribute pollutants to the local storm drain system or receiving waters.

LADWP requires its workers and construction contractors to adhere to standard site management practices and applicable water quality regulations, which collectively would avoid or substantially minimize potential threats to water quality. The closest creek to the project site is Browns Creek Channel, which would be avoided using a trenchless construction method (pipe jacking). At the jacking location, Browns Creek Channel is encased in a concrete flood control channel. The project would be located near the Kelvin Channel, at the intersection of De Soto Avenue and Victory Boulevard. The Kelvin Channel is an underground channel south of Victory Boulevard and daylights to a reinforced cement concrete channel north of Victory Boulevard. The project alignment and much of the surrounding areas are paved and, therefore, do not serve as major groundwater recharge areas.

To avoid adverse impacts on water quality, the project would implement standard site management practices (e.g., perimeter controls, storm drain inlet protection, maintaining a clean and orderly work area, etc.) and conduct construction activities in accordance with the statewide Construction General Permit (SWRCB Order No. 2009-0009-DWQ/CAS000002, as amended). Where applicable, LADWP and/or its construction contractor would submit all permit registration documents to the SWRCB (including a SWPPP) which would demonstrate compliance with linear underground project requirements (Type 1). The SWPPP would include all applicable best management practices (BMPs) necessary to meet discharge prohibitions, effluent

limitations, and other performance standards specified in the permit. The following list includes examples of BMPs that would be implemented during construction of the project:

- Excavated or disturbed soil would be kept within a controlled area surrounded by a perimeter barrier that may entail silt fences, hay bales, straw wattles, or a similarly effective erosion control technique that prevents the transport of sediment from a soil stockpile.
- Storm drain inlets in the construction area would be surrounded by gravel bags or other suitable method of filtration.
- All stockpiled material would be covered or contained in such a way that eliminates off-site runoff from occurring.
- All potential hazardous wastes would be contained, transported, and disposed of in accordance with applicable regulations.
- Construction work areas would be regularly swept and kept clean, orderly, and free of trash.
- Upon completion of construction activities, excavated soil would be replaced and the area restored to pre-construction conditions.
- All authorized non-storm water discharges would be identified in the SWPPP along with BMPs that would be implemented to eliminate or reduce pollutants, which may include use of settling ponds or screens to reduce suspended sediment loads.

The specific location and type of BMPs to be implemented would be outlined in the SWPPP, which must be prepared by a qualified SWPPP professional. Construction would not begin until a waste discharge identification number and letter of coverage has been received from the SWRCB. Compliance with the Construction General Permit and the associated SWPPP prepared for the project would result in less than significant impacts to water quality during construction excavation.

Construction may also require dewatering in certain areas if high groundwater is encountered during excavation. As explained in Section 2.3, groundwater would be removed during the excavation of the trenches, usually by pumping it from the ground through dewatering wells that have been drilled along the alignment. The extracted groundwater would be treated for any contaminants, if present, before being discharged to the storm drain system or to the sewer system in accordance with RWQCB permit requirements. (As explained in Section 3.8(d), there is some potential for contaminated groundwater along the alignment.) LADWP would file a Notice of Intent to comply with the Waste Discharge Requirements for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters, Order No. R4-2018-0125, NPDES No. CAG994004). LADWP would be required to comply with all applicable conditions of this permit.

In addition to stormwater runoff and dewatering discharges, construction may involve other sources of discharge water. Prior to operation, the new pipelines would be hydrostatically tested and disinfected with

chlorine. As described in Section 2.3, hydrostatic test water and disinfectant water would be discharged directly into the stormwater or sewer systems. Additionally, the pipeline segments that are being decommissioned may need to be flushed of water prior to backfilling. These actions would need to comply with the provisions of the Construction General Permit. Compliance with the provisions of the Construction General Permit would ensure that the processes of hydrostatic testing and disinfecting the new pipeline segments, as well as flushing the decommissioned pipeline segments, would not violate water quality standards or waste discharge requirements.

Once constructed, the replaced pipelines would be located underground, and the work sites would be returned to pre-construction conditions. As the project would not involve changes in impervious surfaces or new operational discharges, operation of the project would not be associated with increases in stormwater runoff, polluted runoff, or other types of water quality impacts. The water supplied by the proposed project would meet all applicable water quality standards. Based on the type and magnitude of activities anticipated during project construction and operation, the proposed project would not otherwise substantially degrade surface or ground water quality. Impacts would be less than significant.

b) Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)?

Less Than Significant Impact. The proposed project would have the potential to deplete groundwater supplies if it would result in increased water usage from groundwater sources to the extent that such sources would be compromised. The project could also have an adverse effect on groundwater if it would prevent water from infiltrating into the ground and replenishing groundwater supplies. During construction, dewatering may occur if groundwater is encountered during trenching and excavation activities. However, dewatering would be temporary, limited to the construction period, and would not occur in quantities that could substantially deplete groundwater supplies or interfere with groundwater recharge. The proposed project would serve to increase the reliability of the existing LADWP water supply system and would help accommodate future operational needs. While the project would upsize the portions of pipeline that are proposed for replacement, the upsized pipes would be similar in size to potions that have been recently replaced. Further, the purpose of upsizing is to increase the reliability of the water distribution system in the project area. The replaced pipelines would serve existing consumers in LADWP's service area, and, therefore, would not involve an increase in demand for groundwater. For these reasons, the proposed project would not cause increased groundwater pumping such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table. The proposed project would occur within existing, paved roadways that extend through developed areas. During construction, some pavement would be temporarily removed from the roadways to allow for installation of the replacement trunk line segments. Once construction is complete,

the excavated areas would be repaved. As such, no change in impervious surfaces would occur with the potential to change groundwater infiltration rates. Therefore, the project would not deplete groundwater supplies or interfere substantially with groundwater recharge such that the project would impede sustainable groundwater management. 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, in a manner which would result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. The project alignment extends across Browns Creek Channel and would be situated near the Kelvin Channel. However, the proposed project would not alter the course of these channels, permanently or temporarily. The pipeline would be tunneled underneath Browns Creek Channel. North of Victory Boulevard, a small portion of the alignment would extend adjacent to the Kelvin Channel, where it daylights north of the Victory Boulevard/De Soto Avenue intersection. However, the Kelvin Channel is contained within a concrete channel and is separated from the roadway by a chainlink fence and a sidewalk. As such, proposed project activities are unlikely to adversely affect the Kelvin Channel. Additionally, the project would avoid the underground portions of the Kelvin Channel within the Victory Boulevard/De Soto Avenue intersection. All portions of the project area that are disturbed during construction would be restored to pre-construction conditions once construction is complete. Project construction activities would not include earthmoving or grading sufficient to alter topography or change drainage patterns. As such, site conditions during project operation would be similar to existing conditions, and operation would not result in increased erosion or siltation in the area. For these reasons, impacts would be less than significant. Refer to Section 3.9(a) above for a discussion of construction related impacts as related to erosion and siltation.

d) 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 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. The project alignment extends under Browns Creek Channel and would be situated near the Kelvin Channel. However, the proposed project would not alter the course of these channels, permanently or temporarily, as described under Section 3.9(c). All portions of the project area that would be disturbed during construction would be restored to pre-construction conditions once construction is complete. Project construction activities would not include earthmoving or grading sufficient to alter topography or change drainage patterns. Site conditions would be generally similar to existing conditions during project operation. As such, operation would not result in increased potential for flooding. For these reasons, impacts would be less than significant.

e) Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. Project construction would result in temporary, intermittent increases in discharges due to construction dewatering, hydrostatic testing, pipeline disinfection, and flushing the decommissioned pipeline segments. These discharges may be released to the storm drainage system or to the local sewer system. If they are released to the storm drainage system, construction of the project could result in temporary increases in runoff to the storm drain. In the event that the sources of discharge are contaminated, construction of the project could also result in temporary increases in polluted runoff. The potential effects of each of these discharges are described below, along with an explanation of how the discharges would be handled so as not to adversely affect the stormwater drainage system or create a substantial source of polluted runoff.

Construction dewatering would be required in the event that groundwater is encountered during excavation of the trenches that are required to install the replacement piping. Based on depth to groundwater along the alignment, groundwater could be encountered during excavation near the intersection of De Soto Avenue and Victory Boulevard. Discharges of groundwater would be limited in location, duration, and volume and would be of a negligible amount when compared to the capacity of the storm drain system. Furthermore, in the event that non-stormwater discharges to the storm drain system are expected to coincide with a major storm event, LADWP or its construction contractor would coordinate with the City's Bureau of Engineering Stormwater Division. Coordination would help prevent overflows or exceedances of the storm drainage system during any storm events that may occur during project construction. For these reasons, dewatering discharges are not expected to exceed the capacity of the stormwater drainage system. However, groundwater in the project area has the potential to contain water pollutants and contaminants. In the event that the groundwater being removed from construction work areas is suspected to be contaminated, as evidenced by staining or odors, or proximity to a known release site, it could temporarily introduce a source of polluted runoff. However, discharges of groundwater during construction would be required to comply with the applicable provisions of the General NPDES Permit for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters. Any extracted groundwater would be tested for contaminants and, if present, would be treated before being discharged, pursuant to the permit requirements.

Hydrostatic testing, pipeline disinfection, and flushing of the decommissioned pipe segments would be conducted during the construction process. The total amount of water that would be discharged over the course of construction would be approximately 5 million gallons (this includes hydrostatic test water and water used for disinfection). While hydrostatic tests, pipeline disinfection, and flushing could result in temporary influxes of water to the storm drain system, these discharges would be temporary and would be limited to the construction period. As such, these discharges would not be expected to exceed the capacity of the storm drainage system and would be required to comply with applicable permitting provisions, as described in Section 3.9(a). If non-stormwater discharges to the storm drain system are expected to coincide

with a major storm event, LADWP or its construction contractor would coordinate with the City's Bureau of Engineering Stormwater Division. Coordination would help prevent overflows or exceedances of the storm drainage system during any storm events that may occur during project construction. While hydrostatic testing water and water flushed from the decommissioned pipeline segments is not expected to be contaminated, compliance with the conditions of applicable permits would ensure that these discharges would not contribute to water pollution. Chlorine or other disinfectants present in the water used for disinfecting the new pipeline segments may need to be removed prior to discharge. Removal of disinfectants would occur in compliance with the provisions of the discharge permitting described in Section 3.9(a). Due to the temporary nature of construction-related increases in discharges to the storm drain system, and due to required compliance with the applicable discharge permits, non-stormwater discharges during construction would not have substantial, adverse effects on the storm drain system and would not create a substantial new source of polluted runoff.

Operation of the proposed project would be a closed system that would not create or contribute to runoff water. All portions of the project area that would be disturbed during construction would be restored to pre-construction conditions once construction is complete. As such, site conditions during project operation would be similar to existing conditions, and the amount of runoff and runoff pollutants would not differ substantially compared to existing conditions. Impacts would be less than significant.

f) Would the project otherwise substantially degrade water quality?

No Impact. Based on the type and magnitude of activities anticipated during project construction and operations, the proposed project would not otherwise substantially degrade water quality. Implementation of the SWPPP and standard construction BMPs would protect water quality to the extent practicable. No impact would occur.

g) Would the project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The proposed project does not include the development of housing. Therefore, no impact would occur.

h) Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. A section of the Union Pacific Railroad alignment that crosses Mason Avenue is within a 100-year flood hazard area. This area extends across the project alignment, between Plummer Street and Nordhoff Street and is limited to the railroad alignment. No other areas of the project are within or adjacent to a 100-year flood hazard area (DWR 2019). The construction BMPs described in Section 3.9(a) would minimize the potential for flooding attributable to the project and would also minimize the potential for project-related pollutants to contaminate floodwater, in the unlikely event of flooding in the project area.

Once construction is complete, no permanent structures that could impede or redirect flood flows would be associated with the proposed project. As such, no impact would occur.

i) Would the project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. As stated in Section 3.9(h), a portion of the project alignment crosses a 100-year flood hazard area that extends along the Union Pacific Railroad alignment. The project alignment is approximately 2 miles east of the Chatsworth Reservoir and 0.8 mile west of Monteria Lake. Additionally, the potential construction staging area is adjacent to a covered reservoir (the De Soto Reservoir). There are also a number of creeks in the project vicinity that are controlled by levees, including Browns Creek Channel, Santa Susana Pass Wash, Limekiln Canyon Wash, and the Los Angeles River. The proposed alignment passes underneath Browns Creek Channel and adjacent to Kelvin Channel and is located 0.9 miles west of the Limekiln Canyon Wash and 1 mile east of the Santa Susana Pass Wash. The intersection work at De Soto Avenue and Victory Boulevard would occur approximately 0.5 miles south of the Los Angeles River (DWR 2019). As such, the proposed project is within the vicinity of various levees and contained waterbodies that could be subject to failure. However, the proposed project would not increase the risk of inundation over existing risks, since the proposed project would not involve new populations or sizeable aboveground structures having the potential to redirect or impede flood flows. Rather, the project would involve installation of a new underground pipeline. Even in the event of flooding, the proposed pipeline would not be affected, since it would be located underground. In the unlikely event that inundation were to adversely affect or compromise the pipeline, it would not release water pollutants or hazardous chemicals to the environment, since the pipeline would convey potable water. As such, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of failure of a levee or dam.

In the unlikely event the replacement pipe segments were to break, people and structures in the project area could experience flooding associated with release of the potable water. However, safety valves throughout the water distribution system may be shut off (as deemed necessary by LADWP in response to a loss of pressure), which would isolate the break. The volume of potable water released in such an event would therefore be limited to the amount of water contained in the section of pipeline between the shut-off valves, which would not be expected to yield enough water to pose a significant risk to life or property. Furthermore, the proposed project would replace deteriorating segments of pipeline and would in fact reduce the potential for flooding associated with pipeline breakage. For these reasons, no impacts are expected to occur relative to flooding hazards.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. Seiches are earthquake-induced waves in enclosed bodies of water, such as lakes or reservoirs. There are several small reservoirs within the vicinity of the project; however, the project site is not located within any of the potential inundation areas mapped by the City of Los Angeles (City of Los Angeles 1994).

Additionally, the project involves replacement of pipelines. The pipelines would not be affected in the event of a seiche, since they would be located underground. The risk of a seiche affecting the project is therefore low.

A tsunami is a sea wave generated by an underwater seismic disturbance, such as sudden faulting or landslide activity. The project alignment is not within an area that could be potentially impacted by a tsunami as mapped by the City of Los Angeles (City of Los Angeles 1994). The project site is not located near any coastal areas. The project site is located approximately 12 miles inland from the Pacific Ocean, at an elevation of around 800 feet above mean sea level. The risk of a tsunami affecting the project site is low.

Mudflow is a response to heavy rainfall in steep terrain. There are hillside areas north of the project alignment, associated with the foothills of the Santa Susana Mountains. The potential staging area is located within a mapped hillside area (City of Los Angeles 1994). However, there are no mapped landslide hazard areas within the project alignment, the potential staging area, or immediately to the north of these locations (City of Los Angeles 1994; California Geological Survey 1998a, 1998b). This indicates that the project area and the slopes to the north are generally stable and are not expected to be prone to failure. Furthermore, the project alignment and surrounding areas are fully developed and do not contain any exposed slopes. The foothills of the Santa Susana Mountains north of the project area are either developed or vegetated. Further, the project area is separated from the foothills of the Santa Susana Mountains by SR-118.

For the reasons described above, the project is not located within areas that are at risk for inundation by a seiche, tsunami, or mudflow. Furthermore, the proposed project involves replacing underground pipelines. As such, the project would not introduce new residents to the area or sizable aboveground structures that could be affected by inundation, in the unlikely event that inundation were to occur in the vicinity of the project. In the unlikely event that an inundation event were to adversely affect or compromise the pipeline, inundation would not release pollutants to the environment, since the pipeline would convey potable water. No impacts would occur.

References

City of Los Angeles. 1994. *Safety Element Exhibit G – Inundation & Tsunami Hazard Areas in the City of Los Angeles* and *Safety Element Exhibit C – Landslide Inventory & Hillside Areas*. 1994. Accessed August 30, 2019. http://cityplanning.lacity.org/index.htm.

California Geological Survey. 1998a. *Earthquake Zones of Required Investigation – Oat Mountain Quadrangle*. Earthquake Fault Zones Official Map released January 1, 1976. Seismic Hazard Zones Map released February 1, 1998. Accessed August 30, 2019. http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm.

California Geological Survey. 1998b. *Earthquake Zones of Required Investigation – Canoga Park Quadrangle*. February 1, 1998. Accessed August 30, 2019. http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm.

DWR (Department of Water Resources). 2019. *Best Available Maps*. Accessed August 29, 2019. http://gis.bam.water.ca.gov/bam/.

3.10 Land Use and Planning

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

a) Would the project physically divide an established community?

No Impact. The project alignment is located within an existing roadway. During construction, portions of the roadway would be closed, and some construction work and staging activities may also occur along adjacent sidewalks, at some adjacent properties, and at LADWP's De Soto Reservoir property. Construction activities associated with the proposed project may create a temporary nuisance to residents and employees in the communities surrounding the project alignment. However, two-way access within the roadway would be maintained during construction, and access to private properties along the roadway would also be maintained. Once construction is complete, the project would not cause any divisions and would not restrict access, since the project would operate underground. For these reasons, the proposed project would not physically divide an established community. No impact would occur.

b) Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed project is located within the Chatsworth–Porter Ranch Community Plan Area and the Canoga Park–Winnetka–Woodland Hills–West Hills Community Plan Area within the City of Los Angeles. A portion of the project would also occur within the Warner Center 2035 Specific Plan area. The project would also be subject to the City of Los Angeles General Plan. The project's consistency with these land use plans and policies is described in the subsections below. The proposed project would also be subject to applicable portions of the Los Angeles Municipal Code.

Chatsworth–Porter Ranch Community Plan

The provisions of the Chatsworth–Porter Ranch Community Plan primarily pertain to development patterns, transportation, and recreational facilities and do not apply to public works projects, such as the proposed pipeline replacements. However, several policies and programs related to environmental effects are set forth that are potentially applicable to this project. The "Service Systems" section of the community plan states that "The proposed facilities shown on this Plan are to be developed in accordance with the standards for need, site area, design, and location as expressed in the Service Systems Element of the General Plan. (See individual technical elements for specific standards.) Such development should be sequenced and timed to provide a workable, efficient, and adequate balance between land use and service facilities at all times" (City of Los Angeles 1993). While the proposed pipeline replacements are not specifically identified in the community plan, this project has been identified by LADWP as an improvement that is necessary to increase the reliability, operational flexibility, and safety of potable water service in the San Fernando Valley area. As such, the proposed project is being undertaken to meet the needs of existing land uses and population and to increase safety and reliability of service facilities in the community plan area.

The "Public Improvements – Recreation, Parks, and Open Space" section of the community plan states that "a minimum 100-foot buffer zone should be designated from the top of a channel bank for all riparian habitats. Projects that affect wetlands or natural waterways should comply with requirements of the California Department of Fish and Wildlife and U.S. Army Corps of Engineers" (City of Los Angeles 1993). The proposed project would extend under the Browns Creek Channel and near the Kelvin Channel. Both channels are concrete near the alignment (with Kelvin Channel undergrounding south of Victory Boulevard), and neither are naturalized waterways or wetland features. Browns Creek Channel does not support vegetation near the project alignment, and Kelvin Channel supports minimal scattered riparian vegetation near the project alignment, where it daylights north Victory Boulevard. However, due to the proposed construction activities at the De Soto Avenue/Victory Boulevard intersection, it is unlikely that construction would be limited to 100 feet from the Kelvin Channel. However, the channel is isolated from surrounding land uses with fencing. As such, disturbance to any sparse vegetation that may be present in this channel would not occur. As described in Section 2.6 of this document, the proposed project would likely require a Section 408 permit from the U.S. Army Corps of Engineers. LADWP would be required to comply with the conditions of the permit. It is not anticipated that a permit from the California Department of Fish and Wildlife would be required for the project.

Canoga Park–Winnetka–Woodland Hills–West Hills Community Plan

The overall intent of the Canoga Park–Winnetka–Woodland Hills–West Hills Community Plan is the "promotion of an arrangement of land uses, streets, and services which will encourage and contribute to the economic, social and physical health, safety, welfare, and convenience of the people who live and work in the community. The Plan also guides development to create a healthful and pleasant environment." The proposed

project would comply with this overall intent by increasing the reliability, operational flexibility, and safety of LADWP's water system in the area, which would support the health and safety of the people who live and work in the community. The plan sets forth numerous policies for developing, maintaining, and improving residential, commercial, and industrial development. The plan also contains policies for providing adequate recreational and park facilities, schools, libraries, police services, fire services, and transportation facilities. These policies do not pertain to the proposed project, as the proposed project involves improvements to potable water infrastructure and would not affect development of residential, commercial, or industrial uses or the development and maintenance of public services. In the category of transportation, the plan states that "it is the City's objective that the traffic level of service (LOS) on the street system in the community not exceed LOS E." The plan also sets forth an objective stating "To the extent feasible and consistent with the Mobility Plan 2035's and the Community Plans' policies promoting multi-modal transportation and safety, comply with Citywide performance standards for acceptable levels of service (LOS) and insure that necessary road access and street improvements are provided to accommodate traffic generated by new development." While the proposed project does not involve new development, construction may temporarily impede access in some areas and may add vehicle trips to the community plan area with the potential to temporarily affect LOS at intersections within or adjacent to the project area. Because the proposed project's effects to access and LOS would only occur during construction, such effects would not permanently conflict with the community plan's policies. Furthermore, as described in Section 3.16, the potential transportation effects of the project would be minimized to the extent practicable through best management practices and implementation of mitigation measures. The proposed project would not conflict with or interfere with the implementation of any other provisions of the community plan, such as the urban design guidelines and the provisions for development patterns and public services, which do not pertain replacement or operation of potable water pipelines (City of Los Angeles 1999a).

Warner Center 2035 Specific Plan

The proposed intersection work at De Soto Avenue and Victory Boulevard would be located within the boundaries of the Water Center 2035 Specific Plan. The overall purpose of the specific plan is to "create a vital mixed-use, transit-oriented district for the plan area and surrounding communities" (City of Los Angeles 2013). The proposed project would involve replacement of potable water trunk lines. Once the construction activities required for replacing segments of the existing trunk lines are complete, the affected roadways would be returned to their original conditions. As such, the proposed project would not conflict with mixed-used or transit-oriented developments in the specific plan area. Implementation of the development standards, design guidelines, and development patterns set forth in the Specific Plan would proceed with or without the proposed project. Furthermore, the proposed replacements to potable water pipelines in this area would improve the reliability, operational flexibility, and safety of the potable water system, thereby supporting existing and future implementation of the specific plan.

City of Los Angeles General Plan

The City of Los Angeles General Plan contains several elements that set forth policies for avoiding or mitigating environment effects, including the Air Quality Element, Conservation Element, Noise Element, and Safety Element. Many policies pertain to land use patterns and commercial, residential, industrial, or open space land use and development and, therefore, do not apply to public works projects such as the proposed pipeline replacements. However, there are a number of policies that apply to construction projects in general. Examples of these policies are listed below (City of Los Angeles 1992, 1999b, 2001). The proposed project would not conflict with these policies.

- Air Quality Policy 1.3.1: Minimize particulate emissions from construction sites.
- Noise Objective 2: Reduce or eliminate nonairport related intrusive noise, especially relative to noise sensitive uses.
- Noise Policy 2.2: Enforce and/or implement applicable city, state, and federal regulations intended to mitigate proposed noise producing activities, reduce intrusive noise and alleviate noise that is deemed a public nuisance.
- Conservation Objective (Cultural Resources): Protect the City's archaeological and paleontological resources for historical, cultural, research, and/or educational purposes.

The proposed project would create construction-related air pollutant emissions and would also generate noise during construction near noise-sensitive uses. However, as described in Sections 3.3 and 3.12, these effects would be minimized to the extent practicable through compliance with regulations and/or implementation of mitigation measures. Regarding the conservation of archaeological and paleontological resources, the proposed project involves excavation of soils and therefore has the potential to uncover previously undiscovered resources. However, as explained in Section 3.5, mitigation measures have been set forth to minimize the potential for previously undiscovered resources to be adversely affected by the project. For the reasons described above, the proposed project would not conflict with the environmental policies set forth in applicable land use plans. No impact would occur.

c) Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The Chatsworth–Porter Ranch Community Plan and the Canoga Park–Winnetka–Woodland Hills–West Hills Community Plan do not designate any portions of these respective community plan areas as being within a habitat conservation plan (City of Los Angeles 1993, 1999a). Furthermore, the project area is not within any of the regional conservation plans designated by the state (CDFW 2019). Therefore, the proposed project would not conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plans. No impact would occur.

References

CDFW (California Department of Fish and Wildlife). 2019. *California Natural Community Conservation Plans* [map]. July 2019. Accessed August 30, 2019. https://www.wildlife.ca.gov/Conservation/Planning/NCCP.

City of Los Angeles. 1992. "Air Quality Element" in *City of Los Angeles General Plan*. Adopted November 24, 1992. Accessed August 30, 2019. https://planning.lacity.org/GP_elements.html.

City of Los Angeles. 1993. *Chatsworth–Porter Ranch Community Plan*. Last updated September 7, 2016. Adopted September 4, 1993. Accessed August 30, 2019. https://www.ourla2040.org/community-plans.

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3.11 Mineral Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 California Department of Conservation, Division of Oil, Gas, and Geothermal Resources, there are no oil, gas, geothermal, or other known wells within the project alignment or the potential staging area. There are two plugged dry holes within approximately one block of Mason Avenue. Dry holes are wellbores that have not encountered resources in economically producible quantities. Both of the dry holes within the project vicinity have been plugged (DOGGR 2019). As such, the proposed project would not interfere with oil, gas, or geothermal resource production. The Division of Mines and Geology (renamed the California Geological Survey in 2006) has mapped the project site within Mineral Resource Zone 1 and Mineral Resource Zone 3 for aggregate resources. Mineral Resource Zone 1 is defined as "areas where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence." Mineral Resource Zone 3 is defined as "areas containing mineral deposits the significance of which cannot be evaluated from available data" (Division and Mines and Geology 1981). The project site is located in a developed, urbanized area and does not support any mineral extraction activities. Due to the developed, urbanized nature of the project area and its surroundings, as well as the absence of known mineral resources as mapped by the state, project implementation would not result in the loss of availability of a known mineral resource of value to the region and residents of the state. No impacts to state or regionally important mineral resources 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 Los Angeles has not mapped any oil drilling areas within or adjacent to the project site (City of Los Angeles 1994). As such, the proposed project would not interfere with oil, gas, or geothermal resource production. The project alignment is not delineated as a locally important mineral resource recovery site in the General Plan (City of Los Angeles 1996). The project site is located in a fully urbanized area and does not support any mineral extraction activities. Due to the developed, urbanized nature of the project area and its surroundings, as well as the absence of significant mineral resources as mapped in the General Plan, project implementation is not anticipated to result in loss of availability of a known mineral resource of value to the region and residents of the state. No impacts to locally important mineral resources would occur.

References

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3.12 Noise

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☒	☐	☐
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
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 expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Background Information for the Noise Analysis

Existing Noise Conditions

The proposed project alignment would be within the right-of-way of City streets (i.e., Devonshire Street, Mason Avenue, Roscoe Boulevard, De Soto Avenue, and Victory Boulevard). Adjacent land uses are predominately commercial and residential. Existing ambient noise measurements were conducted on and near the project site to characterize the existing noise environment. The daytime, short-term (1 hour or less) attended sound level measurements were taken with a Larson Davis SoundTrack LxT® sound-level meter, and with a SoftdB Piccolo sound-level meter. These sound-level meters meet the current American National Standards Institute standard for a Type 1 (precision) sound-level meter and a Type 2 (general purpose) sound-level meter, respectively. The calibration of the sound level meters was verified before and after the measurements were taken, and the measurements were conducted with the microphones positioned approximately five feet above the ground.

Noise measurements were conducted at seven locations near noise-sensitive receptors adjacent to or near the project site. The measurement locations are shown in Figure 3.12-1, and the measured average noise levels and measurement locations are provided in Table 3.12-1. As shown in Table 3.12-1, average noise levels ranged from approximately 67 A-weighted decibels (dBA) equivalent continuous sound level (L_{eq}) (at locations ST6 and ST7) to approximately 72 dBA L_{eq} (at location ST2). The primary noise sources at the measurement locations consisted of traffic along the adjacent roads; secondary noise sources included intermittent, distant aircraft noise, car horns, and car alarms.

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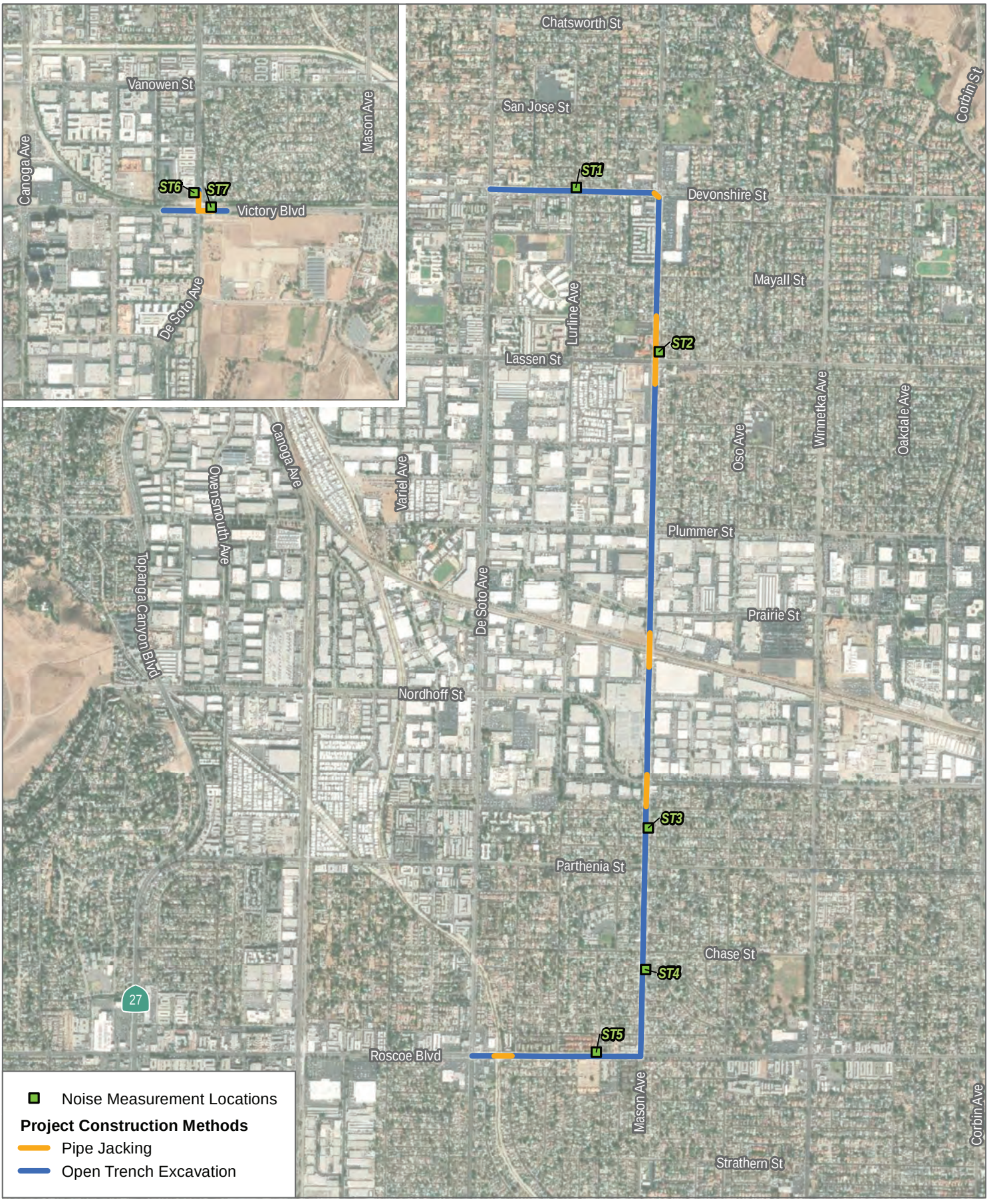

SOURCE: Esri and Digital Globe, Open Street Map 2019

Los Angeles Department of Water & Power

0 1,000 2,000 Feet

FIGURE 3.12-1

Noise Measurement Locations

De Soto Trunk Line Project

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Table 3.12-1. Measured Noise Levels

Receptors	Location/Address	Date	Time	L_{eq} (dBA)	L_{max} (dBA)
ST1	20655 Devonshire Street Chatsworth, CA 91311	September 5, 2019	11:06 a.m. – 11:21 a.m.	70.9	88.0
ST2	9910 Mason Ave Chatsworth, CA 91311	August 28, 2019	12:13 p.m. – 12:28 p.m.	71.9	81.3
ST3	20456 Acre Street, Winnetka, CA 91306	August 28, 2019	11:47 a.m. – 12:07 p.m.	70.7	82.6
ST4	20452 Rodax Street, Winnetka, CA 91306	August 28, 2019	11:39 a.m. – 11:54 a.m.	70.3	82.1
ST5	20601 Cozycraft Avenue, Winnetka, CA 91306	August 28, 2019	11:16 a.m. – 11:31 a.m.	70.3	87.4
ST6	6527 De Soto Ave Canoga Park, CA 91303	October 15, 2017	12:25 p.m. – 12:35 p.m.	67.2	80.4
ST7	Northeast corner of victory Blvd and De Soto Ave. North of Orange Line Busway.	October 15, 2017	12:35 p.m. – 12:45 p.m.	67	76.9

Notes: L_{eq} = Equivalent Continuous Sound Level (Time-Average Sound Level); L_{max} = Maximum Noise Level
Source: LADWP 2019 and Dudek 2017

City of Los Angeles Noise Ordinance

The City of Los Angeles regulates noise through several sections of its Municipal Code Section 41.40 (Noise Due to Construction, Excavation Work – When Prohibited), which establishes time prohibitions on noise generated by construction activity; Section 112.04 (Powered Equipment Intended for Repetitive Use in Residential Areas and Other Machinery, Equipment and Devices), which prohibits the use of loud machinery and/or equipment within 500 feet of residences and prohibits noise from machinery, equipment, or other devices that would result in an increase of more than 5 decibels (dB) above the ambient noise level at residences; and Section 112.05 (Maximum Noise Level of Powered Equipment or Powered Hand Tools), which establishes maximum noise levels for powered equipment and powered hand tools (i.e., 75 dBA at a distance of 50 feet for construction, industrial, and agricultural equipment between the hours of 7:00 a.m. and 10:00 p.m.). According to Section 41.40, no construction activity that might create loud noises in or near residential areas or buildings shall be conducted between the hours of 9:00 p.m. and 7:00 a.m. on weekdays, before 8:00 a.m. or after 6:00 p.m. on Saturday and national holidays, or at any time on Sunday.

Noise Analysis

a) Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant with Mitigation Incorporated. Implementation of the proposed project would result in two primary types of potential noise impacts: short-term (i.e., temporary) noise during construction,

and long-term noise during operation. Because operation of the replaced pipelines would be belowground and would be passive in nature (i.e., no pumps or other mechanized equipment other than for minimal maintenance activities, as occurs under existing conditions), long-term noise associated with the proposed project would be similar to existing conditions.

The major construction activities for the proposed project would consist of open-trench pipe installation, construction of jacking and receiving pits, and pipeline installation via jacking. Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. The nearest sensitive receptors to the project site are residences located as close as 20 feet from the project alignment. Because of the linear nature of the project, the amount of time that construction work would occur immediately adjacent to any one noise-sensitive receiver would generally be relatively short (typically, one to two days for open-trench pipeline installation). Furthermore, the length of time that open-trench pipeline construction work would be in general proximity (i.e., within several hundred feet) of any one noise-sensitive receiver would be one week or less. For pipe-jacking work, it is anticipated that work would take place for less than 6 months at any one of the jacking locations.

Construction of the proposed project would result in temporary localized increases in noise levels from on-site construction equipment, as well as from off-site trucks hauling construction materials. Noise generated by construction equipment would occur with varying intensities and durations during the various phases of construction. The typical maximum noise levels at a distance of 50 feet for various pieces of construction equipment anticipated to be used during construction are listed in Table 3.12-2. Note that these are maximum noise levels, not an average sound level. The equipment would operate in alternating cycles of full power and low power, thus producing noise levels that would ultimately fall below the maximum levels. The average sound level of the construction activity as a whole depends upon the amount of time that the equipment operates and the intensity of construction. As such, the average noise level during construction activity is generally lower, since maximum noise generation may only occur up to 50% of the time. Noise levels from construction operations decrease at a rate of approximately 6 dBA per doubling of distance from the source.

Table 3.12-2. Construction Equipment Noise Levels

Equipment Type	Maximum Noise Level dB(A) at 50 feet
Backhoe	80
Compactor	82
Concrete Mixer	85
Crane	83
Generator	81
Loader	85
Paver	89
Roller	74

Table 3.12-2. Construction Equipment Noise Levels

Equipment Type	Maximum Noise Level dB(A) at 50 feet
Truck	88
Saw	76

Source: DOT 2018.

Noise from the construction phase of the proposed project was estimated using the Federal Highway Administration Roadway Construction Noise Model (FHWA 2008). Input variables for the Roadway Construction Noise Model consist of the receiver/land use types, the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of hours the equipment typically works per day), and the distance from the noise-sensitive receiver. No topographical or structural shielding was assumed in the modeling of construction noise. Construction scenario assumptions, including phasing and equipment mix, were based on the project construction details described in Section 2.3 of this document and the CalEEMod default values developed for the Air Quality/Greenhouse Gas impacts analysis, when proposed project specifics were not known. Construction noise levels were assessed at two distances for each project phase. One represents the anticipated construction noise that may be experienced at the closest possible sensitive receptor (residences nearest to the proposed work areas). The second represents anticipated construction noise that may be experienced within the general vicinity of construction. Table 3.12-3 summarizes these estimated construction noise levels, with separate calculations provided for the different types of construction activities that would occur for this project. The input and output construction noise files are provided in Appendix D.

Table 3.12-3. Construction Noise Summary (dBA L_{eq})

Construction Activity	Construction Noise Level at Nearest Sensitive Receptor *20 feet*	Construction Noise Level in the Vicinity *250 feet*
Open-Trench Pipe Installation	88	73
Construction of Jacking and Receiving Pits	89	73
Pipeline Installation Via Jacking	88	70

Source: Appendix D

As shown in Table 3.12-3, the highest noise levels are predicted to occur during construction of the jacking and receiving pits, when noise levels from construction activities would be as high as 89 dBA L_{eq} at the nearest existing residences, approximately 20 feet away. At more typical distances of approximately 250 feet, construction noise would range from approximately 70 dBA L_{eq} to 73 dBA L_{eq}.

Although nearby off-site residences would be exposed to elevated construction noise levels, the exposure would be short term and would cease upon completion of project construction. It is anticipated that active construction associated with the proposed project would generally take place within the allowable hours per Section 41.40 of the City of Los Angeles Municipal Code (7:00 am through 9:00 pm Monday through Friday, 8:00 am through 6:00 pm on Saturdays, if weekend work is necessary, and would not occur on Sundays or national holidays). In the event that

construction is required to extend beyond these times, extended hours permits would be required. As such, construction would not violate City of Los Angeles standards for construction.

However, construction noise levels would be substantially higher than existing ambient daytime noise levels, particularly within 20 feet of the proposed construction activities (see Tables 3.12-1 and 3.12-3). Therefore, noise impacts from construction would be considered potentially significant. However, MM-NOI-1 (Construction Noise Reduction) and MM-NOI-2 (Notification) have been set forth to reduce construction noise associated with the proposed project and to ensure that nearby receptors are informed of construction activities. The effectiveness of the measures listed in MM-NOI-1 would vary from several decibels (which in general is a relatively small change) to ten or more decibels (which would be perceived as a substantial change). The range of effectiveness would vary based on the equipment in use, the original condition of the equipment, the specific location of the noise source and receiver, etc. Installation of a temporary noise barrier, for example, would vary in effectiveness depending upon the degree to which the line-of-sight between the source and receiver is broken. The noise reduction achieved by a barrier typically ranges from 5 to 10 dB. The noise reduction achieved by equipment silencers would range from several decibels to well over 10 decibels. Limiting equipment idling could reduce overall noise levels up to several decibels. However, the measures listed in MM-NOI-1, in conjunction, would result in a substantial decrease in construction noise. While MM-NOI-2 would not reduce construction noise levels, it would ensure that receptors in the project area are prepared for any nuisances that may occur and would allow them to plan accordingly. Upon implementation of MM-NOI-1 and MM-NOI-2, impacts would be less than significant with mitigation incorporated.

MM-NOI-1: Construction Noise Reduction

The Los Angeles Department of Water and Power and/or its construction contractor shall comply with the following measures during construction:

1. Construction activities shall not occur between the hours of 9:00 pm and 7:00 am Monday through Friday, 6:00 pm and 8:00 am on Saturday, or on Sundays or national holidays. In the event that construction is required to extend beyond these times, extended hours permits shall be required.
2. Pumps and associated equipment (e.g., portable generators etc.) shall be shielded from sensitive uses using local temporary noise barriers or enclosures or shall otherwise be designed or configured so as to minimize noise at nearby noise-sensitive receivers.
3. Staging of construction equipment shall not occur within 20 feet of any noise- or vibration-sensitive land uses.
4. All noise-producing equipment and vehicles using internal combustion engines shall be equipped with mufflers; air-inlet silencers where appropriate; and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specification. Mobile or fixed "package" equipment (e.g., arc-welders, air compressors) shall be equipped with shrouds and noise control features that are readily available for that type of equipment.

5. All mobile or fixed noise-producing equipment used for the project that are regulated for noise output by a local, state, or federal agency shall be in compliance with regulations.
6. Idling equipment shall be kept to a minimum and moved as far as practicable from noise-sensitive land uses.
7. Electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment, where feasible.
8. Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.
9. The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be used for safety warning purposes only.

MM-NOI-2: Notification

Effective communication with local residents shall be maintained prior to and during construction. Specifically, the Los Angeles Department of Water and Power shall inform local residents of the schedule, duration, and progress of the construction. Additionally, residents shall be provided contact information for noise- or vibration-related complaints.

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

Less Than Significant with Mitigation Incorporated. Construction activities may expose persons to excessive groundborne vibration or groundborne noise, causing a potentially significant impact. Caltrans has collected groundborne vibration information related to construction activities (Caltrans 2013). Information from Caltrans indicates that continuous vibrations with a peak particle velocity of approximately 0.1 inch/second begin to cause annoyance. Heavier pieces of construction equipment, such as bulldozers, have peak particle velocities of approximately 0.089 inch/second or less at a distance of 25 feet (DOT 2018).

Groundborne vibration typically attenuates over short distances. At the distance from the nearest residence to the construction area (approximately 20 feet) and with the anticipated construction equipment, the peak particle velocity would be approximately 0.124 inch/second. At the closest sensitive receptors, vibration levels could temporarily exceed the vibration threshold of potential annoyance of 0.1 inch/second; however, these vibration impacts would only occur intermittently during transitory pipeline construction activities. As described in Section 2.3, open trench pipeline construction would proceed at a rate of approximately 18 feet per day, limiting the duration of vibration exposure to one week or less at any sensitive receptor location along the alignment. No sensitive receptors were identified within 20 feet of the proposed pipe jacking locations; therefore, no vibration-related impacts are expected at these locations. Implementation of mitigation measure MM-NOI-1 would ensure that equipment staging does not occur within 20 feet of any sensitive receptors and MM-NOI-2 would ensure that sensitive receptors are notified of construction

activities and are provided contact information for noise- or vibration-related complaints. Implementation of these measures would reduce vibration impacts at sensitive receptor locations to a less than significant level.

Construction can also affect nearby buildings by inflicting damage from vibration. However, construction vibration associated with this project would not result in structural building damage. Building damage typically occurs at vibration levels of 0.5 inch/second or greater for buildings of reinforced-concrete, steel, or timber construction. (Damage thresholds for historic-era buildings are more stringent; see Appendix C for an analysis of vibration effects to historic-era buildings.) The heavier pieces of construction equipment used for this project would include backhoes, front-end loaders, and flat-bed trucks. Pile driving, blasting, or other special construction techniques would not be used for construction of the proposed project; therefore, excessive groundborne vibration and groundborne noise with the potential to adversely affect nearby buildings would not be generated. (See also Appendix C, which contains vibration analysis for historic-era buildings. The analysis shows that vibration from proposed project construction would not pose a risk to historic-era buildings along the project alignment.) Once operational, the project would not generate groundborne vibration. As such, no building damage would be expected to occur as a result of project-related vibration during construction or operation. Overall, upon compliance with MM-NOI-1 and MM-NOI-2, impacts would be less than significant with mitigation incorporated.

c) Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. The proposed project would replace existing potable water pipelines, and operation would occur passively belowground. Therefore, no substantial permanent increase in ambient noise levels would occur in the project vicinity above levels existing without the project. No impact would occur.

d) Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant with Mitigation Incorporated. As discussed above, the proposed project would result in temporary noise increases during the construction period. The temporary increases in ambient noise levels would vary depending on the location of the construction activities and the type of equipment being used. Temporary noise increases at adjacent noise-sensitive land uses from construction activities would be potentially significant, as explained in Section 3.12(a). However, with the implementation of MM-NOI-1 and MM-NOI-2, impacts from construction noise would be reduced below a level of significance, as described in Section 3.12(a). As such, impacts related to temporary or periodic increases in noise levels would be less than significant with mitigation incorporated.

e) Would the project be 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 expose people residing or working in the project area to excessive noise levels?

No Impact. The nearest airport to the project is the Van Nuys Airport, located approximately 5 miles east of the project area (Caltrans 2019). The proposed project area is located outside of the planning boundary of the Van Nuys Airport (County of Los Angeles 2003). As such, the project area is not located within a 2-mile radius of any public airport, and no airport land use plans apply to the site. Therefore, the project would not expose people residing or working in the project area to excessive noise related to public airports. No impact would occur.

f) Would the project be within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project area is not located within the vicinity of a private airstrip. Accordingly, no impacts related to exposing people residing or working in the project area to excessive noise levels related to private airstrips would occur.

References

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3.13 Population and Housing

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

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

No Impact. The proposed project would involve the replacement of portions of existing potable water trunk lines. The proposed project would not include construction or operation of any new residential or commercial land uses and, therefore, would not result in a direct population increase from construction of new homes or businesses. During the proposed construction activities, construction personnel would be required. The need for these workers would be accommodated within the existing and future labor market in the City and the surrounding Los Angeles metropolitan area. When the proposed project is operational, the proposed project would be unmanned, requiring only periodic maintenance, and would therefore not require permanent employees for operation. As such, implementation of the proposed project would not result in a direct increase in the population of the area due to increases in employment opportunities.

Expanded infrastructure has the potential to indirectly induce population growth. However, the proposed project involves the replacement of trunk lines that have generally been in place since the early 1900s. While some of the sections proposed for replacement would be upsized relative to existing conditions, the new size is generally consistent with the connecting segments that have recently been replaced. As such, the proposed project would bring aging trunk line segments into consistency with newer lines. The proposed project would increase the reliability, operational flexibility, and safety of the potable water system in the San Fernando Valley area. The proposed project would not increase the service capacity of the potable water system in the area such that new residents would be drawn to the San Fernando Valley. Therefore, the proposed project would not induce population growth either directly or indirectly, and impacts would not occur.

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

No Impact. The proposed project would not involve removal of existing housing. As such, the project would not displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. No impact would occur.

c) Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The proposed project would not displace people. As such, the project would not necessitate the construction of replacement housing elsewhere. No impact would occur.

References

None.

3.14 Public Services

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
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

No Impact. The need for new or altered fire facilities is typically associated with an increase in population. As described under Section 3.13, the proposed project would not alter population in the project area. Construction of the proposed project could have the potential to reduce access for emergency vehicles near

the work areas. However, all construction activities would be carried out in accordance with all applicable LADOT and Los Angeles Fire Department emergency access standards, and emergency access would be maintained during construction, as needed. Operation of the proposed project would be underground and would not require additional fire protection. As such, the proposed project would not substantially 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. No impact would occur.

Police Protection

No Impact. The need for new or altered police facilities is typically associated with an increase in population. As described under Section 3.13, the proposed project would not alter population in the project area. Construction of the proposed project could have the potential to reduce access for emergency vehicles near the work areas. However, all construction activities would be carried out in accordance with all applicable LADOT and Los Angeles Police Department emergency access standards, and emergency access would be maintained during construction, as needed. Operation of the proposed project would be passive and would not require additional police protection. As such, the proposed project would not substantially 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. No impact would occur.

Schools

No Impact. The need for new or altered school facilities is typically associated with an increase in population. As described under Section 3.13, the proposed project would not alter population in the project area. However, construction of the proposed project could have the potential to temporarily interfere with access to schools in the project area (namely, Sierra Canyon School, Saint John Eudes School, Chatsworth High School, Superior Street Elementary School, Limerick Avenue Elementary School, and Pierce College). Interferences may be associated with temporary increases in traffic due to construction worker trips and construction truck trips and/or obstructions along the roadway and sidewalks due to construction activities and staging. These effects would be temporary, and access to each school would be maintained through construction traffic control (see Section 3.16 for further details). Operation of the project would occur underground and would not affect local schools. For these reasons, the proposed project would not substantially 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 need for new or altered parks is typically associated with an increase in population. As described under Section 3.13, the proposed project would not alter population in the project area. Furthermore, there are no parks along the project alignment. The proposed project's northern terminus on Mason Avenue is about one block south of Mason Park. However, due to the distance between project construction and the park (approximately one

city block), the proposed project is not expected to substantially interfere with access to the park, nor is it expected to alter use of the park. As such, project construction would not create temporary effects to nearby parks. For these reasons, the proposed project would not substantially 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 3.13, the proposed project would not result in the need for libraries or other government administrative services to the extent that new or expanded facilities would be required No impact would occur.

References

None.

3.15 Recreation

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

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 proposed project's norther terminus on Mason Avenue is about one block south of Mason Park. However, due to the distance between project construction and the park (approximately one city block), the proposed project is not expected to substantially interfere with access to the park, nor is it expected to alter use of the park. Therefore, physical deterioration of facilities would not occur or be accelerated as a result of the proposed project. As discussed in Section 3.13, the proposed project would not result in population increases resulting in an increased need for park facilities. For these reasons, 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 does not include recreational facilities. As discussed in Section 3.13, the proposed project would not result in population increases resulting in a need for construction or expansion of recreational facilities. For these reasons, no impact would occur.

References

None.

3.16 Transportation and Traffic

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☒	☐	☐
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐
e) Result in inadequate emergency access?	☐	☒	☐	☐
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☒	☐	☐

Background Information for the Transportation and Traffic Analysis

Project Study Area

Figure 3.16-1 shows the project location and traffic analysis study area. The study area includes twelve major intersections, as listed below. These are the locations most likely to be impacted by the proposed project.

1. De Soto Avenue/Devonshire Street
2. Mason Avenue/ Devonshire Street

3. Mason Avenue /Mayall Street
4. Mason Avenue /Lassen Street
5. Mason Avenue /Plummer Street
6. Mason Avenue /Nordhoff Street
7. Mason Avenue /Parthenia Street
8. Mason Avenue /Chase Street
9. Mason Avenue/Roscoe Boulevard
10. Kelvin Avenue/Roscoe Boulevard
11. De Soto Avenue/ Roscoe Boulevard
12. De Soto Avenue/Victory Boulevard

Intersection Methodology

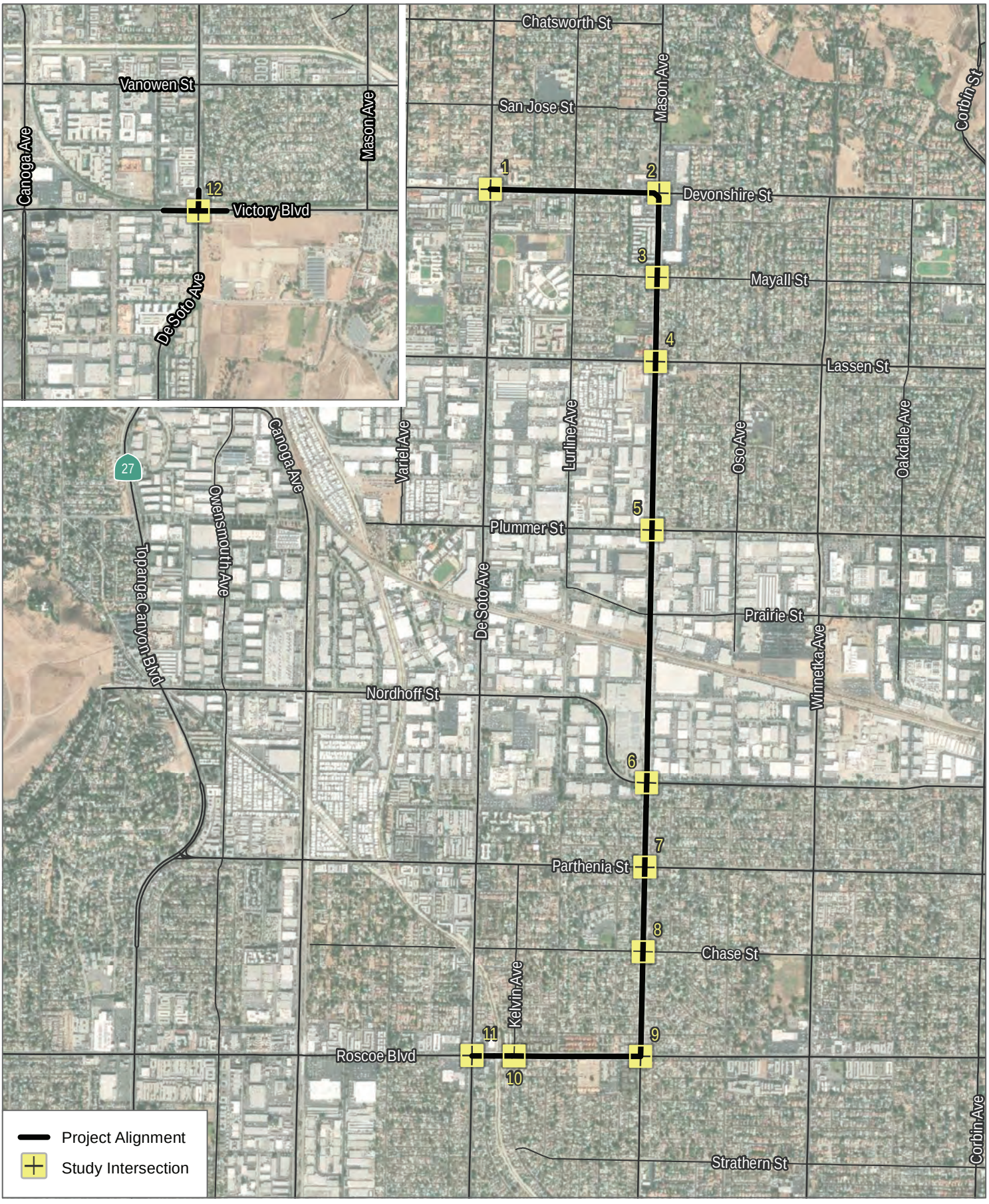
Per City of Los Angeles Department of Transportation (LADOT) *Traffic Impact Study Guidelines* (December 2016), the intersection evaluation methodology to assess transportation impacts is based on the Transportation Research Board Circular 212 Critical Movement Analysis (CMA) Planning Method for analyzing traffic operating conditions at study intersections. CMA is a method that determines the volume-to-capacity (V/C) ratio on a critical-lane basis and the LOS associated with each V/C ratio at an intersection.

The operational characteristics of an intersection are determined by calculating the intersection's LOS. The intersection as a whole and its individual turning movements are described alphabetically with a range of levels of service (LOS A through F), with LOS A indicating free-flow traffic and LOS F indicating extreme congestion and long vehicle delays (see Table 3.16-1).

Table 3.16-1. Level of Service Definitions using Critical Movement Analysis (CMA) Methodology

Level of Service	V/C Ratio	General Description
A	≤0.600	Free flow
B	0.601 to ≤0.700	Stable flow (slight delays)
C	0.701 to ≤0.800	Stable flow (acceptable delays)
D	0.801 to ≤0.900	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	0.901 to ≤1.00	Unstable flow (intolerable delay)
F	>1.00	Forced flow (jammed)

Notes: V/C = volume to capacity
Source: LADOT *Traffic Impact Study Guidelines*, 2016.



SOURCE: Esri and Digital Globe, Open Street Map 2019

LA DWP Los Angeles Department of Water & Power

0 1,000 2,000 Feet

FIGURE 3.16-1

Project Site Location and Study Area

De Soto Trunk Line Project

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Significance Criteria

The proposed project is located entirely within the City of Los Angeles and uses the significance criteria provided in the LADOT *Traffic Impact Study Guidelines* (December 2016). LADOT has adopted the following significance criteria to assess whether the addition of project trips would cause a significant impact on study area intersections: A significant impact would occur if the project-related increases in the V/C ratio would equal or exceed the thresholds shown in Table 3.16-2.

Table 3.16-2. Significance Criteria for Local Signalized Intersections

Level of Service	Final V/C Ratio	Project-Related Increase in V/C
C	0.701 to 0.800	Equal to or greater than 0.040
D	0.801 to 0.900	Equal to or greater than 0.020
E	0.901 or more	Equal to or greater than 0.010
F	Greater than 1.00	Equal to or greater than 0.010

Source: LADOT, *Traffic Impact Study Guidelines*, 2016.

Existing Conditions

The following presents a description of the existing street network conditions in the study area based on traffic counts collected in the project area.

Street Network

Characteristics of the existing street system in the study area are shown in Table 3.16-3, and Figure 3.16-2 shows the existing traffic control and geometrics at the study area intersections.

Table 3.16-3. Study Area Existing Street System Summary

Roadway	Street Classification	Posted Speed Limit (MPH)	Number of Travel Lanes	Parking	Sidewalks	Bicycle Lanes
De Soto Avenue	Boulevard II	40	4–6	Some sections/ Time restrictions	Yes	No
Mason Avenue	Avenue II	40	4	Some sections/ Time restrictions	Yes	No
Victory Boulevard	Boulevard I/ Boulevard II	40	6	No	Yes	Yes – Class I route
Roscoe Boulevard	Boulevard II	40	6	Some sections/ Time restrictions	Yes	No
Devonshire Street	Avenue I	40	4	Some sections	Yes	Yes – Class II route
Lassen Street	Avenue II	40	4	Yes	Yes	No

Table 3.16-3. Study Area Existing Street System Summary

Roadway	Street Classification	Posted Speed Limit (MPH)	Number of Travel Lanes	Parking	Sidewalks	Bicycle Lanes
Plummer Street	Avenue II	35-40	2-4	Yes	Yes	Yes – Class III route
Nordhoff Street	Boulevard II	40	6	Some sections/ Time restrictions	Yes	No
Parthenia Street	Avenue II	40	4	Yes	Yes	No

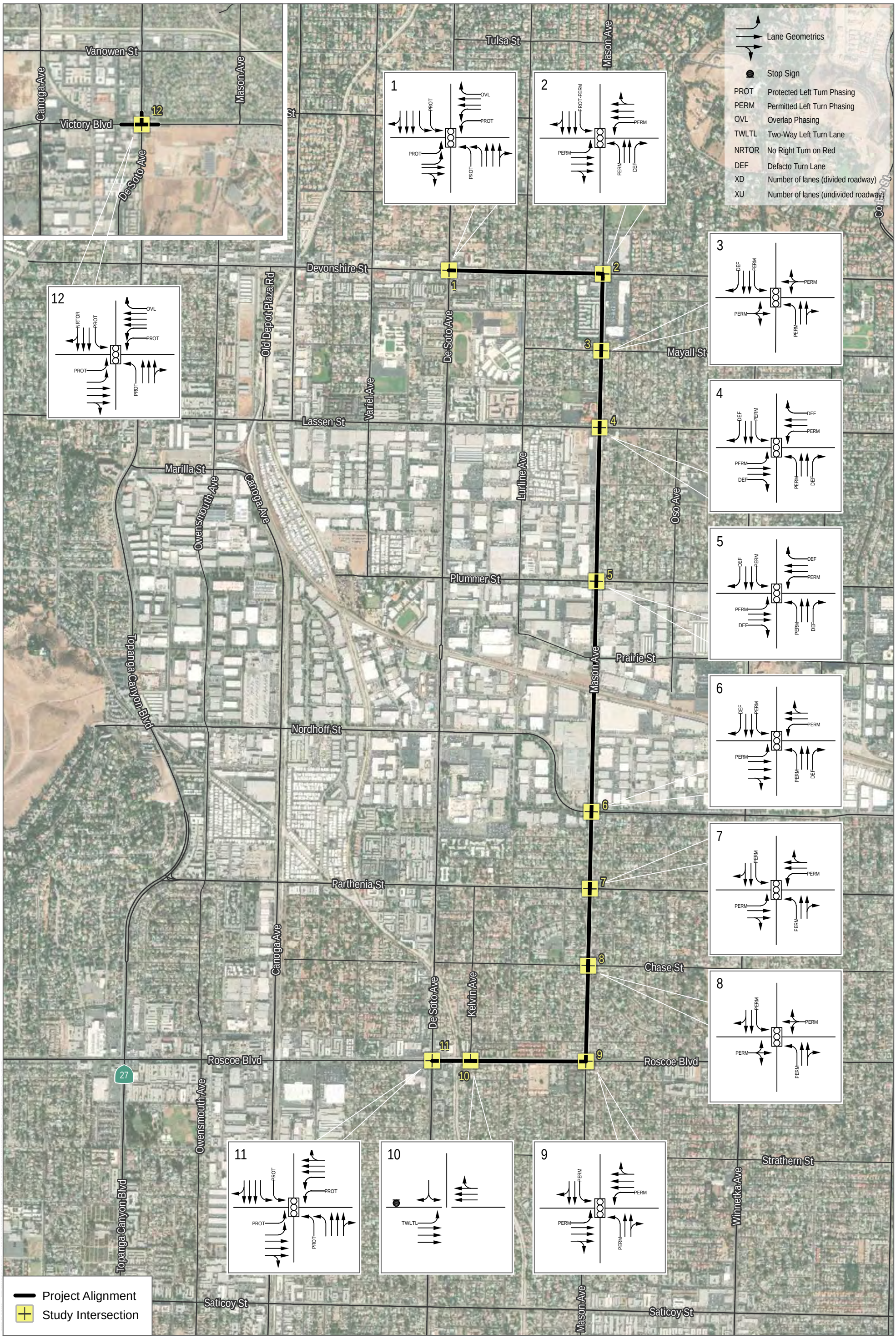
Source: City of Los Angeles 2015
Notes: MPH = miles per hour

Transit System

The LA Metro provides transit service in the project study area. LA Metro Route 243 provides bus service along Mason Avenue, north of Plummer Street. On weekdays, this service runs from 5:30 am through 8:30 pm, with service varying between half an hour to an hour, limited on weekends/holidays to every hour. LA Metro Route 244 provides bus service along the entirety of De Soto Avenue. On weekdays, this service runs from 4:56 am through 9:09 pm, with service every quarter-hour, limited on weekends/holidays to every hour. Routes 152, 353 and Route 787 also operate along De Soto Avenue. LA Metro Route 167 traverses Devonshire Street, enters De Soto Avenue, and then turns left onto Plummer Street. Service is provided every half-hour on weekdays and every hour on weekends/holidays. Several other LA Metro routes service corridors near the project alignment, including Route 158 (Devonshire Street), Routes 167 and 787 (Plummer Street), Routes 166 and 364 (Nordhoff Street), Routes 152 and 353 (Roscoe Boulevard), and Route 164 and the Orange Line along a separated busway (Victory Boulevard).

Traffic Volumes

Existing peak-hour turn movement counts at the study intersections were conducted in October 2017 and August 2019 per LADOT requirements. Worksheets for the raw peak-hour turn movement counts are provided in Appendix E. The intersection LOS analysis focuses on the weekday AM (7:00 am to 10:00 am) and PM (3:00 pm to 6:00 pm) peak periods. Figure 3.16-3 shows the existing AM and PM peak-hour traffic volumes, expressed in passenger car equivalents (PCE).



SOURCE: Esri and Digital Globe, Open Street Map 2019

FIGURE 3.16-2

Existing Traffic Controls and Geometrics

De Soto Trunk Line Project

Los Angeles Department of Water & Power

0 100 200 Feet

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(X) Weekday AM Peak Hour Traffic Volumes

X Weekday PM Peak Hour Traffic Volumes

1
(1,263)
981
(93) 186 (83) 179
(261) 302 (89) 140
(788) 736 (772) 658
(114) 121 (239) 134
(141) 131 (93) 92
(939)
1,406

2
(970)
596
(333) 123 (349) 151
(92) 140 (120) 241
(796) 1,000 (893) 709
(127) 140 (126) 101
(103) 173 (115) 122
(713)
1,301

3
(899)
823
(194) 65 (104) 33
(80) 65 (53) 36
(100) 24 (90) 8
(72) 42 (17) 2
(66) 35 (20) 17
(785)
1,624

4
(868)
629
(80) 101 (46) 87
(68) 137 (103) 133
(533) 638 (768) 535
(79) 42 (95) 80
(92) 89 (107) 266
(745)
1,407

5
(1,004)
748
(68) 35 (60) 90
(34) 161 (68) 148
(361) 599 (581) 350
(148) 100 (398) 121
(93) 77 (133) 206
(836)
1,380

6
(1,167)
952
(256) 104 (35) 69
(114) 266 (67) 69
(489) 1,093 (999) 568
(68) 258 (177) 194
(90) 87 (131) 83
(1,076)
1,041

7
(1,160)
1,109
(173) 131 (67) 167
(94) 139 (128) 100
(852) 1,033 (1,129) 752
(47) 49 (123) 86
(49) 62 (78) 97
(1,089)
973

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1,150
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(44) 20 (35) 19
(50) 30 (46) 13
(66) 29 (18) 15
(47) 35 (13) 24
(1,114)
1,136

9
(1,031)
912
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(174) 191 (108) 96
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(100) 118 (162) 84
(77) 95 (74) 128
(897)
917

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(251) 288 (129) 132
(1,025) 1,162 (1,106) 838
(85) 100 (202) 212
(95) 124 (159) 227
(960)
1,121

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(1,676)
851
(220) 171 (182) 109
(89) 366 (87) 145
(887) 1,520 (1,488) 1,069
(77) 145 (577) 218
(81) 54 (357) 365
(873)
1,261

Project Alignment
Study Intersection

SOURCE: Esri and Digital Globe, Open Street Map 2019

FIGURE 3.16-3

Existing AM/PM Peak Hour Traffic Volumes (PCE)

De Soto Trunk Line Project

Los Angeles Department of Water & Power

0 100 200 Feet

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Levels of Service

An intersection LOS analysis was prepared for the existing conditions using the CMA methodologies; Table 3.16-4 shows the results of the existing weekday peak-hour LOS analysis. As shown in Table 3.16-4, all the study area intersections are currently operating at LOS D or better under existing conditions. Worksheets for the LOS analysis are provided in Appendix E.

Table 3.16-4. Existing (2017) Weekday Peak-Hour Intersection LOS

No.	Intersection	Control Type	AM Peak		PM Peak	
			V/C	*LOS*	*V/C*	*LOS*
1.	De Soto Avenue/Devonshire Street	signalized	0.709	C	0.700	B
2.	Mason Avenue/ Devonshire Street	signalized	0.700	B	0.800	C
3.	Mason Avenue /Mayall Street	signalized	0.423	A	0.558	A
4.	Mason Avenue /Lassen Street	signalized	0.552	A	0.697	B
5.	Mason Avenue /Plummer Street	signalized	0.683	B	0.701	C
6.	Mason Avenue /Nordhoff Street	signalized	0.702	C	0.766	C
7.	Mason Avenue /Parthenia Street	signalized	0.859	D	0.786	C
8.	Mason Avenue /Chase Street	signalized	0.484	A	0.381	A
9.	Mason Avenue/Roscoe Boulevard	signalized	0.766	C	0.739	C
10.	Kelvin Avenue/Roscoe Boulevard	unsignalized	0.476	A	0.458	A
11.	De Soto Avenue/ Roscoe Boulevard	signalized	0.690	B	0.684	B
12.	De Soto Avenue/Victory Boulevard	signalized	0.883	D	0.864	D

Source: Dudek 2019
Notes: LOS calculated using LADOT CMA Methodology; V/C = volume to capacity; LOS = level of service

Peak Construction Year (2026) Conditions

It is anticipated that some overlap of open trench and pipe jacking construction activities would occur during project construction. For the purposes of this analysis, year 2026 has been identified as the peak construction year. At completion of the proposed project, permanent operations of the replaced pipeline segments would generate nominal traffic associated with occasional, routine maintenance by LADWP, which would occur in a manner similar to existing conditions.

Traffic Volumes

Peak Construction Year (2026) baseline (i.e., without project construction) volumes include traffic from ambient growth and traffic from the addition of cumulative projects in the vicinity. A growth rate of 0.54% per year, provided in the "General Traffic Volume Growth Factors" (from the respective Regional Statistical Area #12 – RSA) found in Exhibit D-1 of the Los Angeles County *Congestion Management Program* (CMP; Metro 2010) was applied to the existing traffic volumes. In addition, anticipated traffic volumes from cumulative projects in the vicinity was also added (i.e., projects that are approved/pending but not yet constructed). The Los Angeles Department of City Planning, Case Reports, identified 26 cumulative development projects that may add traffic to the project study area. Figure 3.16-4 shows the locations of cumulative projects. Figure 3.16-5 shows the Peak Construction Year AM and PM peak hour traffic volumes, expressed in passenger car equivalents (PCE).

Levels of Service

An intersection LOS analysis was prepared for the Peak Construction Year (2026) conditions using the CMA methodology; Table 3.16-5 shows the results of the Peak Construction Year (2026) weekday peak hour LOS analysis.

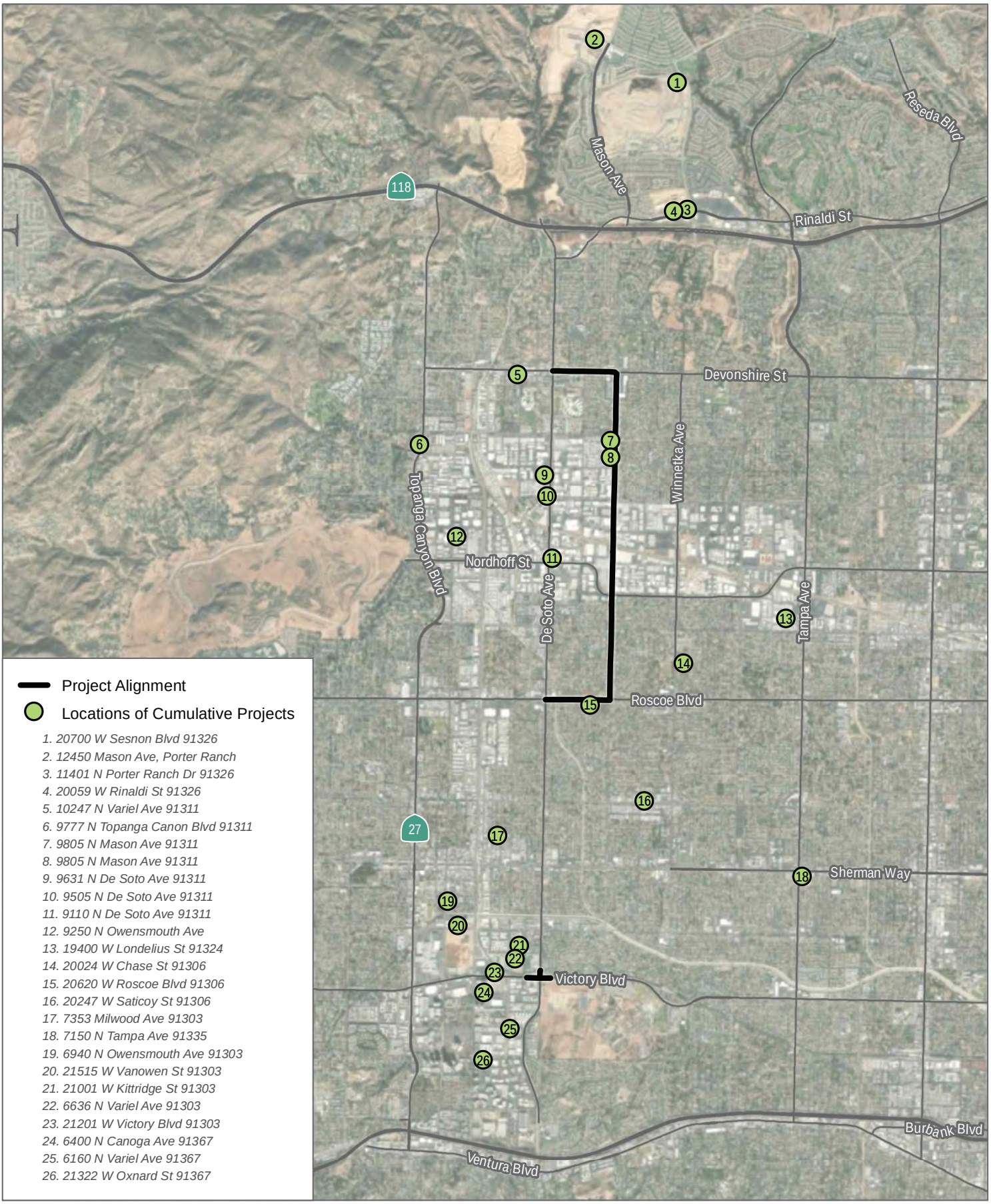
Table 3.16-5. Peak Construction Year (2026) Weekday Peak Hour Intersection LOS

No.	Intersection	Control Type	AM Peak		PM Peak	
			V/C	*LOS*	*V/C*	*LOS*
1.	De Soto Avenue/Devonshire Street	signalized	0.776	C	0.778	C
2.	Mason Avenue/ Devonshire Street	signalized	0.764	C	0.893	D
3.	Mason Avenue /Mayall Street	signalized	0.487	A	0.635	B
4.	Mason Avenue /Lassen Street	signalized	0.634	B	0.785	C
5.	Mason Avenue /Plummer Street	signalized	0.765	C	0.805	D
6.	Mason Avenue /Nordhoff Street	signalized	0.787	C	0.873	D
7.	Mason Avenue /Parthenia Street	signalized	0.943	E	0.885	D
8.	Mason Avenue /Chase Street	signalized	0.545	A	0.448	A
9.	Mason Avenue/Roscoe Boulevard	signalized	0.879	D	0.835	D
10.	Kelvin Avenue/Roscoe Boulevard	unsignalized	0.528	A	0.516	A
11.	De Soto Avenue/ Roscoe Boulevard	signalized	0.754	C	0.810	D
12.	De Soto Avenue/Victory Boulevard	signalized	0.988	E	0.993	E

Source: Dudek 2019
Notes: LOS calculated using LADOT CMA Methodology; V/C = volume to capacity; LOS = level of service; BOLD text = unsatisfactory LOS

As shown in Table 3.16-5, most of the study area intersections are forecast to continue to operate at LOS D or better under Peak Construction Year (2026) conditions except for the following intersections:

- Mason Avenue/Parthenia Street – LOS E in the PM peak hour.
- De Soto Avenue/Victory Boulevard – LOS E in the AM peak hour and the PM peak hour.



SOURCE: Esri and Digital Globe, Open Street Map 2019

LA DWP Los Angeles Department of Water & Power

FIGURE 3.16-4

Locations of Cumulative Projects

De Soto Trunk Line Project

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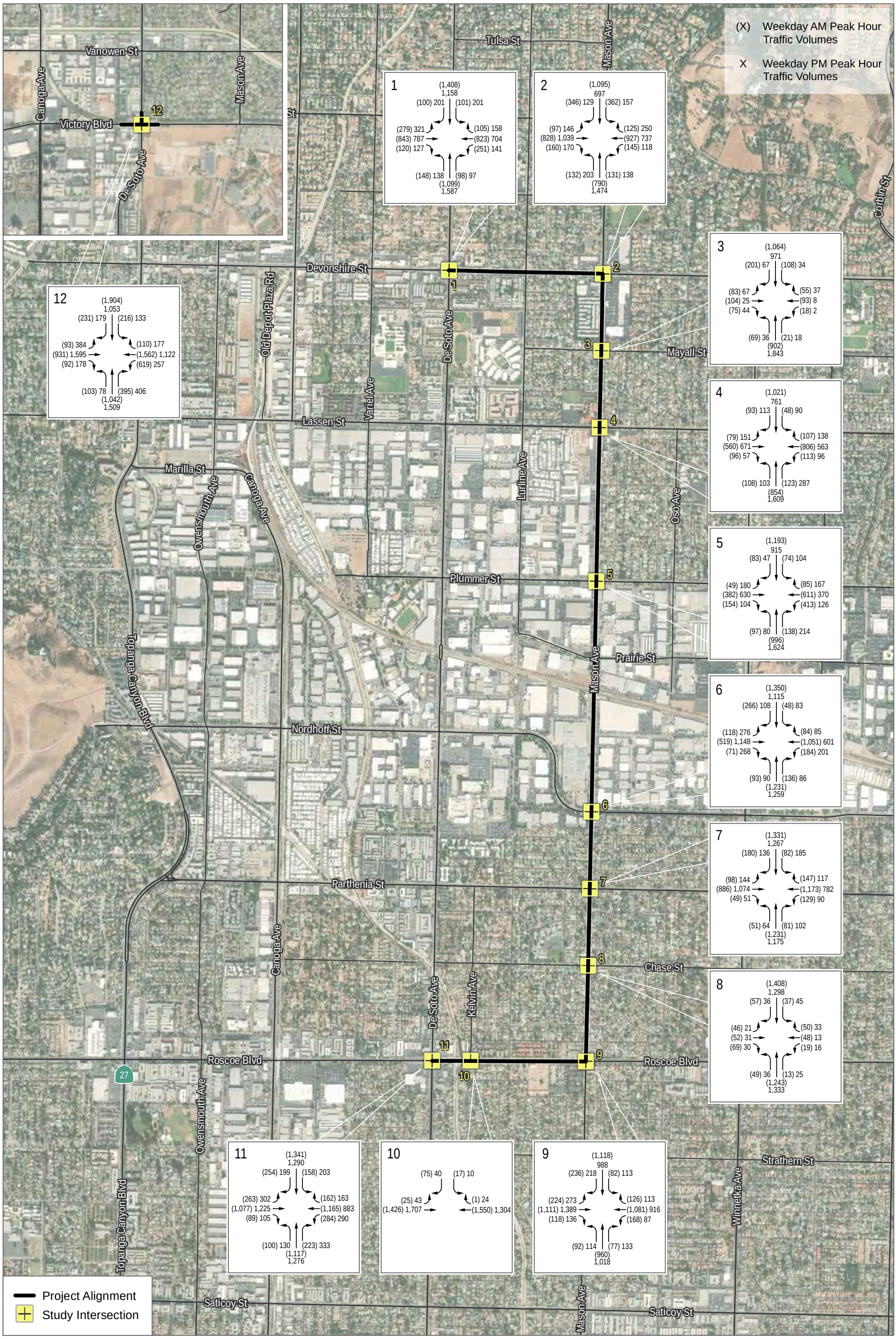
(X) Weekday AM Peak Hour Traffic Volumes

X Weekday PM Peak Hour Traffic Volumes



1
(1,408)
1,158
(100) 201 (101) 201
(279) 321 (105) 158
(843) 787 (823) 704
(120) 127 (251) 141
(148) 138 (98) 97
(1,099)
1,587

2
(1,095)
697
(346) 129 (362) 157
(97) 146 (125) 250
(828) 1,039 (927) 737
(160) 170 (145) 118
(132) 203 (131) 138
(790)
1,474

3
(1,064)
971
(201) 67 (108) 34
(83) 67 (55) 37
(104) 25 (93) 8
(75) 44 (18) 2
(69) 36 (21) 18
(902)
1,843

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915
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(154) 104 (413) 126
(97) 80 (138) 214
(996)
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6
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1,115
(266) 108 (48) 83
(118) 276 (84) 85
(519) 1,148 (1,051) 601
(71) 268 (184) 201
(93) 90 (136) 86
(1,231)
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1,267
(180) 136 (82) 185
(98) 144 (147) 117
(886) 1,074 (1,173) 782
(49) 51 (129) 90
(51) 64 (81) 102
(1,231)
1,175

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(52) 31 (48) 13
(69) 30 (19) 16
(49) 36 (13) 25
(1,243)
1,333

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988
(236) 218 (82) 113
(224) 273 (126) 113
(1,111) 1,389 (1,081) 916
(118) 136 (168) 87
(92) 114 (77) 133
(960)
1,018

10
(75) 40 (17) 10
(25) 43 (1) 24
(1,426) 1,707 (1,550) 1,304

11
(1,341)
1,290
(254) 199 (158) 203
(263) 302 (162) 163
(1,077) 1,225 (1,165) 883
(89) 105 (284) 290
(100) 130 (223) 333
(1,117)
1,276

12
(1,904)
1,053
(231) 179 (216) 133
(93) 384 (110) 177
(931) 1,595 (1,562) 1,122
(92) 178 (619) 257
(103) 78 (395) 406
(1,042)
1,509

SOURCE: Esri and Digital Globe, Open Street Map 2019

LA DWP Los Angeles Department of Water & Power

0 100 200 Feet

FIGURE 3.16-5

Peak Construction Year 2026 AM/PM Peak Hour Traffic Volumes (PCE)

De Soto Trunk Line Project

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Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law, which creates a process to change the way that transportation impacts are analyzed under CEQA. SB 743 required that the Governor's Office of Planning and Research amend the CEQA Guidelines to provide an alternative to LOS for evaluating transportation impacts. Under the new transportation guidelines, LOS, or automobile delay, will no longer be considered an environmental impact under CEQA.

The updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018; however, the new thresholds for analyzing transportation impacts do not need to be implemented until July 2020. As described in the Preface of this IS/MND, the IS/MND and NOI for the proposed project were released for public review prior to adoption of the Guideline amendments. As such, the analysis in this recirculated IS/MND does not need to reflect the revised Guidelines.

Under the new transportation guidelines, which are set forth in Section 15064.3 to the CEQA Guidelines, vehicle miles traveled are described as being the most appropriate measure of transportation impacts in most cases. However, the new Section 15064.3(b), "Criteria for Analyzing Transportation Impacts," states "If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. **For many projects, a qualitative analysis of construction traffic may be appropriate**." The analysis below remains consistent with the transportation and traffic analysis conducted for the November 2018 IS/MND, which involved a qualitative analysis of construction traffic impacts and use of LOS to characterize the existing roadway conditions that could be temporarily affected by the project.

Transportation and Traffic Analysis

a) Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Less Than Significant with Mitigation Incorporated. Construction would occur between the hours of 7:00 am and 7:00 pm Monday through Friday and between 8:00 am and 5:00 pm on Saturdays, if weekend work is necessary. Nighttime and weekend construction, while infrequent, may occur. Specifically, construction activities at major intersections, such as De Soto Avenue and Roscoe Boulevard, may require nighttime and weekend work to avoid peak commute hours. Additional construction assumptions are provided in Section 2.3 of this IS/MND.

Construction of the proposed project would require the use of open-trench and pipe-jacking methods. Open-trench construction activities would last for approximately 55 months assuming two crews of approximately ten workers each. Pipe-jacking activities would last approximately 37 months assuming one crew of approximately six workers. Open-trench and pipe-jacking activities could occur simultaneously at different segments of the alignment. Therefore, the maximum number of workers along the alignment at one time

would be 26 workers, when open-trench crews and pipe-jacking crews would be working simultaneously. Approximately 23 vendor trucks and 3 haul trucks per day are estimated during the peak construction period.

Based on estimates of the maximum number of construction workers and vendor and haul trucks, Table 3.16-6 provides the project trip generation for the peak construction phase. As shown in Table 3.16-6, the peak construction is expected to generate approximately 104 daily trips, 33 AM peak-hour trips (30 inbound and 3 outbound), and 33 PM peak-hour trips (3 inbound and 30 outbound). With the application of passenger-car equivalence (PCE) factors to truck trips, the proposed project would generate 162 PCE daily trips, with 41 PCE trips during the AM peak hour (35 inbound and 6 outbound) and 41 PCE trips during the PM peak hour (6 inbound and 35 outbound).

Table 3.16-6. Project Trip Generation

Vehicle Type	Daily Quantity	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	*Out*	*Total*	*In*	*Out*	*Total*
Trip Generation								
Employees	26 workers	52	26*	0	26	0	26	26
Vendor trucks	23 trucks	46	3	3	6	3	3	6
Haul trucks	3 trucks	6	1	0	1	0	1	1
Total		104	30	3	33	3	30	33
Trip Generation with PCE								
Employees (1.0 PCE)	26 workers	52	26*	0	26	0	26	26
Vendor trucks (2.0 PCE)	23 trucks	92	6	6	12	6	6	12
Haul trucks (3.0 PCE)	3 trucks	18	3	0	3	0	3	3
Total (w/ PCE)		162	35	6	41	6	35	41

Source: Dudek 2019
Notes: PCE = passenger car equivalent
* Most workers would be expected to arrive before the AM Peak Hour, since construction is anticipated to start at 7:00 am. As such, the AM Peak Hour worker trips shown in this table are conservative.

The general process for both open-trench and pipe-jacking construction methods consists of site preparation, excavation, shoring, pipe installation, backfilling, and work area street restoration. Staging for both processes would occur along De Soto Avenue, Devonshire Street, Mason Avenue, Roscoe Boulevard, and Victory Boulevard, with some encroachment occurring along sidewalks. A portion of the De Soto Reservoir property located to the north of the project alignment may also be used as a construction staging area. (This area is referred to as the "potential staging area.") The potential effects of open trenching and pipe jacking along the project alignment are described and analyzed below.

Open Trenching

The open-trench method would be used along Devonshire Street, Mason Avenue, Roscoe Boulevard, and Victory Boulevard and at the following intersections:

- De Soto Avenue/Devonshire Street
- Mason Avenue /Mayall Street
- Mason Avenue /Plummer Street
- Mason Avenue /Parthenia Street
- Mason Avenue /Chase Street
- Mason Avenue/Roscoe Boulevard
- Kelvin Avenue/Roscoe Boulevard
- De Soto Avenue/ Roscoe Boulevard
- De Soto Avenue/Victory Boulevard

For trenching, construction would occur within the public right-of-way on the east or west side of the street, within an approximately 1,000-foot-long work area. The maximum length of open trench at any one time would be approximately 100 feet. Open-trench activities would occur for a total of 55 months and would require closure of one travel lane along Mason Avenue and, at intersections, multiple lane closures on the cross-streets. However, lane closures would be temporary and are expected to last six days or fewer per intersection, one intersection at a time (i.e., lane closures would not occur at multiple intersections simultaneously). Two-way travel would be maintained along Mason Avenue at all times, however, closure of one travel lane along Mason Avenue would result in some of the study intersections operating at LOS D, E or F, and worse conditions at intersections requiring multiple lane closures on the cross-streets. However, as described above, this impact would be temporary and would occur for approximately six days or fewer per intersection.

Pipe Jacking

The pipe-jacking method would be used at the following intersections and crossings to minimize traffic impacts and to avoid areas where open trenching would not be feasible.

- Devonshire Street and Mason Avenue
- Lassen Street and Mason Avenue
- Union Pacific Railroad tracks and Mason Avenue
- Nordhoff Street and Mason Avenue

- Browns Creek Channel crossing at Roscoe Boulevard
- De Soto Avenue and Victory Boulevard (2 jacking locations)

The pipe-jacking process would take less than 6 months at each of the pipe jacking areas, for a total of 37 months of pipe jacking. During pipe jacking at an intersection, the cross-streets would not be excavated, because the proposed piping would be jacked underneath the intersection. However, construction areas on both sides of the intersections along Mason Avenue would require lane closures. Closure of one travel lane along Mason Avenue would result in some of the study intersections operating at LOS D, E, or F in the AM and PM peak hour. However, this impact would be temporary, as it would occur for less than 6 months per jacking location.

To minimize the temporary inconvenience to drivers resulting from proposed project construction, mitigation measure MM-TRAF-1 would be implemented and would reduce effects to below a level of significance.

MM-TRAF-1: Construction Traffic Management Plan

Prior to the start of any construction-related work or encroachment, the Los Angeles Department of Water and Power (LADWP) shall develop and implement a Construction Traffic Management Plan. The Construction Traffic Management Plan shall include but will not be limited to the following measures:

1. All construction activities shall be conducted in accordance with the Standard Specifications for Public Works Construction (Greenbook) and traffic control plans designed or approved by the City of Los Angeles Department of Transportation (LADOT) and LADWP, to allow the least impacts to levels of service, traffic safety, and emergency access to the site during construction.
2. LADWP shall install temporary equipment necessary for safe and efficient traffic control including changeable message signs, delineators, arrow boards, K-Rails, flagmen, etc.
3. LADWP shall provide advance notification of the proposed construction work area limits and lane closure times to transit services and all local emergency service providers (police, fire, ambulance, etc.).
4. Qualified flagmen shall be posted at each work site to direct construction traffic entering and exiting the site and/or to direct large construction-related vehicles to/from the work areas.
5. Two-way travel shall always be provided along Mason Avenue, Devonshire Street, and Roscoe Boulevard, and affected cross-streets throughout construction. During construction periods with reduced lane capacity at impacted intersections, LADOT/LADWP shall implement a Traffic Control Plan that includes the provision of detour routes around the impacted intersections. The detour routes would include the use of adjacent parallel collector streets such as De Soto Avenue (0.5 miles to the west) or Canoga Avenue (1.0 mile to the west), both four-lane divided roads classified as Avenue II roadways in the City's circulation element). For drivers on the northern end of the route (i.e., north of Plummer Street), access to Topanga

Canyon Boulevard (four-lane, divided state highway) would be provided 1 mile to the west. Detours through residential streets would be prohibited.

6. The Traffic Control Plans shall also include detours and safe passage areas for bicyclists and pedestrians in the impacted work areas.

Operational activities would be limited to scheduled maintenance and repair. Maintenance activities would be minimal and would be similar to those that occur under existing conditions. No permanent workers would be required to operate or maintain the proposed project. Activities associated with long-term operations and maintenance of the proposed project would be minimal. Therefore, once operational, the proposed project would not conflict with applicable plans and policies established for the circulation system. As such, effects would be limited to the construction period and would be reduced to below a level of significance upon implementation of MM-TRAF-1. Impacts are therefore less than significant with mitigation incorporated.

b) Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Less Than Significant Impact. The Los Angeles County CMP requires evaluation of all CMP arterial monitoring intersections where the project would add 50 or more new peak-hour trips. As shown in Table 3.16-5, construction of the proposed project would generate temporary trips equaling 41 trips during both the AM and PM peak hours and therefore would not require a CMP analysis. Construction impacts would be less than significant. Operational activities required for scheduled maintenance and repair would not generate 50 or more new peak-hour trips. Since the project would not result in additional future traffic, conflicts with an applicable CMP or standards would not occur during operation, and, therefore, no operational impacts would occur.

c) Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

No Impact. The nearest airport to the project alignment is the Van Nuys Airport, located approximately 5 miles east of the project alignment. The proposed project area is located outside of the planning boundary of the Van Nuys Airport (County of Los Angeles 2003). The project area is not located within a 2-mile radius of any public airport, and no airport land use plans apply to the site. Further, the proposed project would not result in a change in air traffic patterns, due to an increase in traffic levels or a change in location, and no impact would occur.

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

Less Than Significant with Mitigation Incorporated. During construction, lane closures, detours, driveway blockages, loss of parking, and disruptions to traffic, transit, bicycle, and pedestrian movement would occur in and around the project alignment. This may result in a potentially significant safety hazard to construction workers and/or the public; therefore, mitigation would be required. As required under MM-

TRAF-1, the construction of the proposed project would be conducted in accordance with the Standard Specifications for Public Works Construction (Greenbook), and traffic control plans designed or approved by LADOT/LADWP, to allow acceptable LOS to the extent practicable, traffic safety, and emergency access to the site during construction. With implementation of MM-TRAF-1, impacts related to hazards during construction would be reduced to less than significant levels. Once operational, the maintenance and repair of the proposed project would be similar in nature to what is currently occurring for the existing pipelines. Therefore, no new impacts would occur. As such, impacts would be limited to the construction period and would be less than significant with mitigation incorporated.

e) Would the project result in inadequate emergency access?

Less Than Significant with Mitigation Incorporated. As previously discussed, construction vehicles would temporarily access the project site via Devonshire Street, De Soto Avenue, Mason Avenue, Roscoe Boulevard, and other local roadways. The proposed project would have the potential to obstruct portions of Mason Avenue during pipeline trenching and pipe jacking. However, incorporation of a Construction Traffic Management Plan, as required by MM-TRAF-1, and associated traffic control plans would ensure that any temporary impacts to emergency vehicle flow and/or ingress/egress to facilities are coordinated in advance with emergency service providers and law enforcement to ensure that provision of sufficient emergency service, access, and evacuation can occur during construction if necessary. Implementation of a Construction Traffic Management Plan with applicable traffic control plans would reduce impacts to local emergency service providers to less than significant levels. Once operational, the proposed project would not include any impediments to emergency access. Additionally, vehicular trips for maintenance and repair during operation of the facility would be minimal and would be similar in quantity and nature to those currently occurring for the existing pipeline. Therefore, no new impacts to emergency access would occur during operation. As such, impacts would be limited to the construction period and would be less than significant with mitigation incorporated.

f) Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Less Than Significant with Mitigation Incorporated. As discussed above, construction vehicles would temporarily access the project site via local roadways. Construction activity may block parking and portions of travel lanes, restrict access to driveways, disrupt access for emergency providers, and result in potential safety issues for vehicular traffic, pedestrians, and bicyclists along Mason Avenue and some of the intersecting cross streets. However, with implementation of the Construction Traffic Management Plan and associated traffic control plans as required under MM-TRAF-1, potentially significant impacts to alternative transportation systems would be reduced to a less than significant level. Once operational, the maintenance and repair of the proposed project would be similar in nature to what is currently occurring for the existing pipeline, and any vehicle trips or activities would be minor and infrequent. As such, operation of the proposed project would not conflict with adopted policies, plans, or programs regarding alternative transportation facilities, and no operational impacts would occur. As such, impacts would be limited to the construction period and would be less than significant with mitigation incorporated.

References

City of Los Angeles. 2015. Citywide General Plan Circulation System, Map A2 – Valley Subarea. December 2015. Accessed November 2, 2017. http://www.lawa.org/uploadedFiles/LAX/ConnectingLAX/pdf/FILE%20X2%20Existing%20MPlan%20MapA1%20-%20GenCirculation.pdf.

County of Los Angeles. 2003. "Van Nuys Airport – Airport Influence Area." Airport Land Use Commission. May 13, 2003. Accessed August 29, 2019. http://planning.lacounty.gov/aluc/airports#anc-apm.

LADOT (City of Los Angeles Department of Transportation). 2016. City of Los Angeles Traffic Impact Guidelines. December 2016.

Metro (Los Angeles County Metropolitan Transportation Authority). 2010. *2010 Congestion Management Program for Los Angeles County*. Accessed April 5, 2018. http://www.metro.net/projects/congestion_mgmt_pgm/.

3.17 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) 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), or	☐	☐	☒	☐
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.	☐	☒	☐	☐

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 under Section 3.5 of this document, a California Historical Resources Information System records search was conducted for the project area. No tribal cultural resources were identified as a result of the records search. In a Sacred Lands File results letter dated September 16, 2019, the NAHC stated that the Sacred Lands File search was completed with negative results. Additionally, no specific, designated tribal cultural resources were identified within the proposed areas of disturbance by California Native American tribes during LADWP's AB 52 notification and consultation process (see Section 3.17(a)(ii) below for a description of this process.) Therefore, the proposed project would not adversely affect tribal cultural resources that are listed or eligible for listing in the state or local register. Impacts would be less than significant.

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? (In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.)

Less Than Significant with Mitigation Incorporated. On September 5, 2019, LADWP sent notification of the proposed project to California Native American tribal representatives identified by the NAHC as being traditionally or culturally affiliated with the geographic area. LADWP received two responses from tribes requesting consultation on the project. The tribes stated that the project is located in an area with extensive tribal history and, although no previously recorded resources were found within the proposed areas of disturbance, several known prehistoric sites are within the vicinity of the project alignment (see Appendix C for details). For these reasons, the tribes stated that the project has the potential to uncover previously unknown resources that could be tribal cultural resources (TCRs).

There are no known resources within the project boundaries that have been determined by LADWP to be significant pursuant to the criteria set forth in Public Resources Code Section 5024.1. However, LADWP has determined that the project may have the potential to impact previously unknown subsurface TCRs. In the event that unknown subsurface TCRs are uncovered during construction ground disturbance, and such resources are not identified and avoided or properly treated, a potentially significant impact could result. As such, mitigation measures MM-TCR-1, MM-TCR-2, and MM-TCR-3 have been set forth to protect TCRs during project construction. Upon implementation of these measures, impacts would be less than significant with mitigation incorporated.

MM-TCR-1: Worker Environmental Awareness Program Training

All construction workers shall undergo Worker Environmental Awareness Program (WEAP) training to ensure that any unanticipated archaeological or tribal cultural discoveries are treated appropriately. The WEAP training will provide specific details on the kinds of archaeological and/or tribal cultural resources materials that may be identified during construction.

MM-TCR-2: Native American Monitoring

Tribal representatives who have participated in Native American consultation for the project shall be contacted prior to the start of construction activities to determine the appropriate Native American monitor(s), the phases and locations of project ground-disturbing activities that would involve monitoring, and the frequency and duration of monitoring throughout construction. Should any tribal cultural resources be encountered, the Native American monitor(s) will have the authority to request construction to cease within 60 feet of the discovery to assess and document potential finds as outlined in Mitigation Measure MM-TCR-3.

MM-TCR-3: Inadvertent Discovery of Tribal Cultural Resources

Should a potential tribal cultural resource be encountered, construction activities near the discovery shall be temporarily halted within 60 feet of the discovery. The Los Angeles Department of Water and Power (LADWP) along with the Native American monitor(s) shall discuss the significance of the discovery. If the potential resource is archaeological in nature, appropriate management requirements shall be implemented as outlined in Mitigation Measure MM-CUL-1. If the resource is determined to be a potential tribal cultural resource (as defined by PRC, Section 21074), LADWP shall, in good faith, consult with the tribes who have participated in consultation under Assembly Bill 52 on the disposition and treatment of the resource. Depending on the nature of the resource and tribal recommendations, review by a qualified archaeologist may be required. Implementation of proposed recommendations will be made based on the determination of LADWP that the approach is reasonable and feasible. All activities shall be conducted in accordance with regulatory requirements.

References

None.

3.18 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☒	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐
e) 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?	☐	☐	☐	☒
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

a) Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Less Than Significant Impact. During construction, hydrostatic testing, pipeline disinfection, and dewatering could result in temporary non-stormwater discharges in the project area. As explained in Section 3.9(a), the hydrostatic test water, disinfectant water, extracted groundwater, and water flushed from decommissioned pipeline segments would be discharged to either the storm drain or sewer systems. If the discharges would be made to the local storm drain system, they would be subject to a variety of NPDES permits (Order No. R4-2018-0125, NPDES No. CAG994004; and/or Order No. 2009-0009-DWQ, as amended by Order No. 2010-0014-DWQ, NPDES No. CAS000002). See Section 3.9 for details on the required discharge permitting. The project would be required to comply with all applicable provisions of these permits. Required compliance would ensure that treatment requirements pertaining to stormwater discharges are not exceeded.

With regard to sanitary wastewater, the project would not involve long-term sanitary sewer discharges, as the project does not include habitable structures or other sources of permanent polluted discharge. The aforementioned non-stormwater discharges (i.e., hydrostatic testing, pipeline disinfection, pipeline flushing, and trench dewatering), if made to the local municipal sewer system, would be temporary and periodic in nature, and would comingle with wastewater in the municipal sewer collection system prior to being treated at a regional wastewater treatment plant. Prior to making such discharges, especially related to pipeline disinfection, LADWP would coordinate with Los Angeles Sanitation to ensure that the sewer conveyance system would not be unduly burdened with regard to either capacity or water quality (e.g., disinfection agents and/or by-products).

Upon compliance with the applicable permit requirements, the project would not exceed wastewater treatment requirements. For these reasons and upon compliance with the applicable permit requirements during construction, the impact to the wastewater treatment requirements of the applicable RWQCB would be less than significant.

b) Would the project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. As described under Section 3.18(a), proposed project construction could result in temporary increases in wastewater generation in the project area, since the hydrostatic test water, disinfectant water, extracted groundwater, and water flushed from decommissioned pipeline segments could be discharged to the sewer system. Proposed project construction would also result in temporary increases in water use in the project area, since water would be required for dust control, concrete mixing, hydrostatic testing, and pipeline disinfection. However, the project's discharges and water needs would be limited to the construction period. Temporary, minor increases in water use and wastewater generation in the project area would not result in the need for new or expanded water and/or wastewater facilities. During operation, the replaced pipeline segments would operate below ground. The project would convey existing potable water sources and would not generate wastewater or require new water treatment facilities. As such, operation of the project would not require or result in the need for new or expanded water and/or wastewater facilities or expansion of existing facilities. No impact would occur.

c) Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. Stormwater drainage facilities are provided throughout the project area. During construction, hydrostatic testing, pipeline disinfection, dewatering, and pipeline flushing could result in temporary increases in discharges to the stormwater drainage system. As explained in Sections 3.9(a) and 3.9(e), the hydrostatic test water, disinfectant water, extracted groundwater, and flushed water would either be discharged to the stormwater or sewer systems. If this water is discharged to the storm drain system, the project could cause a temporary increase in runoff water entering the drainage systems in the project area. However, because dewatering, disinfection, flushing, and hydrostatic testing activities would be temporary and spread out along the project alignment, they would not result in a need for new or expanded stormwater drainage facilities.

Once operational, the proposed project would be part of a closed water supply system and would not affect stormwater drainage facilities. For these reasons, the proposed project would not be anticipated to require, or indirectly result in, the construction of new stormwater drainage facilities or the expansion of existing facilities. No impact would occur.

d) Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Less Than Significant Impact. Water needs of the project during construction would be relatively minor and temporary. Water would be used for dust control, concrete mixing, hydrostatic testing, and pipeline disinfection. Water use during construction would be negligible relative to regional supplies and would be typical of similar water conveyance replacement projects. Existing water resources are sufficient to meet those needs. Following construction, the proposed project would merely convey existing potable water sources throughout the life of the project and would not involve increases in the consumptive use of water. LADWP provides potable water to the City, and the proposed project would be used to convey that water to portions of LADWP's service area. The LADWP 2015 Urban Water Management Plan provides normal year, single dry year, and multiple dry year supply-and-demand analysis for LADWP's domestic water service area. As shown in the 2015 Urban Water Management Plan, LADWP's supplies can meet demand for multiple dry years (LADWP 2015). Therefore, impacts related to water supply would be less than significant.

e) 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?

No Impact. During construction, hydrostatic testing, pipeline disinfection, pipeline flushing, and dewatering could result in temporary increases in wastewater in the project area. As explained in Section 3.9(a), the hydrostatic test water, disinfectant water, flushing water, and extracted groundwater would either be discharged to the storm drain or sewer system. If this water is discharged to the sewer system, the project could cause a temporary increase in wastewater entering the sewer systems in the project area. However, because these discharges would be temporary and would end once construction is complete, they would not adversely affect wastewater treatment capacity. During operation, the project would not generate wastewater. As such, the project would not result in a long-term demand for wastewater treatment services and no impacts to wastewater treatment capacity would occur.

f) Would the project be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. Construction associated with the proposed project would generate minor amounts of solid waste. Solid waste would primarily consist of soils and asphalt from the proposed trenching and tunneling

activities. As described in Section 2.3 of this document, pavement that is removed from the project site would be recycled, used as a backfill material, reused as pavement base materials, or transported to an appropriate facility for recycling or disposal. Soils would be hauled off site or reused as backfill. During open-trench activities, approximately 5,100 haul truck trips would be required. During pipe jacking, approximately 1,040 haul truck trips would be required. Assuming a truck capacity of 16 cubic yards, project construction would generate approximately 98,240 cubic yards of materials of the course of the 7-year construction period (equating to an average of 49 cubic yards per day). The nearest active solid waste landfill to the project site is the Sunshine Canyon Landfill, located at 14747 San Fernando Road, in Sylmar. The Sunshine Canyon Landfill has a maximum permitted throughput of 12,100 tons per day. As of May 2018, the remaining capacity was approximately 77,900,000 cubic yards and the expected cease operation date is in 2037 (CalRecycle 2019). As such, the nearest landfill to the project area is anticipated to have sufficient permitted capacity to accommodate the construction debris that would be generated by the proposed project. (The project's anticipated total construction waste generation is approximately 0.13% of the landfill's remaining capacity as of 2018.) As such, the amount of debris generated during construction is anticipated to be minimal and is anticipated to be accommodated by landfills in the area. Operation of the proposed project would not generate solid waste. For these reasons, impacts related to solid waste and landfill capacity would be less than significant.

g) Would the project comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant Impact. The proposed project would be required to comply with all applicable local and state regulations related to solid waste. Construction associated with the proposed project would generate minor amounts of solid waste. Solid waste would primarily consist of soils and asphalt from the proposed construction activities. Once construction is complete, the project would not require solid waste disposal.

Per the California Green Building Standards Code, 65% of construction and demolition waste must be diverted from landfills. As such, at least 65% of all construction and demolition debris from the site would be diverted. Any hazardous wastes that are generated during construction activities would be managed and disposed of in compliance with all applicable federal, state, and local laws. In addition to the California Green Building Standards Code's requirements for recycling construction and demolition waste, the state has set a goal of 75% recycling, composting, and source reduction of solid waste by 2020. To help reach this goal, the state has adopted AB 341 and AB 1826. AB 341 is a mandatory commercial recycling bill, and AB 1826 is mandatory organic recycling. Waste generated by the proposed project would enter the City's waste stream but would not adversely affect the City's ability to meet AB 341 or AB 1826, since the proposed project's waste generation would be limited to the temporary construction period and would represent a nominal percentage of the waste created within the City. At the local level, the City has a Citywide Construction and Demolition Waste Recycling Ordinance, which requires that all construction and demolition waste generated within City limits be taken to City-certified construction and demolition waste processors. All haulers and contractors responsible for handling construction and demolition waste must obtain a private waste hauler permit from Los Angeles Sanitation. LADWP and/or its construction contractor would be required to adhere to the requirements of the Citywide Construction and Demolition Waste Recycling Ordinance.

As the proposed project involves replacement of existing potable water pipelines and operation and maintenance activities would be similar to existing activities, operation of the proposed project would not generate additional solid waste. For these reasons and for the reasons described under Section 3.18(f), the proposed project would be in compliance with applicable statutes and regulations related to solid waste. Impacts would be less than significant.

References

CalRecycle. 2019. "Facility/Site Summary Details: Sunshine Canyon City/County Landfill (19-AA-2000)." Accessed August 30, 2019. https://www2.calrecycle.ca.gov/swfacilities/Directory/19-AA-2000.

LADWP (Los Angeles Department of Water and Power). 2015. *Urban Water Management Plan*. Accessed August 30, 2019. https://www.ladwp.com/ladwp/faces/wcnav_externalId/a-w-sos-uwmp;jsessionid=mnqTcZSfh23hpXGvjFtjSnxWcRTBxCGJwQngqjyzh6HlLs2ZLxwR!-1131025128?_afrLoop=297912534597770&_afrWindowMode=0&_afrWindowId=null#%40%3F_afrWindowId%3Dnull%26_afrLoop%3D297912534597770%26_afrWindowMode%3D0%26_adf.ctrl-state%3D141m96d0e6_4.

3.19 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

a) Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant with Mitigation Incorporated. The proposed project is located within a densely developed urban area and contains no sensitive habitat areas. The proposed project would not degrade the quality of the environment, as the proposed project would be placed below ground, under existing streets and public rights-of-way. As explained in Section 3.4 of this IS/MND, impacts to biological resources, including fish and wildlife species, plant and animal communities, and rare or endangered plants and animals would be less than significant.

The project would involve excavation and grading activities, which could potentially encounter buried cultural resources. Such actions could unearth, expose, or disturb subsurface archaeological, historical, or Native American resources that were not observable on the ground surface. However, with the incorporation of MM-CUL-1, MM-CUL-3, MM-TCR-1, MM-TCR-2, and MM-TCR-3, potential impacts to cultural resources that could represent major periods of California history or prehistory would be less than significant. As such, impacts to biological resources would be less than significant, and impacts to cultural resources would be less than significant with mitigation incorporated.

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 with Mitigation Incorporated. As discussed in the respective issue areas, the proposed project would not result in any significant, unmitigable effects to environmental resources. The implementation of the identified project-specific mitigation measures and compliance with applicable codes, ordinances, laws, and other required regulations would reduce the magnitude of any impacts associated with construction activities to a level of less than significant. For the reasons further set forth below, impacts would not be cumulatively considerable.

Related projects with the potential to contribute to cumulative impacts would be those projects occurring concurrent with and in proximity to, the proposed project. Such projects, as may be determined at this level of planning, would be other linear utility projects being undertaken by LADWP in the proposed project area at the time of construction activities and would also include development projects in the area that would create similar construction effects. The impacts of these projects, as well as those of the proposed project (as discussed above), would be temporary in nature, and would generally be limited to the area in which construction activities are occurring. Given that related linear utility projects would be coordinated by LADWP, it can be anticipated that LADWP would initiate construction of these related projects in a manner

such that construction activities associated with different projects would occur either at different times, or at sufficient distance from one another as to avoid cumulative effects relative to air quality, noise, and traffic.

With regard to air quality, the SCAQMD has established incremental emissions thresholds to determine whether a project will contribute to significant impacts. Because the proposed project would contribute emissions at rates well below SCAQMD significance thresholds, and given the aforementioned assumption that related LADWP projects would be coordinated as to avoid cumulative impacts, it is anticipated that the air quality impacts of the proposed project and other related projects would not be cumulatively considerable.

Noise impacts, similar to those related to air quality, would be dependent on the timing and location of related project construction in conjunction with the construction of the proposed project. As such, assuming that LADWP would phase such projects to avoid, to the extent feasible, concurrent construction of linear utilities in any one location, it can be concluded that noise impacts of the proposed project and related projects would not result in noise impacts that are cumulatively considerable. As explained in Section 3.12, noise from project construction would be greatest at the properties immediately adjacent to the project alignment. As such, cumulative projects with the potential to combine with the noise effects of the proposed project would generally be limited to those located along the project alignment. As shown in Figure 3.16-4, the majority of cumulative projects would occur outside of the project alignment. For those that occur along the alignment, the possibility of proposed project construction coinciding with construction of those projects is unlikely. In the event that construction were to coincide, the overlap would be brief, since proposed project construction would not remain in a single location for more than a week (for open trench) or about 6 months (for pipe jacking at intersections and crossings). The transitory nature of this project's construction process would limit the potential for cumulative noise effects to occur from stationary development projects (e.g., a development of a commercial or multi-family building). Furthermore, implementation of MM-NOI-1 would limit noise produced by the proposed project to the extent practicable. Development projects in the area have been or would be subject to environmental review pursuant to state law. If potentially significant noise impacts are identified, appropriate mitigation would be applied to the related projects. The combination of the transitory nature of this project, implementation of project-specific mitigation, and regulatory and/or project-specific requirements that would be applied to related projects would ensure that cumulatively significant noise impacts would be less than significant upon incorporation of MM-NOI-1 and MM-NOI-2.

With regard to traffic, construction activities would generate truck traffic and vehicular traffic associated with construction workers. Construction activities would also result in lane closures along affected streets. Project-level impacts resulting from the proposed project's construction traffic would be temporary and less than significant with the implementation of MM-TRAF-1. Traffic impacts of the proposed project, in conjunction with those of related projects, would be minimized by coordination with LADOT, which is required to maintain proper levels of service and the overall function of the City's transportation network. Given that all related projects are subject to review by LADOT (when traffic system components or function are affected), LADOT would require that LADWP coordinate the proposed project such that the traffic system and levels of service in any one area are

maintained to the extent feasible. Coordination with LADOT in conjunction with implementation of MM-TRAF-1 would preclude the possibility of cumulative traffic impacts resulting from proposed project and related project construction activities. Based on the above, the cumulative traffic effects of the proposed project would be less than significant with mitigation incorporated.

In summary, the proposed project's cumulative 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 with Mitigation Incorporated. Implementation of the proposed project would not result in any impacts that are significant and unavoidable or cumulatively considerable. The implementation of the mitigation measures set forth herein would reduce all potential impacts to less-than-significant levels. Once operational, the proposed project would provide a reliable and safer water supply for existing LADWP water service customers. Therefore, upon implementation of the mitigation measures identified in this document, the project would not result in impacts that would cause substantial adverse effects on human beings, either directly or indirectly. Therefore, impacts would be less than significant with mitigation incorporated.

References

None.

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4 REPORT PREPARERS

Lead Agency

Los Angeles Department of Water and Power
Environmental Affairs
111 North Hope Street, Room 1044
Los Angeles, California 90012

Charles C. Holloway, Manager of Environmental Planning and Assessment
Christopher Lopez, Project Manager

Technical Assistance Provided By

Dudek
38 North Marengo Avenue
Pasadena, California 91101

Contributors

Eric Wilson, Project Director
Michele Webb, Project Manager
Adam Poll, QEP, LEED AP BD+C, Senior Air Quality Specialist
Michael Cady, Senior Biologist
Linda Kry, Archaeologist
Adriane Gusick, Archaeologist
Samantha Murray, MA, RPA, Cultural Resources Specialist/Architectural Historian
Mike Green, INCE, Senior Noise Specialist
Dennis Pascua, Transportation Services Manager
Sabita Tewani, AICP, Transportation Planner
Chris Starbird, GIS Specialist

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