



State Streets Infrastructure Projects

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION



November 2019



**NOTICE OF AVAILABILITY AND
NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION FOR THE
STATE STREETS INFRASTRUCTURE PROJECTS**

NOTICE IS HEREBY GIVEN that the Initial Study/Mitigated Negative Declaration (IS/MND) for the State Streets Infrastructure Projects has been completed and is available for public review. The public may review the IS/MND on the City of West Sacramento website: [www.cityofwestsacramento.org/Government/Departments/Capital Projects and Transportation/Projects/State Street Infrastructure Projects](http://www.cityofwestsacramento.org/Government/Departments/Capital%20Projects%20and%20Transportation/Projects/State%20Street%20Infrastructure%20Projects). The IS/MND can also be reviewed during normal business hours at the City of West Sacramento Capital Projects & Transportation Department office, 1110 West Capitol Avenue, Second Floor, West Sacramento, CA 95691.

The IS/MND is also available for review at the Yolo County Library – West / Arthur F. Turner Library, 1212 Merkley Avenue, West Sacramento, CA 95691.

The IS/MND has been prepared in accordance with the California Environmental Quality Act (CEQA; Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (Title 14, California Code of Resources, Section 15000 et seq.).

Project Name: State Streets Infrastructure Projects

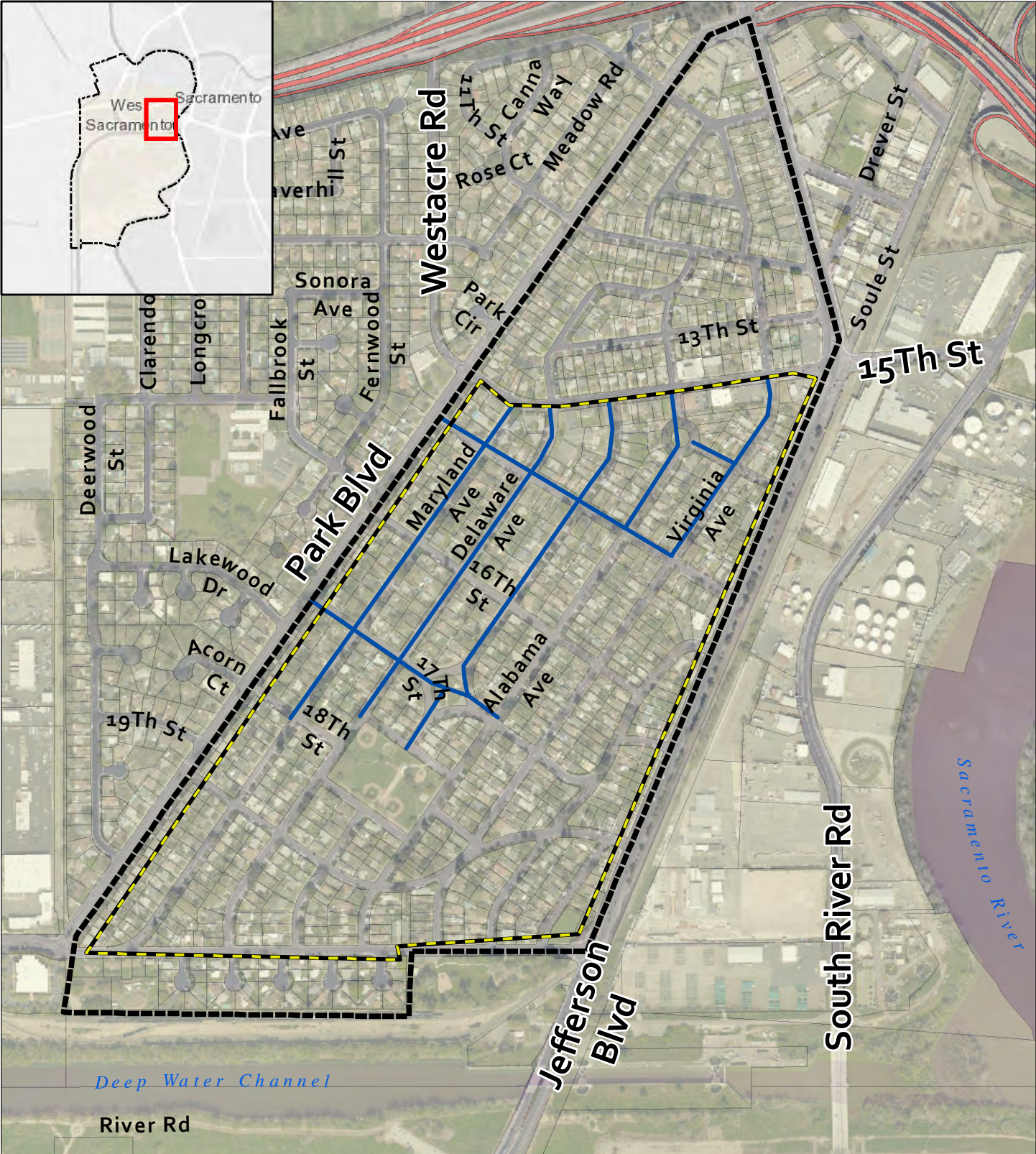
Project Sponsor and CEQA Lead Agency: City of West Sacramento Capital Projects & Transportation Department, 1110 West Capitol Avenue, First Floor, West Sacramento, CA 95691

Project Description: The proposed project consists of replacing approximately 9,600 feet of water main, rehabilitating approximately 36,000 feet of sewer main, curb and gutter replacement, sidewalk repairs, curb ramp installations and pavement rehabilitation with the project. Construction is scheduled between Jan 2020 – Jan 2021.

Project Location: The Proposed Project is in the State Streets neighborhood of the City of West Sacramento, Yolo County, and is bounded by Jefferson Blvd., Park Blvd., and Stone Blvd. (see Figure 1).

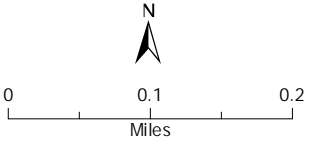
Public Review and Comment Period: In accordance with the time limits provided for by state law, the public review period will extend from **November 6, 2019, to December 5, 2019**. Comments must be received by 5:00 p.m. on **December 5, 2019**. Comments may be sent in hard copy or via email to:

Amber Wallace, P.E., Associate Civil Engineer
City of West Sacramento Capital Projects & Transportation Department
1110 West Capitol Avenue, First Floor
West Sacramento, CA 95691
Email: amberwa@cityofwestsacramento.org



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Basebap Sources: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,



- Proposed water main replacement
- Boundary of Proposed Sanitary Sewer main Rehab/Repair
- Pavement Rehabilitation boundary area

Source: City of West Sacramento 2018

Figure 1
Proposed Project Site



State Streets
Infrastructure Projects

State Streets Infrastructure Projects

Initial Study/Mitigated Negative Declaration

Prepared for:

City of West Sacramento
Capital Projects & Transportation Department
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West Sacramento, CA 95691
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November 2019

Horizon Water and Environment. 2019. *State Streets Infrastructure Projects Initial Study/Mitigated Negative Declaration*. Prepared for City of West Sacramento. November. Sacramento, CA. (HWE 19.002.)

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Acronyms and Abbreviations

§	section
A	
AB	Assembly Bill
ADA	Americans with Disabilities Act
APN	Assessor's parcel number
ATCM	Airborne Toxic Control Measures
B	
bgs	below ground surface
BMP	best management practice
C	
C	Commercial
CAL FIRE	California Department of Forestry and Fire Protection
Cal OES	California Governor's Office of Emergency Services
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health
CalEPA	California Environmental Protection Agency
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Standards Code
CCR	California Code of Regulations
CCTV	closed-circuit television
CDFW	California Department of Fish and Wildlife
CDOC	California Department of Conservation
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CIPP	cured-in-place pipe
City	City of West Sacramento
CIWMA	California Integrated Waste Management Act
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
County	County of Yolo
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CUPA	Certified Unified Program Agency
D	
dB	decibel

dba	A-weighted decibel
dbh	diameter at breast height
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
E	
EIR	Environmental Impact Report
ESL	Environmental Screening Level
F	
F&G Code	California Department of Fish and Game Code
FEMA	Federal Emergency Management Agency
FTA	Federal Transit Administration
G	
GHG	greenhouse gas
H	
HAP	hazardous air pollutant
HCP	habitat conservation plan
Hz	hertz
I	
I-80	Interstate 80
in/sec	inches per second
IPaC	Information for Planning and Consultation Report
IS/MND	initial study/mitigated negative declaration
L	
LR	Low Density Residential
Leq	equivalent steady-state sound level
Lmax	maximum sound level
LOS	level of service
M	
MBTA	Migratory Bird Treaty Act
MG	million gallons
MGD	million gallons per day
MLD	Most Likely Descendant
N	
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	natural community conservation plan
NOx	oxides of nitrogen

NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
NWI	National Wetland Inventory
NWIC	Northwest Information Center
P	
PCB	polychlorine biphenyls
PERP	Portable Equipment Registration Program
PM	particulate matter
PM10	particulate matter of aerodynamic radius of 10 micrometers or less
PM2.5	particulate matter of aerodynamic radius of 2.5 micrometers or less
ppm	parts per million
PPV	peak particle velocity
Proposed Project	State Streets Infrastructure Projects
PRC	Public Resources Code
PVC	polyvinyl chloride
R	
RFP	Reasonable Further Progress
ROG	reactive organic gases
ROW	right-of-way
RP	Recreation and Park
RWQCB	Regional Water Quality Control Board
S	
SO ₂	sulfur dioxide
SR	State Route
SSMP	sewer system management plan
Superfund	Comprehensive Environmental Response, Compensation, and Liability Act
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
T	
TAC	toxic air contaminant
TCR	tribal cultural resource
U	
U.S.	United States
UAIC	United Auburn Indian Community of the Auburn Rancheria
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

V

VdB vibration velocity in decibels

VOC volatile organic compound

W

Williamson Act California Land Conservation Act of 1965

Y

YSAQMD Yolo-Solano Air Quality Management District

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2

3 1.1 Introduction and Purpose

4 The City of West Sacramento (City) has prepared this initial study/mitigated negative
5 declaration (IS/MND) to provide the public, responsible agencies, and trustee agencies with
6 information about the potential environmental effects of the proposed State Streets
7 Infrastructure Improvements Project (Proposed Project). This document has been prepared
8 in accordance with the requirements of the California Environmental Quality Act of 1970, as
9 amended (CEQA) (Public Resources Code [Pub. Res. Code] Section 21000 et seq.) and the
10 State CEQA Guidelines (Title 14 California Code of Regulations [CCR] Section 15000 et seq.).

11 The City is evaluating the proposed implementation of multiple infrastructure projects within
12 the State Streets neighborhood located on the east side of the city, bounded by Jefferson
13 Boulevard, Park Boulevard, 15th Street, and Stone Boulevard. Infrastructure improvements
14 would include replacement and rehabilitation of water and sanitary sewer mains and
15 pipelines, as well as rehabilitation of existing curb, gutter, sidewalk, and pavement.

16 This chapter describes the intent and scope of this IS/MND, the public involvement process,
17 the organization and scope of the document, and specific impact-related terminology used in
18 the document.

19 1.2 Intent and Scope of this Document

20 This IS/MND has been prepared in accordance with CEQA, under which the Proposed Project
21 is evaluated at a project level (State CEQA Guidelines Section 15378). The City of West
22 Sacramento, as the lead agency under CEQA, will consider the Proposed Project’s potential
23 environmental impacts when considering whether to approve the project. This IS/MND is an
24 informational document to be used in the planning and decision-making process for the
25 Proposed Project and does not recommend approval or denial of the Proposed Project.

26 This IS/MND describes the Proposed Project; its environmental setting, including existing
27 conditions and regulatory setting, as necessary; and the potential environmental impacts of
28 the Proposed Project on or with regard to the following topics:

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

1

2 1.3 Public Involvement Process

3 Public disclosure and dialogue are priorities under CEQA. State CEQA Guidelines Sections
 4 15073 and 15105(b) require that the lead agency designate a period during the IS/MND
 5 process when agencies and the public can provide comments on the potential impacts of the
 6 Proposed Project. Accordingly, the City is circulating this document for a 30-day public and
 7 agency review period. The beginning and ending dates of the comment period are identified
 8 in the Notice of Availability.

9 Comments on this IS/MND can be submitted by mail or email to the following contact:

10 Amber Wallace, P.E., Associate Civil Engineer
 11 City of West Sacramento Capital Projects & Transportation Department
 12 1110 West Capitol Avenue, 1st Floor
 13 West Sacramento, CA 95691
 14 Email: amberwa@cityofwestsacramento.org

15 All comments received before 5:00 p.m. on the date identified for closure of the public
 16 comment period in the Notice of Intent will be considered by the City during its deliberations
 17 on whether to approve the Proposed Project.

18 1.4 Organization of this Document

19 This IS/MND contains the following components:

20 Chapter 1, *Introduction*, provides a brief description of the intent and scope of this
 21 IS/MND, the public involvement process under CEQA, the organization of the
 22 document, and terminology used in this IS/MND.

23 Chapter 2, *Project Description*, describes the Proposed Project, including its purpose
 24 and goals, the project site where the Proposed Project would be constructed and
 25 operated, construction methods, and related permits and approvals.

Chapter 3, *Environmental Checklist*, presents the environmental checklist used to assess the Proposed Project's potential environmental effects, which is based on the model provided in Appendix G of the State CEQA Guidelines. This chapter includes brief regulatory environmental setting descriptions for each resource topic, evaluates the Proposed Project's anticipated environmental impacts, and identifies mitigation measures that would be required to reduce potentially significant impacts to a less-than-significant level.

Chapter 4, *Report Preparers*, identifies the individuals who prepared portions of this document.

Chapter 5, *References*, provides a bibliography of printed references, websites, and personal communications used in preparing this IS/MND.

Appendices:

- Appendix A. *Arborist Report*
- Appendix B. *Biological Resources Information*
- Appendix C. *Cultural/Tribal Cultural Resources Evaluation*
- Appendix D. *Mitigation Monitoring and Reporting Program*

1.5 Impact Terminology

This IS/MND uses the following terminology to describe the environmental effects of the Proposed Project:

- A finding of *no impact* is made when the analysis concludes that the Proposed Project would not affect the particular environmental resource or issue.
- An impact is considered *less than significant* if the analysis concludes that no substantial adverse change in the environment would result and that no mitigation is needed.
- An impact is considered *less than significant with mitigation* if the analysis concludes that no substantial adverse change in the environment would result with the implementation of the mitigation measures described.
- An impact is considered *potentially significant* if the analysis concludes that a substantial effect on the environment could result.
- Mitigation refers to specific measures or activities that would be adopted by the lead agency to avoid, minimize, rectify, reduce, eliminate, or compensate for an otherwise significant impact.
- A cumulative impact refers to one that can result when a change in the environment would result from the incremental impacts of a project along with other related past, present, or reasonably foreseeable future projects. Significant cumulative impacts might result from impacts that are individually minor but collectively significant. The cumulative impact analysis in this IS/MND focuses on whether the Proposed Project's incremental contribution to significant cumulative impacts caused by the project in combination with past, present, or probable future projects is cumulatively considerable.

- 1 ▪ Because the term “significant” has a specific usage in evaluating the impacts under
- 2 CEQA, it is used to describe only the significance of impacts and is not used in other
- 3 contexts within this document. Synonyms such as “substantial” are used when not
- 4 discussing the significance of an environmental impact.

3 **2.1 Overview**

4 The City of West Sacramento (City) is evaluating the environmental effects of implementing
5 multiple infrastructure projects within the State Streets neighborhood. The State Streets
6 Infrastructure Improvement Project (Proposed Project) can be characterized generally as
7 improvements to water infrastructure, sanitary sewer infrastructure, and existing pavement.
8 The neighborhood, located southwest of the Interstate 80 (I-80)/Jefferson Boulevard
9 interchange and west of the Sacramento River, is bounded by Jefferson Boulevard, Park
10 Boulevard, and Stone Boulevard.

11 This chapter describes the Proposed Projects and discusses its purpose, objectives, location,
12 proposed actions, and necessary permits and approvals.

13 **2.2 Proposed Project Purpose and Objectives**

14 The purpose of the State Streets Water Capacity and Sewer Rehabilitation Project is to correct
15 some of the infrastructure deficiencies identified in the *2015 Water System Master Plan*
16 *Update* (City of West Sacramento 2017a) and *2015 Sanitary Sewer Master Plan Update* (City
17 of West Sacramento 2017b), as well as conducting additional pavement and curb/gutter
18 maintenance activities in the area.

19 Project objectives are as follows:

- 20 ▪ replace the aging water as identified in the City’s *2015 Water Master Plan Update* and,
21 to improve water system reliability and to improve fire flows in the area;
- 22 ▪ replace or rehabilitate aging sewer pipelines as identified in the City’s *2015 Sanitary*
23 *Sewer Master Plan Update*; and
- 24 ▪ repair and/or remove and replace curb, gutter, sidewalk, and retrofits required to
25 comply with the Americans with Disabilities Act (ADA) and rehabilitate deficient
26 street sections.

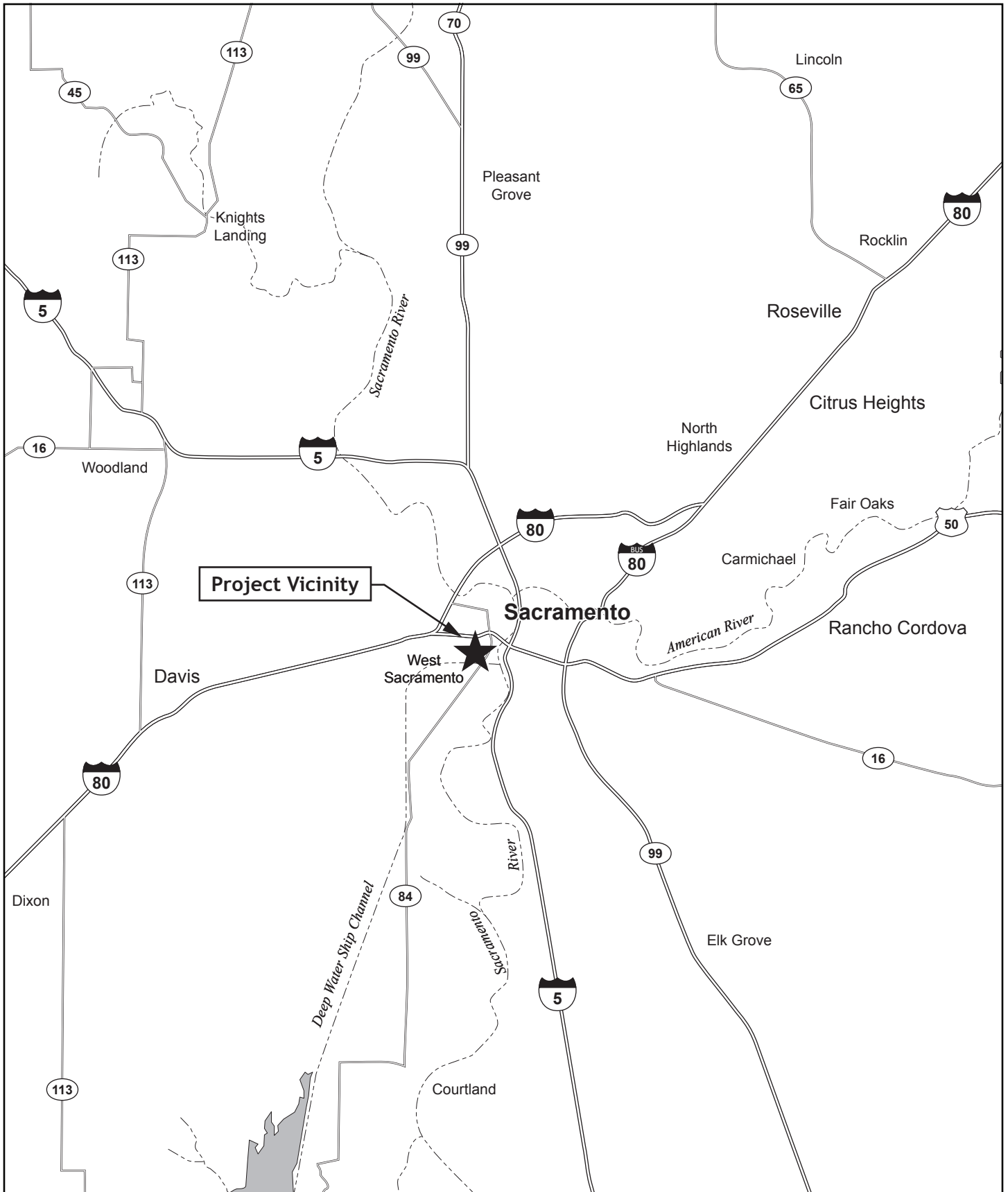
27 **2.3 Proposed Project Location and Setting**

28 The State Streets area is located in the central portion of the City of West Sacramento, on the
29 eastern border of Yolo County with Sacramento County (**Figure 2-1**). The neighborhood is
30 located southwest of the Interstate 80 (I-80)/Jefferson Boulevard interchange and west of
31 the Sacramento River.

32 The State Streets neighborhood is one of the city’s older communities, with the earliest
33 development dating back to the 1920s and the largest influx taking place after World War II,
34 in the early 1950s. Bounded by Jefferson Boulevard, Park Boulevard, and Stone Boulevard,

1 the neighborhood comprises the eastern half of what is also referred to as Old West
2 Sacramento. Approximately 625 single-family residences are located in the neighborhood,
3 with an estimated population of approximately 1,750 persons. The area is designated entirely
4 as Low Density Residential (LR) except for a community park between Regent Street and
5 Euclid Street, designated Recreation and Park (RP), and a small commercial area north of the
6 intersection of Maryland Avenue and Virginia Avenue, designated Commercial (C).

7



**Figure 2-1.
Project Location Map**

Prepared by:



State Streets Infrastructure Projects

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2.4 Proposed Project Elements

The Proposed Project consists of replacing approximately 9,600 feet of water main within eight identified residential streets and replacing or rehabilitating approximately 36,000 feet of gravity sewer main. **Figure 2-2** illustrates the project boundaries and the streets that would be affected. Two project boundaries are shown: (1) the streets that would undergo water main replacement and sewer main replacement and (2) the larger limits of the closed-circuit television (CCTV) sewer investigations, sewer lining, and curb/gutter/pavement rehabilitation. The CCTV inspection has already been conducted for most portions of the project area, and almost all of the sewer lines are suitable for rehabilitation rather than replacement. The remaining areas would be inspected to identify the potential rehabilitation needs for the remaining sewer mains in the larger project boundary. **Table 2-1** identifies the streets affected by the Proposed Project where water main improvements and sewer main replacements are proposed.

Table 2-1. Areas Affected by the Proposed Projects

Street	Cross Streets	Approximate Length (linear feet)
Water System Improvements		
Maryland Avenue	18 th Street to 15 th Street	1,912
Delaware Avenue	Regent Street to 15 th Street	1,906
Pennsylvania Avenue	Regent Street to Alameda Boulevard	1,472
Alabama Avenue	Alameda Boulevard to 15 th Street	598
Virginia Avenue	Alameda Boulevard to 15 th Street	1,035
17 th Street	Park Boulevard to Alabama Avenue	1,117
Alameda Boulevard	Maryland Avenue to Alabama Avenue	775
Circle Street	Alabama Avenue to Virginia Avenue	770
Total		9,585
Sewer Line Replacement and Rehabilitation		
Sewer pipelines in the area bounded by Jefferson Boulevard, Park Boulevard, Stone Boulevard, and 15th Street (see Section 2.5.2, "Sewer Main Rehabilitation and Replacement," for more information)		36,235
Pavement Restoration		
Curb, gutter, sidewalk, and driveways in the area bounded by Jefferson Boulevard, Park Boulevard, Stone Boulevard, and 15th Street (see Section 2.5.3, "Pavement Restoration," for more information)		As needed throughout

15 Source: Domenichelli and Associates 2018; City of West Sacramento 2019

1 **2.4.1 Water Main Replacement**

2 The City would replace approximately 9,600 feet of water main using open-cut installation at
3 the current locations. Based on City design requirements, all water mains within the City's
4 distribution system would be replaced with minimum 8-inch-diameter pipes. The existing
5 asbestos cement (transite) and welded steel piping would be abandoned in place and
6 replaced with polyvinyl chloride (PVC) pipe, which is an acceptable option for potable water
7 systems. Water mains would be backfilled by at least 30 inches of soil and pavement (within
8 the existing right-of-way [ROW]), installed in accordance with City standards. A geotechnical
9 engineering study prepared for the Proposed Project (Youngdahl Consulting Group 2018)
10 includes recommendations for backfilling in areas that contain unsuitable material, if any are
11 identified.

12 The existing water mains would be abandoned in place in accordance with City procedures.
13 Each main not in use would be disconnected and capped with a minimum of 24 inches of
14 concrete injected into the pipe, mushrooming 12 inches beyond the end of the pipe. Water
15 mains that would remain in use would be capped with cast iron fittings, with a concrete thrust
16 block placed against the cap.

17 Fire hydrants would be installed at or near street intersections at a maximum spacing of 500
18 feet; on streets without fronting lots, fire hydrants would have a maximum spacing of 1,000
19 feet.

20 All properties in West Sacramento are served by water meters. If any existing water meters
21 would need to be relocated to accommodate the new water main, they would be reconnected
22 at a suitable location.

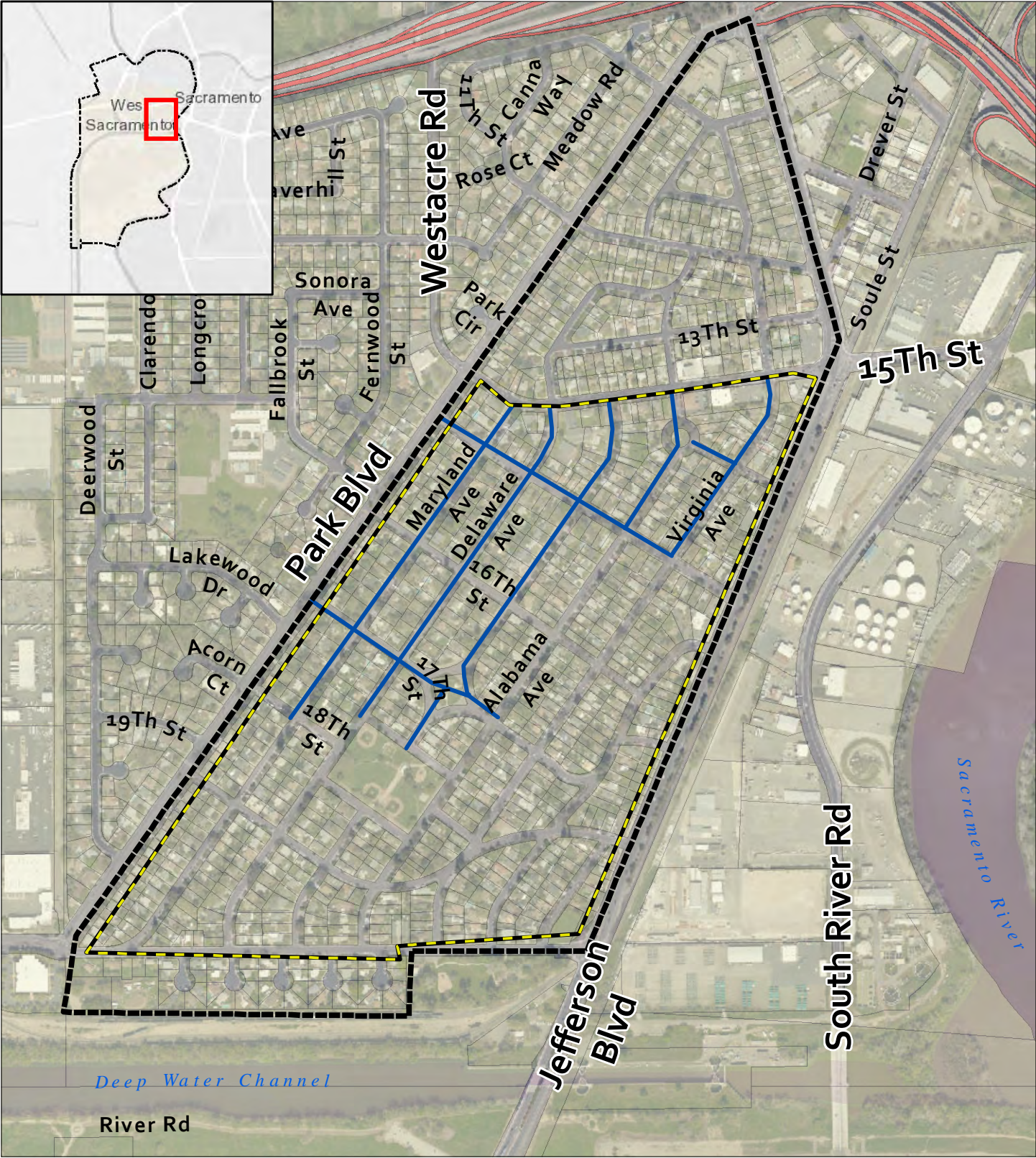
23 **2.4.2 Gravity Sewer Main Rehabilitation**

24 The Proposed Project includes rehabilitation or replacement of approximately 36,235 linear
25 feet of sewer main within the project area. The City has used video inspection to determine
26 rehabilitation or replacement for most of the project area; inspection is in process for the
27 remaining areas. This project would use the existing sewer main alignments and current pipe
28 depths through a trenchless process. Some excavation may be required for repair of service
29 laterals.

30 Rehabilitation method alternatives and recommendations are presented in Section 2.5.

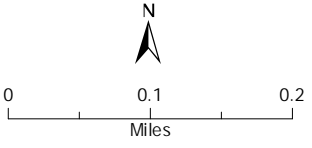
31 **2.4.3 Pavement Restoration**

32 The City would perform a project-wide pavement restoration project as part of the Proposed
33 Project. Approximately 16,000 linear feet of curbs and gutters, along with two valley gutters,
34 sidewalks, and residential and commercial driveways within the State Streets neighborhood
35 would be repaired, rehabilitated, or replaced during project construction. The City has
36 evaluated the condition of these facilities throughout the project area and identified locations
37 in need of repair or replacement.



Basebap Sources: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,

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- Proposed water main replacement
- Boundary of Proposed Sanitary Sewer main Rehab/Repair
- Pavement Rehabilitation boundary area

Source: City of West Sacramento 2018



Figure 2-2
Proposed Project Site

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1 **2.5 Proposed Project Construction**

2 Information on construction methods for the Proposed Project is provided in the *Design*
3 *Criteria Technical Memorandum* prepared for the Proposed Project in December 2018
4 (Domenichelli and Associates 2018).

5 **2.5.1 Water Main Replacement**

6 The new water mains would be installed using conventional open-cut methods in accordance
7 with City standards and the City's encroachment permit requirements. Although water
8 service lines are sometimes installed using trenchless boring technology to minimize surface
9 impacts, the open-cut method is considered a feasible installation method for this project
10 because pavement restoration is also a part of the project.

11 The existing water main and water services would be shut down during scheduled mainline
12 shutdowns and when the existing water services are being crossed over to the new water
13 services and mains. The City's Utility Maintenance Division would notify all affected users in
14 writing at least 48 hours in advance of service interruption. Shutdowns would not be allowed
15 on Friday, weekends, or City-recognized holidays.

16 The existing water mains and water services would remain in service (except for limited shut-
17 downs during construction) until the new main and water services have been installed and
18 backfilled, flushed, pressure tested, and passed bacteriological tests.

19 **2.5.2 Sewer Main Rehabilitation and Replacement**

20 **Rehabilitation Methods**

21 Two methods would be used for rehabilitation and replacement of sewer mains as part of the
22 Proposed Project. A total of 36,235 feet of sewer pipelines within the area bounded by
23 Jefferson Boulevard, Park Boulevard, Stone Boulevard, and 15th Street will be inspected to
24 determine the need for replacement or rehabilitation. All lines will be either lined with Cured
25 in Place Pipe or replaced. Sewer laterals may be rehabilitated and replaced as needed.

26 ***Conventional Open-cut Removal and Replacement***

27 The conventional rehabilitation method requires the contractor to open-cut and shore the
28 trench over the existing sewer pipe, remove existing pipe, and install the new sewer main
29 pipe in the same location. This method would be used for localized spot repairs at locations
30 where the existing sewer main has been significantly compromised (e.g., broken pipe), based
31 on information obtained from the CCTV inspection, and at locations where the sewer main
32 cannot be lined or where a substantial length of the sewer main needs to be replaced. New
33 sewer mains installed through the open-cut method are typically PVC pipe.

34 ***Cured-in-Place Pipe***

35 The cured-in-place pipe (CIPP) rehabilitation method involves lining the existing "host pipe"
36 with a resin-impregnated felt liner that is inflated and cured in place. This method is typically
37 used for full-length rehabilitations. In some instances, spot repairs may be necessary to
38 successfully perform the lining procedure. In all cases, a resin-impregnated felt liner is the

1 only material used in this rehabilitation process; the liner may be either a structural or non-
2 structural liner. Based on the CCTV inspection and the potential for void spaces within the
3 existing pipe backfill, a structural liner is recommended when the CIPP method is used.

4 The CIPP rehabilitation method would be most commonly used to rehabilitate the existing
5 sewer mains. Based on the CCTV inspection, most of the sewer mains inspected appear they
6 would accommodate the CIPP process. It is anticipated that more sewer main cleaning and
7 some spot repairs would be necessary to adequately remove solids and/or eliminate pipe
8 sags and joint off-sets before the CIPP method can be implemented.

9 **Sewer System Management Plan**

10 For all rehabilitation methods, the City's contractor would be required to prepare, submit for
11 City approval, and implement a sewer system management plan (SSMP) specific to each
12 rehabilitation method. The SSMP would identify the labor, materials, and equipment
13 provided to avoid any sanitary sewer overflows, sewer impacts on customers, and impacts
14 on the other portions of the City sewer system not actively being rehabilitated. The SSMP
15 would outline the contractor's approach to bypass sewer flows and/or temporarily plug the
16 sewer system while performing the sewer main rehabilitation.

17 **2.5.3 Pavement Restoration**

18 Construction methods for pavement may include mill and fill, full-depth-reclamation or cold-
19 in-place replacement. Temporary pavement would be placed during pipeline installation.
20 These activities could include installation of any new sewer mains, locations of spot repairs,
21 manhole rehabilitation or replacements, sewer lateral reconnections or replacement, and any
22 other activity where pavement would be disturbed. The City may consider a reduced final
23 trench thickness (3 inches rather than the standard 4 inches) or allow for restoration of the
24 trench section only (no T-trench section required).

25 **2.5.4 Potential Need for Tree Removal**

26 As described above, homes in the State Streets neighborhood were constructed between the
27 1910s and the 1950s. Many properties have well-established landscape trees, some of which
28 have grown over or beneath the sidewalk and road and may have caused damage to pavement
29 and/or pipelines. In addition, water and sewer pipelines for the neighborhood were installed
30 at approximately the same time these trees were planted. As a result, some tree roots may be
31 located directly in the path of excavation and construction activities for the Proposed Project.

32 To identify which trees could be affected by the Proposed Project, surveyors with the City
33 Capital Projects & Transportation Department compared the project map (Figure 2-2) with a
34 map of trees in the project area. West Coast Arborists then conducted a tree survey of the
35 neighborhood and identified, measured, and assessed the health of the 68 indicated trees in
36 fall 2018 (**Figure 2-3**). Of these, five trees were recommended for removal regardless of
37 project construction because of location, poor structure, or poor health. An additional two
38 trees were recommended for extensive pruning to reduce safety hazards from poor structure.
39 More information about the arborist's evaluation is provided in Section 3.4, "Biological
40 Resources," and **Appendix A, Arborist Report**.

41



Figure 2-3.
Mapped Locations of Potential Tree Impacts

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1 The City's Tree Preservation Ordinance (Chapter 8.24 of the West Sacramento Municipal
 2 Code) protects several classifications of trees that may be affected by a typical construction
 3 project:

- 4 ▪ **Heritage tree:** Any living tree with a trunk circumference of 75 inches or more or a
 5 native oak with a trunk circumference of 50 inches or more, measured 4 feet 6 inches
 6 from ground level
- 7 ▪ **Landmark tree:** Any tree or stand of trees that is especially prominent, stately, or of
 8 historical significance as designated by the city council
- 9 ▪ **Native oak tree:** A living tree of any species of the *Quercus* genus (all oaks, including
 10 the nine native California oaks); for example, the interior live oak (*Quercus wislizenii*),
 11 valley oak or California white oak (*Quercus lobata*), or blue oak (*Quercus douglasii*)
- 12 ▪ **Street tree:** Any tree growing or placed within the tree maintenance strip or public
 13 right-of-way

14 Under the Tree Preservation Ordinance, trees in these classifications that are affected by
 15 construction activity must be replaced; other categories of trees, such as landscaping trees
 16 on private property, are not protected. For this project, the City tree administrator has
 17 determined that, because of the significance of trees as a key element of the neighborhood's
 18 identity, the requirement under the City's Tree Preservation Ordinance to replace only
 19 heritage, native, and landmark trees and street trees would be expanded to include to all trees
 20 that require removal.

21 During construction, West Coast Arborists would evaluate trees on a case-by-case basis
 22 where construction activities are identified as affecting roots or branches. The City would
 23 make every reasonable effort to preserve trees where feasible; however, the nature of the
 24 pipeline work being proposed allows limited opportunity for modification to avoid impacts.

25 The City would make replacement trees available to homeowners through the City Parks and
 26 Recreation Department's West Sacramento Tree Program. This program provides free trees
 27 to homeowners who attend a Free Tree Workshop (City of West Sacramento n.d.). The
 28 following tree species are available through the program:

- 29 ▪ Valley Oak (*Quercus lobata*)
- 30 ▪ Cork Oak (*Quercus suber*)
- 31 ▪ Frontier Elm (*Ulmus 'Frontier'*)
- 32 ▪ Prospector Elm (*Ulmus wilsoniana*)
- 33 ▪ Golden Rain (*Koelreuteria paniculate*)
- 34 ▪ Trident Maple (*Acer buergerianum*)
- 35 ▪ Maidenhair Tree (*Ginkgo biloba*)
- 36 ▪ Deodar Cedar (*Cedrus deodara*)

37 These species have been selected as being drought resistant and "utility friendly" (i.e., their
 38 height and branching structure are not likely to interfere with power lines, and their root
 39 system is not likely to affect underground pipelines or sidewalks), as well as based on their
 40 speed of growth, hardiness, and lifespan.

1 **2.5.5 Construction Equipment**

2 Approximately 20-35 construction workers would commute to and from the project site each
 3 work day over the approximately 18-month work period. The main pieces of equipment that
 4 may be used are the following:

Water Main and Sewer Main Installation

- track-mounted excavators (2)
- end dump/haul trucks (4)
- flat-bed delivery truck (1)
- concrete truck (1)
- backhoe (1)
- front-end loaders (2)
- vac truck (1)
- concrete saw (1)
- pipe cutting saw (2)
- water truck (1)
- street sweeper (1)
- “Ditch Witch” horizontal directional drilling machine (1)
- compressor/jack hammer (1)
- crew trucks (F150-F350) (3)

CIPP Installation

- Television Inspection truck (1)
- vac truck (2)
- refig truck/liner truck (1)
- generator truck (1)
- water truck (1)
- boiler truck (1)
- crew trucks (F150-F350) (3)

5 **Table 2-2** provides information about construction scheduling during each stage of
 6 construction. Most soil excavated from the project construction areas would be reused to fill
 7 the excavated areas; the remaining soil would be off-hauled to a landfill.

8 **Table 2-2.** Construction Schedule by Stage

Stage	Estimated Dates
Sewer Rehabilitation	
Open cut sewer main and lateral installation	mid-January through mid-March 2020
Sewer main CIPP rehabilitation	mid-January through June 2020
Water Main Improvement	
Water main installation	mid-June through August 2020
Water service installation	August through September 2020
Trench pavement restoration and street repaving	March 2021

9 *Source: Dugan, pers. comm., 2019*

1 **2.5.6 Construction Schedule and Timeline**

2 Construction of the Proposed Project is anticipated to take place over approximately 18
3 months and is expected to begin in January 2020. Table 2-2 provides general information
4 about the phasing and schedule for the Proposed Project.

5 Construction activities would occur Monday through Friday between 7:00 a.m. and 7:00 p.m.
6 as allowed by City ordinance. Work on Saturdays, Sundays, and state holidays may be
7 permitted on a case-by-case basis at the discretion of the City.

8 The construction process would take place in three parts.

- 9 ▪ Sewer replacement would affect approximately 523 homes over the first six months of
10 2020. Cleaning would progress at a rate of 12,000 feet per day, and lining would move
11 at 800 feet per day.
- 12 ▪ Water line replacement would take place in summer of 2020, progressing at a rate of
13 200-300 feet per day.
- 14 ▪ Repaving of the streets would take place in spring 2021. The new base would be
15 compacted at a rate of 1 block per day (drivable immediately afterward) and then left to
16 cure for 2 days. Grading and paving would take place on 1 block per day.

17 In all, active construction would take place in front of each affected residence for
18 approximately 6 days over the year-long construction period.

19 **2.6 Responsible and Trustee Agencies**

20 California Environmental Quality Act (CEQA) defines a responsible agency as “a public
21 agency, other than the lead agency, which has responsibility for carrying out or approving a
22 project” (Public Resources Code [PRC] Section 21069). A trustee agency is “a state agency
23 that has jurisdiction by law over natural resources affected by a project, that are held in trust
24 for the people of the State of California” (PRC Section 21070). For the Proposed Project, the
25 California Department of Fish and Wildlife, North Central Region, is considered a trustee
26 agency. Responsible agencies for the Proposed Project are the Central Valley Regional Water
27 Quality Control Board and Yolo-Solano Air Quality Management District.

1 **2.7 Permits and Approvals**

2 The permits and regulatory compliance requirements for the Proposed Project are described
 3 in **Table 2-3**.

4 **Table 2-3. Applicable Permit and Regulatory Requirements**

Regulatory Agency	Law/Regulation	Purpose	Permit/Authorization Type
Central Valley Regional Water Quality Control Board	Clean Water Act Section 402	National Pollutant Discharge Elimination System (NPDES) program regulates discharges of pollutants	NPDES General Permit Construction Permit
Central Valley Regional Water Quality Control Board	Nonpoint Source Pollution Control Program	Regulates discharge of pollutants into surface waters	Section 401 water quality certification
California Department of Fish and Wildlife – North Central Region	California Endangered Species Act (CESA) (Fish and Game Code Section 2081[b])	Regulates “take” of species listed under CESA as threatened or endangered	Incidental Take Permit, if necessary
Yolo-Solano Air Quality Management District	Stationary Source Permit	Required for activities that emit pollutants	Authority to Construct and Permit to Operate (for generators or pumps if larger than 50 horsepower)

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Chapter 3

ENVIRONMENTAL CHECKLIST

This chapter of the initial study/mitigated negative declaration (IS/MND) assesses the environmental impacts of the City of West Sacramento’s State Streets Infrastructure Projects (Proposed Project) based on the environmental checklist provided in Appendix G of the State California Environmental Quality Act (CEQA) Guidelines. The environmental resources and potential environmental impacts of the Proposed Project are described in the individual sections below. Each section includes a discussion of the rationale used to determine the significance level of the Proposed Project’s environmental impact for each checklist question. For environmental impacts that have the potential to be significant, mitigation measures are identified that would reduce the severity of the impact to a less-than-significant level.

- | | |
|---|---|
| 1. Project Title | State Streets Infrastructure Projects |
| 2. Lead Agency Name and Address | City of West Sacramento
Capital Projects & Transportation Department
1110 West Capitol Avenue, 1 st Floor
West Sacramento, CA 95691 |
| 3. Contact Person, Phone Number and Email | Amber Wallace, P.E., Associate Civil Engineer
(916) 617-5327
amberwa@cityofwestsacramento.org |
| 4. Project Location and Assessor's parcel number (APN) | Neighborhood located southwest of the Interstate 80 (I-80)/Jefferson Boulevard interchange and west of the Sacramento River, bounded by Jefferson Boulevard, Park Boulevard, and Stone Boulevard, including road right-of-way |
| 5. Property Owner(s) | City of West Sacramento |
| 6. General Plan Designation | Mostly Low Density Residential District (LR); some Recreation and Parks (RP), Commercial (C) |
| 7. Zoning | Mostly Residential One Family (R-1-A); some Residential-Medium Density (R-2), Recreation and Parks (RP), Commercial (C) |
| 8. Description of Project | The Proposed Project would involve upgrading water, sanitary sewer pipelines , and repairing and/or removing and replacing curbs, gutters, sidewalks, and rehabilitate pavement . |
| 9. Surrounding Land Uses and Setting | Residential, Open Space, Recreation and Parks, Public/Quasi Public, and commercial uses surround the project location, with the Sacramento River on the east. Residential uses border the western side of |

the project site with a small strip of open space bordering the southwestern most section, Sam Combs Park is located to the southeast, railroad tracks are located along the southern border of the site, and commercial buildings are located along the eastern border.

10. Other Public Agencies whose Approval or Input May Be Needed

- Central Valley Regional Water Quality Control Board
- California Department of Fish and Wildlife – North Central Region
- Yolo-Solano Air Quality Management District

11. Native American Consultation

The United Auburn Indian Community of the Auburn Rancheria (UAIC) and the Yocha Dehe Wintun Nation, both tribes with a traditional and cultural affiliation to the Project area, had previously requested consultation with the City on department projects pursuant to PRC section (§) 21080.3.1. The City sent Project notification letters, dated February 1, 2019, to both tribes via United States (U.S.) mail with a returned receipt. The Yocha Dehe Wintun Nation responded in a letter dated February 19, 2019, stating that the tribe “would like to participate in ongoing consultation.” The UAIC responded in a letter dated March 11, 2019, requesting consultation under Assembly Bill (AB) 52, copies of all cultural resources record search materials and environmental documents, and indicated a desire to meet to discuss the project. The requested consultation with both tribes has taken place.

1

2

1 Environmental Factors Potentially Affected

2 The environmental factors checked below would potentially be affected by the Proposed
3 Project, as indicated by the checklist on the following pages.

- | | |
|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Mineral Resources |
| <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Noise |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Population/Housing |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Energy | <input checked="" type="checkbox"/> Transportation |
| <input checked="" type="checkbox"/> Geology/Soils | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Utilities/Service Systems |
| <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Wildfire |
| <input type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Land Use/Planning | |

4

1 **Determination**

2 The conclusions and recommendations contained herein are professional opinions derived
 3 in accordance with current standards of professional practice. They are based on a review of
 4 sources of information cited in this document, and the comments received, conversations
 5 with knowledgeable individuals; the preparer's personal knowledge of the area; and, where
 6 necessary, a visit to the site.

7 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 (EIR) 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 EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Amber Wallace
 Signature

11/5/19
 Date

Name: Amber Wallace

1 **3.1 AESTHETICS**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2

3 **Discussion**

4 The California Scenic Highway Program, a provision of the Streets and Highways Code,
 5 functions to preserve and enhance the natural beauty of California (California Department of
 6 Transportation [Caltrans] 2018). The state highway system includes designated scenic
 7 highways and those that are eligible for designation as scenic highways. The nearest
 8 designated scenic highway is State Route (SR) 160 south of Freeport, approximately 11 miles
 9 southeast of the project area (Caltrans 2019).

10 As described in Chapter 2, *Project Description*, the State Streets neighborhood dates back to
 11 the 1920s, with the largest influx of population taking place in the early 1950s. The
 12 neighborhood consists of approximately 625 single-family residences situated on paved
 13 streets. Many properties have well-established landscape trees, some of which have grown
 14 over or beneath the sidewalk and road and may have caused damage to pavement and/or
 15 pipelines. The streets have curb, gutter, and sidewalk that are in disrepair due to the age of
 16 the construction and disruption by street trees. Two small parks, Fred and Leila Holmes Park
 17 and Memorial Park, are located in the midst of the neighborhood, and a small commercial
 18 area is located at Maryland Avenue and Virginia Avenue.

1 ***a. Adverse effects on scenic vistas (No Impact)***

2 A scenic vista is generally considered a view of an area that has remarkable scenery or a
3 natural or cultural resource that is indigenous to the area. No portion of the project area has
4 been designated as, or is located in the vicinity of, a scenic vista. The project area is an urban
5 residential area. Therefore, there would be **no impact**.

6 ***b. Damage to scenic resources, including, but not limited to, trees, rock
7 outcroppings, and historic buildings within a state scenic highway (No
8 Impact)***

9 The nearest state-designated scenic highway is approximately 11 miles southeast along the
10 Sacramento River at Freeport. No scenic resources are visible from the State Streets
11 neighborhood, and no scenic resources are located at or near the project area. Therefore,
12 there would be **no impact**.

13 ***c. Degrade the existing visual character or quality of views in non-
14 urbanized areas, or conflict with applicable zoning and other
15 regulations governing scenic quality in urbanized areas (Less than
16 Significant)***

17 The project area is an urban residential neighborhood. The City of West Sacramento has no
18 zoning or other regulations related to scenic quality that would apply to the Proposed Project
19 or the project area. As described in Section 2.5.4, "Potential Need for Tree Removal," some
20 landscape trees have grown over or beneath the sidewalk and road and may have caused
21 damage to pavement and/or pipelines. As a result, some tree roots may be located directly in
22 the path of excavation and construction activities for the Proposed Project.

23 As part of planning for the Proposed Project, surveyors with the City Capital Projects &
24 Transportation Department compared the project map (Figure 2-2) with a map of trees in the
25 project area. West Coast Arborists then conducted a tree survey of the neighborhood and
26 identified, measured, and assessed the health of the 68 indicated trees in fall 2018
27 (Figure 2-3). Of these, five trees were recommended for removal regardless of project
28 construction because of location, poor structure, or poor health. Two additional trees were
29 recommended for extensive pruning to reduce safety hazards from poor structure.

30 During construction, West Coast Arborists would evaluate trees on a case-by-case basis
31 where construction activities are identified as affecting roots or branches. The City would
32 make every reasonable effort to preserve trees where feasible; however, the nature of the
33 pipeline work being proposed allows limited opportunity for modification to avoid impacts.
34 The City would also make replacement trees available to homeowners; more information
35 about this process is provided in Section 3.4, "Biological Resources." As a result, the impact
36 of the Proposed Project on the existing visual character of the project area would be **less than
37 significant**.

1 ***d. New sources of substantial light or glare (Less than Significant)***

2 Construction activities would typically be performed Monday through Friday between 7:00
3 a.m. and 7:00 p.m. as allowed by City ordinance. Work on Saturdays, Sundays, and state
4 holidays may be permitted on a case-by-case basis at the discretion of the City. Therefore,
5 nighttime work would likely be infrequent, and project activities would not generally result
6 in additional lighting in the project area that could affect the surrounding residences. No
7 external changes would result that would involve additional lighting; therefore, no new
8 sources of light or glare would be created. Therefore, this impact would be **less than**
9 **significant.**

1 **3.2 AGRICULTURAL RESOURCES**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a California Land Conservation Act of 1965 (Williamson Act) contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2

3 **Discussion**

4 According to the California Department of Conservation (CDOC), no land within or adjacent
 5 to the project area is classified as Important Farmland. The project area is designated as
 6 urban or built-up land (CDOC 2017). The State Streets neighborhood is an urban residential
 7 neighborhood that has been developed since the mid-20th century, and no agricultural areas
 8 are located in the general vicinity.

1 ***a, e. Convert farmland to non-agriculture use, or result in conflicts with or***
2 ***loss of agricultural or forest lands (No Impact)***

3 No land within or adjacent to the project area is classified as Important Farmland by the
4 CDOC. The project area is designated as urban or built-up land (CDOC 2017). Although many
5 landscape trees are present within the neighborhood, these trees are ornamental and are not
6 part of a stand intended for commercial production. Therefore, the Proposed Project would
7 not result in the conversion of farmland to non-agricultural use or result in conflicts with or
8 loss of agricultural or forest lands. There would be **no impact**.

9 ***b-c. Conflict with existing zoning for agriculture use, Williamson Act***
10 ***Contract, or forest land or timber land (No Impact)***

11 Land use designations in the project area are Low Density Residential (LR); Recreation and
12 Park (RP), for the small park areas; and Commercial (C) for a small commercial area north of
13 the intersection of Maryland Avenue and Virginia Avenue. No agricultural or timberland
14 zoning is present in or near the project area. There would be **no impact**.

15 ***d. Result in the loss of forest land or conversion of forest land to non-***
16 ***forest use (No Impact)***

17 Because no forest land or timberland is present in the project area, there would be **no impact**.

1 **3.3 AIR QUALITY**

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

2 **Discussion**

3 West Sacramento is within the Sacramento Valley Air Basin and is under the jurisdiction of
 4 the Yolo-Solano Air Quality Management District (YSAQMD). The YSAQMD is part of the
 5 Sacramento Federal Non-Attainment Area for ground-level ozone and fine particulate matter
 6 (i.e., particulate matter less than or equal to 2.5 microns in diameter, or PM2.5) pollution set
 7 by the United States Environmental Protection Agency (USEPA) (YSAQMD 2018).

8 Air quality plans applicable to the Project site include the Sacramento Regional 2008 National
 9 Ambient Air Quality Standards (NAAQS) 8-Hour Ozone Attainment and Reasonable Further
 10 Progress (RFP) Plan (YSAQMD 2017) and the PM2.5 Implementation/Maintenance Plan
 11 (YSAQMD 2013). The 8-Hour Ozone Plan demonstrates how existing and new control
 12 strategies will provide the necessary future emission reductions to meet the federal Clean Air
 13 Act requirements for reasonable further progress and attainment of the 1997 8-hour ozone
 14 NAAQS for the Sacramento region. The PM2.5 Plan shows that the region has met the
 15 redesignation requirements and requests that the USEPA redesignate the area to attainment.
 16 The plan also analyzes measures that were implemented to achieve attainment and that will
 17 provide for maintenance of the PM2.5 NAAQS.

18 The YSAQMD’s CEQA thresholds of significance are shown in **Table 3-1**.

1 **Table 3-1. Yolo-Solano Air Quality Management District Thresholds of Significance**

Pollutant	Threshold
ROG	10 tons/year
NO _x	10 tons/year
CO	Violation of a State ambient air quality standard for CO
PM ₁₀	80 lbs/day

2
3 *Notes: Emissions of CO from construction activities are not considered to be an issue of concern because*
4 *construction activities are not considered to be a major source of CO. In addition, the YSAQMD is in*
5 *attainment status for CO. CO = carbon monoxide; lbs/day = pounds per day; NO_x = nitrogen oxides; PM₁₀*
6 *= particulate matter less than or equal to 10 microns in diameter; ROG = reactive organic gases.*

7 *Source: YSAQMD 2007*

8 USEPA and California Air Resources Board (CARB) regulate various stationary sources, area
9 sources, and mobile sources. USEPA has regulations involving performance standards for
10 specific sources that may release toxic air contaminants (TACs), known as hazardous air
11 pollutants (HAPs) at the federal level. In addition, USEPA has regulations involving emission
12 criteria for off-road sources such as emergency generators, construction equipment, and
13 vehicles. CARB is responsible for setting emission standards for vehicles sold in California
14 and for other emission sources, such as consumer products and certain off-road equipment.
15 CARB also establishes passenger vehicle fuel specifications. Airborne Toxic Control Measures
16 (ATCMs), including the following relevant measures, are implemented to address sources of
17 TACs:

- 18 ▪ ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower
19 and Greater
- 20 ▪ ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- 21 ▪ ATCM to Reduce Particulate Emissions from Diesel-Fueled Engines – Standards for
22 Non-vehicular Diesel Fuel
- 23 ▪ ATCM for Stationary Compression Ignition Engines
- 24 ▪ Asbestos ATCM for Construction, Grading, Quarrying and Surface Mining Operations
25

26 CARB has several vehicle fleet regulations that cover fossil-fueled equipment operated at a
27 facility. These regulations require owners of equipment and vehicle fleets to meet fleet-wide
28 specified engine emission levels over time. Obligations include equipment registration,
29 equipment labeling, and reporting requirements. These regulations include the following
30 fleet rules:

- 1 ▪ Rule for On-Road Heavy-Duty Diesel-Fueled Public and Utility Fleets,
- 2 ▪ Portable Equipment Registration Program (PERP),
- 3 ▪ Large Spark-Ignition Engine Fleet Requirements Regulation, and
- 4 ▪ In-Use Off-Road Diesel-Fueled Fleets Regulation.

5 YSAQMD Rule 403 requires that visible dust beyond the property line emanating from the
6 Project will be prevented to the maximum extent feasible. During clearing, grading,
7 earthmoving, or excavation operations, excessive fugitive dust emissions shall be controlled
8 by regular watering or other dust preventive measures using the following procedures:

- 9 ▪ All material excavated or graded will be sufficiently watered to prevent excessive
10 amounts of dust.
- 11 ▪ Watering will occur at least twice daily with complete coverage, preferably in the
12 late morning and after work is done for the day.
- 13 ▪ All material transported off-site will be either sufficiently watered or securely
14 covered to prevent excessive amounts of dust.
- 15 ▪ The area disturbed by clearing, grading, earthmoving, or excavation operations will
16 be minimized so as to prevent excessive amounts of dust.

17 YSAQMD recommends that even projects not exceeding district particulate mater (PM)
18 thresholds should implement best management practices (BMPs) to reduce dust emissions
19 and avoid localized health impacts. The recommended BMPs to reduce PM10 include the
20 following:

- 21 ▪ Water all active construction sites at least twice daily.
- 22 ▪ Haul trucks shall maintain at least 2 feet of freeboard.
- 23 ▪ Cover all trucks hauling dirt, sand, or loose materials.
- 24 ▪ Apply chemical soil stabilizers on inactive construction areas (disturbed lands within
25 construction projects that are unused for at least four consecutive days).
- 26 ▪ Cover inactive storage piles.
- 27 ▪ Sweep streets if visible soil material is carried out from the construction site.
- 28

29 BMPs to reduce construction equipment exhaust focus on strategies that reduce NO_x, ROG,
30 and PM10 emissions. These strategies may include restricting unnecessary vehicle idling to
31 5 minutes, using reformulated and emulsified fuels, incorporating catalyst and filtration
32 technologies, and modernizing the equipment fleet with cleaner repower and newer engines,
33 among others.

1 ***a. Conflict with or obstruct implementation of the applicable air quality***
2 ***plan (Less than Significant)***

3 The Proposed Project would include improvements to utility infrastructure, which would
4 require a maximum excavation depth of 7 feet, as well as rehabilitation of pavement and
5 street surface. Work would be completed within existing right-of-way; however, work within
6 Caltrans right-of-way on Jefferson Boulevard, if necessary, would require an encroachment
7 permit. Construction duration would be approximately 18 months.

8 As detailed below in item (b), the Proposed Project would not result in significant air quality
9 impacts and would not increase exposure of sensitive receptors to air pollutants. The
10 Proposed Project would not conflict with or obstruct implementation of applicable air quality
11 plans. This impact would be **less than significant**.

12 ***b. Cumulatively considerable net increase of any criteria pollutant for***
13 ***which the project region is a nonattainment area (Less than***
14 ***Significant)***

15 The Proposed Project involves repair, replacement, and upgrade of a portion of the City's
16 water and sewer infrastructure; repair and replacement of curb, gutter, and sidewalk; and
17 rehabilitation of deficient street sections throughout the State Streets neighborhood. During
18 construction, short-term degradation of air quality may occur due to the release of particulate
19 emissions generated by excavation. Emissions from construction equipment also are
20 anticipated and would include CO, NO_x, ROG, PM₁₀, PM_{2.5}, and toxic air contaminants (e.g.,
21 diesel exhaust particulate matter).

22 Excavation and roadway construction would involve paving roadway surfaces. Construction-
23 related effects on air quality would be greatest during excavation, handling, and transport of
24 soils. If not properly controlled, these activities would temporarily generate PM₁₀, PM_{2.5},
25 CO, sulfur dioxide (SO₂), NO_x, and volatile organic compounds (VOC). The main source of
26 fugitive dust would be excavated soils. PM₁₀ emissions would vary from day to day,
27 depending on the nature and magnitude of construction activity and local weather conditions.
28 PM₁₀ emissions would also vary depending on soil moisture, the silt content of soil, wind
29 speed, and the amount of equipment operating at the time. Larger dust particles would settle
30 near the source, while fine particles would be dispersed over greater distances from the
31 construction site.

32 In addition to dust-related PM₁₀ emissions, heavy trucks and construction equipment
33 powered by gasoline and diesel engines would generate CO, SO₂, NO_x, VOCs, PM_{2.5}, and PM₁₀
34 in exhaust emissions. These emissions would be temporary and limited to the immediate area
35 surrounding the construction site. Areas within 500 feet of CARB-defined sensitive land uses
36 would be designated as no-idle areas where materials storage/transfer and equipment
37 maintenance activities are not permitted to occur.

38 SO₂ is generated by oxidation during combustion of organic sulfur compounds contained in
39 diesel fuel. Off-road diesel fuel meeting federal standards can contain up to 5,000 parts per
40 million (ppm) of sulfur, whereas on-road diesel is restricted to less than 15 ppm of sulfur.
41 However, under California law and California Air Resources Board regulations, off-road diesel

1 fuel used in California must meet the same sulfur and other standards as on-road diesel fuel;
2 therefore, SO₂-related issues due to diesel exhaust would be minimal.

3 Construction activities would take place over an approximately 18-month period, and
4 construction contractors would comply with CARB regulations and YSAQMD rules and BMPs
5 as identified above. No operational activities would involve emissions of criteria pollutants
6 beyond the activities taking place under existing conditions. Therefore, the Proposed Project
7 would not contribute to cumulative impacts related to emission of criteria pollutants. The
8 impact would be **less than significant**.

9 ***c. Expose sensitive receptors to substantial pollutant concentrations***
10 ***(Less than Significant)***

11 During project construction activities, diesel particulate matter (DPM) and gasoline fuel
12 combustion emissions that are classified as TACs could be emitted from construction
13 equipment. As described in Section 3.9, "Hazards and Hazardous Materials," petroleum-
14 contaminated soils were identified in one of the geotechnical borings at approximately 11.5
15 feet depth (Youngdahl 2018). These TACs could be emitted during excavation and hauling
16 work, if not properly handled. Due to the variable nature of excavation activity in any specific
17 location, however, the generation of and/or exposure to TAC emissions would be temporary,
18 especially considering the short amount of time such equipment is typically operating within
19 an influential distance that would result in the exposure of sensitive receptors to substantial
20 concentrations.

21 Potential toxic emissions from contaminated soil would be minimized through compliance
22 with the rules, regulations, and guidelines identified above and in Section 3.9, "Hazards and
23 Hazardous Materials." These practices would ensure that the amount of construction
24 emissions would be controlled to the extent feasible through a combination of newer
25 equipment, alternative fuel-powered equipment, after-market emission control equipment,
26 equipment maintenance, and work practices to minimize engine use.

27 Implementing these practices would ensure that health effects from the Proposed Project are
28 minimized for nearby sensitive receptors. The Proposed Project's effect on nearby sensitive
29 receptors due to construction-related air pollutant emissions would be **less than significant**.

30 ***d. Result in other emissions affecting a substantial number of people***
31 ***(Less than Significant)***

32 Diesel exhaust from excavation activities and backup generators may generate temporary
33 odors while the project is underway. Once activities are completed, these odors would cease.
34 The Proposed Project would involve removing some sanitary sewer pipelines, asphalt,
35 concrete, and possibly contaminated soil, which may produce additional objectionable odors.
36 The intensity of the odor perceived by a receptor depends on the distance of the receptor
37 from the excavation area and the amount and quality of the exposed material. Excavation and
38 removal work would be temporary at any given location, and the nearest sensitive receptors
39 would be at least 25 feet from the location of pipeline excavation. Impacts related to potential
40 generation of other emissions are thus expected to be temporary and **less than significant**.

1 **3.4 BIOLOGICAL RESOURCES**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 CDFW or USFWS?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state HCP?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 **Discussion**

3 West Coast Arborists conducted a tree inventory on December 12, 2018, to identify trees
 4 within the project area that could potentially be affected by project activities (West Coast
 5 Arborists 2018, provided as Appendix A of this IS/MND). In March 2019, the City Capital

1 Works & Transportation Department surveyor identified additional trees that could also be
2 potentially be affected. A reconnaissance-level biological site assessment was conducted by a
3 Horizon biologist on March 19, 2019. The purpose of the assessment was to characterize
4 existing conditions and assess the project area's potential to support special-status species.
5 The impact analysis was based on the results of the arborist inventory, reconnaissance-level
6 survey, and information about construction activity detailed in the Chapter 2, *Project*
7 *Description*.

8 The Proposed Project is located within a residential neighborhood in West Sacramento. The
9 project area is bounded by Jefferson Boulevard to the east/northeast, Park Boulevard to the
10 west, and Stone Boulevard to the south. Several park/open space areas are present within
11 the project area: Memorial Park is located in the middle southern portion of the project area.
12 Sam Combs Park is located directly south of the project area's southeastern most boundary.
13 Circle Park is a small open space area on Circle Street. Project activities (replacement of water
14 and sewer mains, sewer lining, and curb/gutter/pavement rehabilitation) would take place
15 within the paved streets. Vegetation within the project area boundary consists mostly of
16 ruderal or disturbed areas and landscaped yards. A small area located in the southwestern
17 most section of the project area contains annual grasslands; this area is undeveloped but is
18 proposed for development in the *City of West Sacramento General Plan* (City of West
19 Sacramento 2016). There are no natural communities or aquatic features within the project
20 area. The topography is flat, with an elevation range of approximately 10-15 feet above mean
21 sea level.

22 ***a. Substantial adverse effect, either directly or through habitat***
23 ***modifications, on any species identified as a candidate, sensitive, or***
24 ***special-status species (Less than Significant with Mitigation)***

25 The potential for special-status plant and wildlife species to occur within or near the project
26 area was evaluated by determining which special-status species occurred in the vicinity of
27 the project area through biological information databases and resources. This information is
28 provided in **Appendix B, *Biological Resources Information***.

29 Special-status species included those listed as endangered, threatened, rare, or proposed for
30 listing by U.S. Fish and Wildlife Service (USFWS) or California Department of Fish and Wildlife
31 (CDFW). California Native Plant Society (CNPS) plant lists were also reviewed. The following
32 sources were reviewed to determine which special-status plant, wildlife, and fish species
33 have been documented to occur in the vicinity of the project site:

- 34 ▪ USFWS list of federally listed endangered and threatened species that occur within
35 the vicinity of the proposed project (Appendix B) (USFWS 2019a);
- 36 ▪ California Natural Diversity Database (CNDDDB) queries for the U.S. Geological Survey
37 (USGS) 7.5-minute quadrangle containing the project area and the quadrangles
38 immediately adjacent to it: Davis, Sacramento West, Sacramento East, Grays Bend,
39 Taylor Monument, Rio Linda, Saxon, Clarksburg, and Florin (Appendix B) (CDFW
40 2019);
- 41 ▪ California Native Plant Society's (CNPS's) *Inventory of Rare and Endangered Plants of*
42 *California* (CNPS 2019) and California Rare Plant Rank (CRPR) listing (Appendix B)
43 (CNPS 2019);

- 1 ▪ USFWS Critical Habitat Portal (USFWS 2019b)
- 2 ▪ National Wetland Inventory (NWI) (USFWS 2019c)
- 3 ▪ EcoAtlas (California Wetlands Monitoring Workgroup 2019)
- 4 ▪ Western Bat Species Regional Priority Matrix (Western Bat Working Group 2013)

5 The Yolo Habitat Conservancy is a joint powers agency comprising the County of Yolo
6 (County) and the cities of Davis, West Sacramento, Winters, and Woodland, along with the
7 University of California, Davis, as an ex-officio member of the Board of Directors (Yolo Habitat
8 Conservancy 2019). The Yolo Habitat Conservancy has prepared the Yolo Habitat
9 Conservation Plan/Natural Community Conservation Plan (HCP/NCCP), a model
10 conservation plan to provide Endangered Species Act permits and associated mitigation for
11 infrastructure (e.g., roads, bridges, and levees) and development activities (e.g., agricultural
12 facilities, housing, commercial buildings) taking place over the next 50 years in Yolo County.
13 The HCP/NCCP was completed in 2018 and implementation began in January 2019. The Yolo
14 HCP/NCCP coordinates mitigation to maximize benefits to 12 identified sensitive species, as
15 well as conserve 8,000 acres of additional habitat conservation beyond mitigation.

16 Special-status Plant Species

17 Based on searches of the CNDDDB, USFWS Information for Planning and Consultation Report
18 (IPaC), and CNPS Inventory of Rare and Endangered Plants, 26 sensitive plant species and
19 four natural communities were identified as historically occurring within 5 miles of the
20 project area or having potential to occur in the project vicinity (CDFW 2019; USFWS 2019a,
21 2019b; CNPS 2019). **Figure 3-1** shows sensitive plant species that currently or historically
22 occur within 5 miles of the project area. None of these plant species or natural communities
23 have potential to occur in the project area due to the lack of suitable habitat (Appendix B,
24 Table B-1). The project area is not within an area designated as critical habitat for any plant
25 species (**Figure 3-2**).

26 No special-status plant species were observed during the reconnaissance-level site visit;
27 however, a protocol-level plant survey was not conducted. The project area occurs mostly
28 within a residential neighborhood that lacks native vegetation communities. Vegetation
29 within the project area consisted of mostly ruderal/disturbed vegetation and landscaped
30 yards; vegetation in the southwestern portion of the project area was undeveloped non-
31 native annual grassland. Some of the non-native species observed around the project area
32 included foxtail barley (*Hordeum murinum* ssp. *leporinum*), cheeseweed (*Malva parviflora*),
33 Bermuda buttercup (*Oxalis pes-caprae*), common stork's bill (*Erodium cicutarium*), and
34 henbit dead-nettle (*Lamium amplexicaule*).

35 Because the project area occurs mostly within a developed neighborhood, it would not
36 support suitable habitat for special-status plant species. The southwestern section of the
37 project area contains non-native annual grassland; this area has been highly disturbed and
38 would also not support suitable habitat for special-status plants. Therefore, no impacts to
39 special-status plants would occur as a result of the Proposed Project.

40 Special-status Wildlife Species

41 Fifty special-status wildlife species (nine invertebrates, two amphibians, two reptiles, seven
42 fish species, 25 birds, and five mammals) were identified in database searches associated
43 with the Proposed Project (CDFW 2019; USFWS 2019a) or have been identified as historically

1 occurring within 5 miles of the project site (**Figure 3-3**). These species are documented in
2 Appendix B, Table B-1, including their potential for occurrence within the project area. Of
3 these, 10 wildlife species have potential to occur within the project area due to the presence
4 of suitable or marginally suitable habitat. No special-status wildlife species were observed
5 during the biological reconnaissance survey; however, no focused or protocol-level wildlife
6 surveys were conducted. Other wildlife species that were observed during the survey
7 included yellow-billed magpie (*Pica nutalli*), American crow (*Corvus brachyrhynchos*),
8 California scrub-jay (*Aphelocoma californica*), mourning dove (*Zenaida macroura*), house
9 finch (*Haemorhous mexicanus*), northern mockingbird (*Mimus polyglottos*), American robin
10 (*Turdus migratorius*), turkey vulture (*Cathartes aura*), cedar waxwing (*Bombycilla cedrorum*),
11 red-shouldered hawk (*Buteo lineatus*), domestic cat (*Felis catus*), and California ground
12 squirrel (*Otospermophilus beecheyi*). The project site is not within an area designated as
13 critical habitat for any wildlife species (Figure 3-2).

14 *Special-status Invertebrates*

15 Of the nine special-status species identified through the database searches as having
16 potential to occur within the project area, suitable habitat exists for only one species: the
17 western bumble bee (*Bombus occidentalis*) (see Appendix B). The western bumble bee is
18 found within a variety of habitats, including urban parks and open grassy areas, and could
19 utilize tree cavities or rodent burrows within the project area for nesting. The western
20 bumble bee could also forage in landscaped yards and other vegetation within the project
21 area. The only CNDDDB database record for this species within the project vicinity indicates
22 that it was observed west of the project area near Davis. This species is being monitored on
23 the CNDDDB due to a decline in numbers and distribution; however, the species does not have
24 legal protection status under the California or federal Endangered Species Act. The Proposed
25 Project would have no impact on special-status invertebrates.

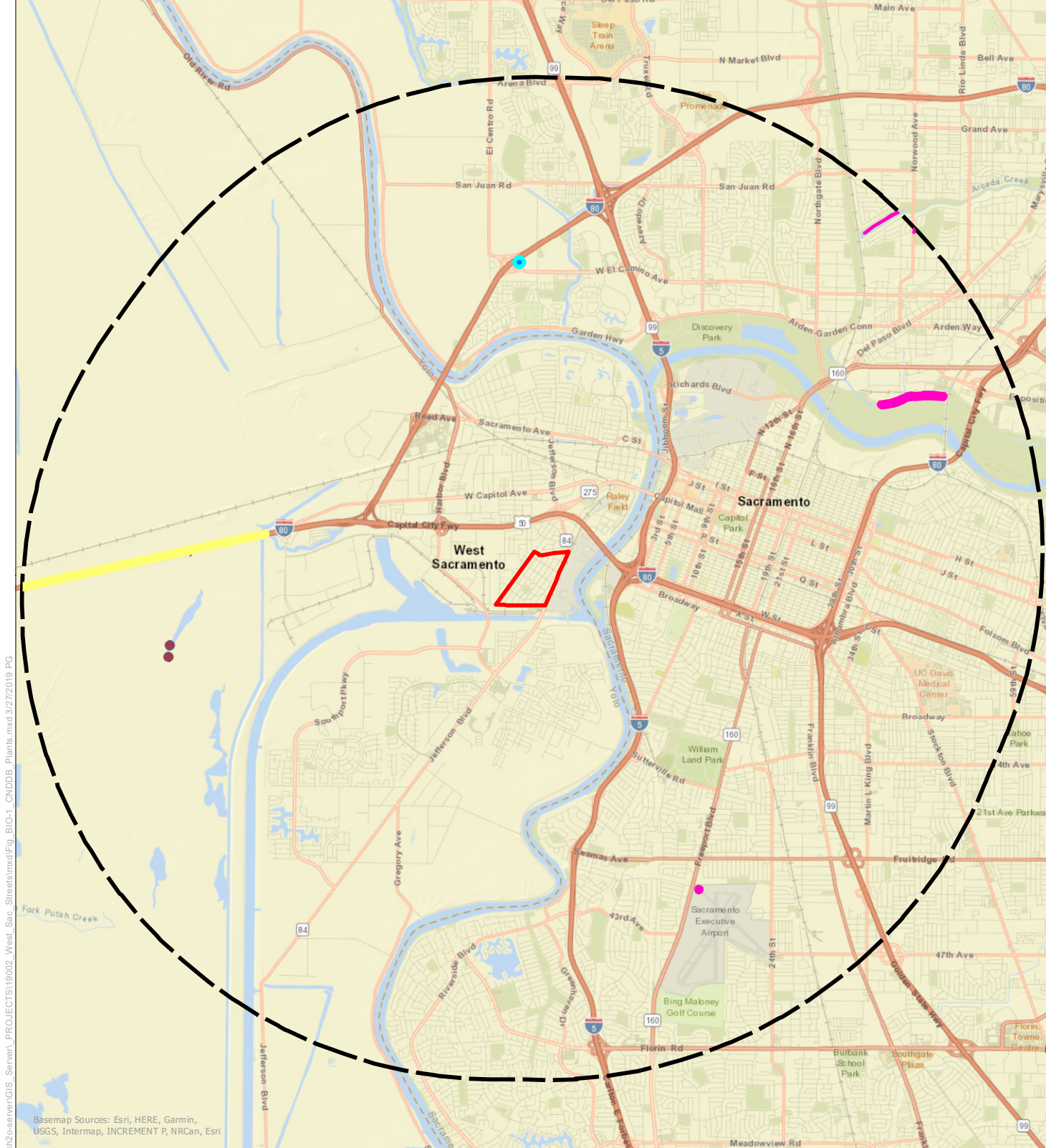
26 One species, the Antioch multilid wasp (*Myrmosula pacifica*), appeared in the CNDDDB
27 database search but is not included in Appendix B. No information is available regarding this
28 species' occurrences or habitat requirements, and therefore it is not discussed further in this
29 document.

30 *Special-status Amphibians and Reptiles*

31 No suitable habitat exists within the project area for the two species of special-status
32 amphibians or two species of reptiles (Appendix B) that were identified through the database
33 searches as having potential to occur in the project area. The Proposed Project would have
34 no impact on special-status amphibian and reptile species.

35 *Special-status Fish*

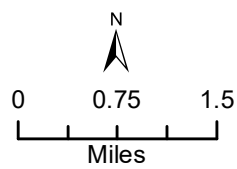
36 No suitable aquatic habitat for the special-status fish species identified in the database
37 searches is present within the project area. The nearest aquatic habitat is located
38 approximately 260 feet south of the project area in the Sacramento River Deep Water Ship
39 Channel. At its closest, the project area boundary is approximately 1,100 feet east of the
40 Sacramento River. Both the Deep Water Ship Channel and the Sacramento River contain
41 suitable habitat for six of the seven fish species listed in Appendix B. The project area,
42 however, is separated from the Deep Water Ship Channel by a strip of land between two sets



\\h2o-server\GIS_Server\PROJECTS\19002_West_Sac_Streets\mxd\Fig_BIO-1_CNDDDB_Plants.mxd 3/27/2019 PG

Basemap Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri

Figure 3-1.
CNDDB Occurrences of
Special-Status Plants within
5 Miles of the Proposed Project



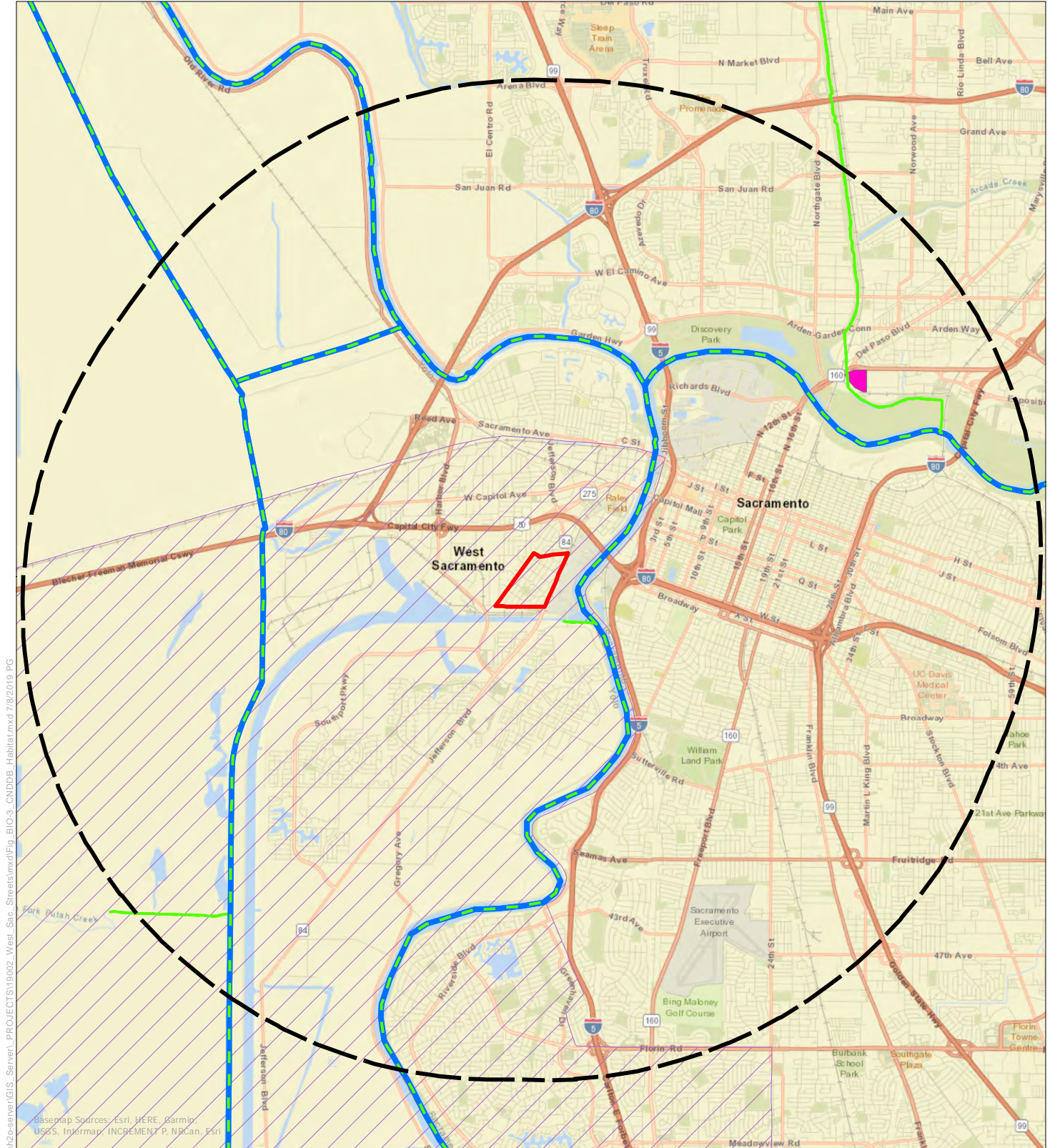
- Special-status Plant Species**
- Project Area
 - 5-mile buffer
 - Ferris' milk-vetch
 - Sanford's arrowhead
 - Suisun Marsh aster
 - woolly rose-mallow

Source: CDFW CNDDB, March 2019 update.



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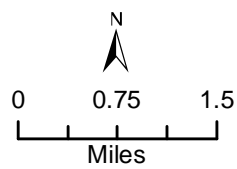




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Basemap Sources: Esri, HERE, Garmin,
 USGS, Intermap, INCREMENT P, NRCan, Esri

Figure 3-2.

**Critical Habitat within
5 Miles of the Proposed Project**



- | Critical Habitat | |
|---|-----------------------------------|
|  | Project Area |
|  | 5-mile buffer |
|  | Delta smelt |
|  | Valley elderberry longhorn beetle |
|  | Chinook salmon |
|  | Steelhead |

Source: USFWS 2019.



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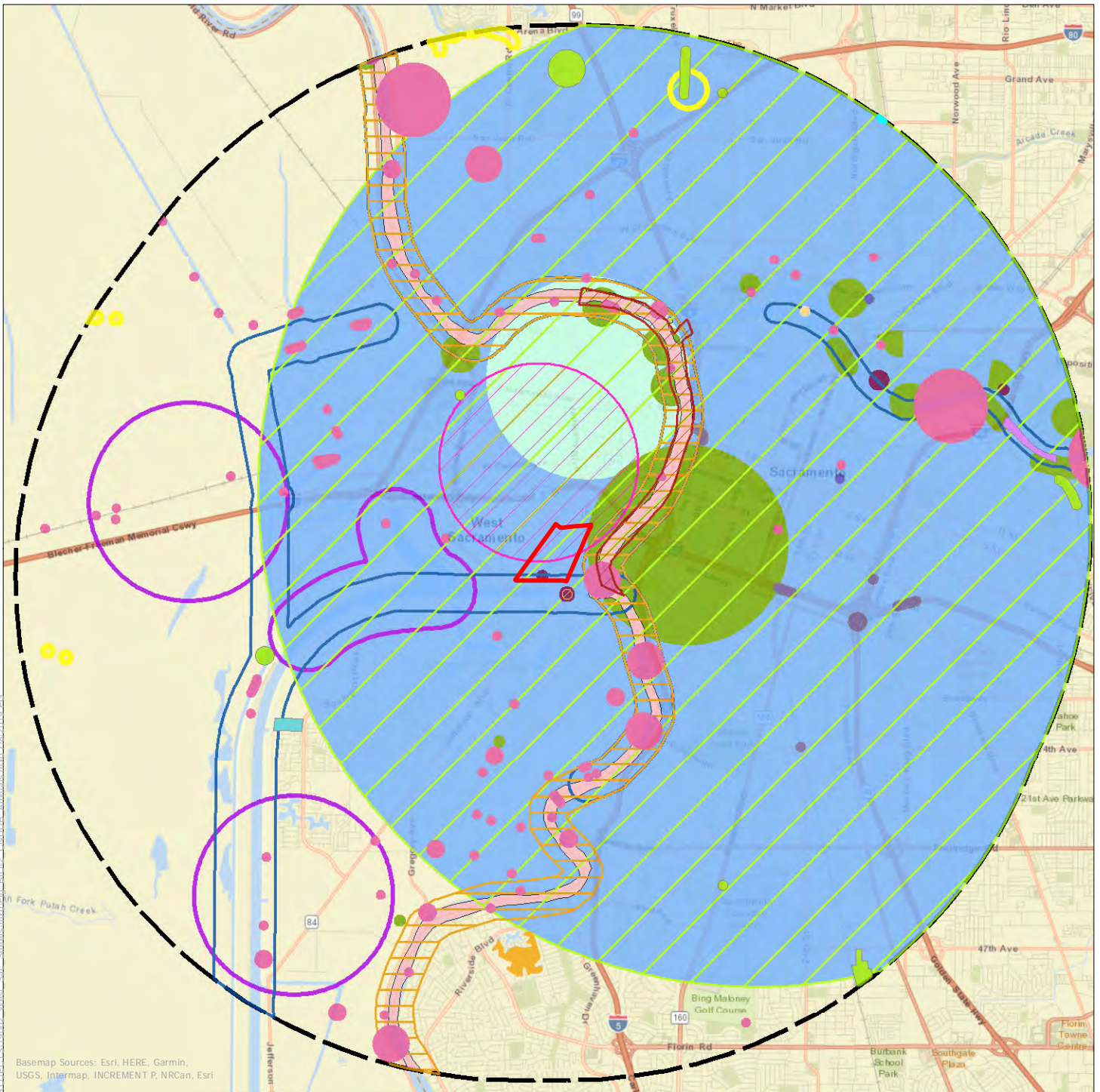
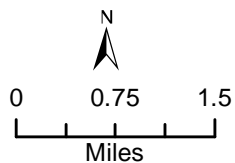





Figure 3-3.

CNDDB Occurrences of Special-status Animals within 5 Miles of the Proposed Project

-  Project Area
-  5-mile buffer



Special-status Animal Species

- | | | |
|--|--|---|
|  California black rail |  chinook salmon - Sacramento River winter-run ESU |  vernal pool fairy shrimp |
|  Cooper's hawk |  giant gartersnake |  white-tailed kite |
|  Sacramento Valley tiger beetle |  great blue heron |  Sacramento splittail |
|  Sacramento perch |  hoary bat |  song sparrow ("Modesto" population) |
|  Swainson's hawk |  longfin smelt |  western yellow-billed cuckoo |
|  bank swallow |  purple martin |  valley elderberry longhorn beetle |
|  burrowing owl |  steelhead - Central Valley DPS |  least Bell's vireo |
|  chinook salmon - Central Valley spring-run ESU |  tricolored blackbird | |

State Streets Infrastructure Projects

Source: CDFW CNDDB, March 2019 update.

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1 of railroad tracks and a vegetated riparian bank, and is separated from the Sacramento River
2 by Jefferson Boulevard and industrial development. These waterways would not be affected
3 by project activities. Therefore, the Proposed Project would have no impact on special-status
4 fish.

5 *Special-status Birds*

6 Many species of birds utilize the project area and surrounding areas to forage and/or nest.
7 The project area contains marginal to suitable habitat for eight of the 25 species of special-
8 status birds listed in Appendix B: Cooper's hawk (*Accipiter cooperii*), great egret (*Ardea alba*),
9 great blue heron (*Ardea herodias*), black-crowned night heron (*Nycticorax nycticorax*),
10 Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), merlin (*Falco*
11 *columbaris*), and purple martin (*Progne subis*). Project construction activities would take
12 place within a developed residential neighborhood that contains many suitable nesting trees
13 and foraging habitat. Additionally, special-status birds and other birds protected under the
14 California Department of Fish and Game Code (F&G Code), and the Migratory Bird Treaty Act
15 (MBTA) could use nearby riparian, open space, and aquatic areas (e.g., Deep Water Ship
16 Channel and Sacramento River) for nesting and foraging.

17 Suitable nesting and foraging habitat exists within and near the project area for the Cooper's
18 hawk. Cooper's hawks could nest in trees within the project area and also prey upon the many
19 medium-sized birds that occur around and in the project area. The nearest CNDDDB
20 occurrence records of Cooper's hawks are approximately 2.7 miles and 4 miles northeast of
21 the project area.

22 Due to the constant human presence within the project area, it is not expected that the great
23 egret, great blue heron, and the black-crowned night heron would choose to establish nesting
24 rookeries in trees within the project area boundaries (Appendix B). These species are
25 typically sensitive to human disturbance and they would likely be deterred by the high level
26 of human presence within the project area. These species would not be expected to utilize the
27 project area for foraging as they forage in aquatic areas, and would be expected to be found
28 foraging near the Deep Water Ship Channel or Sacramento River located south and east of the
29 project area, respectively. No evidence of an established nesting rookery was observed in any
30 of the trees within the project area during the reconnaissance survey. No CNDDDB occurrence
31 records of great egrets or black-crowned night herons exist within 5 miles of the project area;
32 however, one CNDDDB occurrence of a great blue heron rookery has been documented
33 approximately 3 miles northeast of the project area.

34 Suitable nesting habitat for Swainson's hawks exists within the southwestern portion of the
35 project area. This area contains disturbed annual grasslands and oak trees and is near the
36 riparian area near the Deep Water Ship Channel (Appendix B). Swainson's hawks could utilize
37 the oak trees and riparian areas to nest or roost; however, due to the proximity of railroad
38 tracks directly south of the oak trees and the adjacent residences, it is expected that hawks
39 would choose to nest in the riparian area in preference to the project area. This species also
40 would not be expected to forage within the project area as Swainson's hawks prefer more
41 open grasslands and agricultural fields in which to find prey. The nearest CNDDDB occurrence
42 was reported approximately 0.5 mile east of the project area. The City of West Sacramento is
43 a participant in the Yolo HCP/NCCP, which covers impacts from infrastructure and
44 development activities on Swainson's hawk.

1 Suitable nesting habitat exists for white-tailed kite within the trees in the project area. White-
2 tailed kites would not be expected to forage within the residential neighborhood in the
3 project area as they prefer more open grasslands and meadows, such as the open fields
4 located southwest of the Deep Water Ship Channel. A 2017 CNDDDB occurrence documented
5 a white-tailed kite nest in an oak tree in the backyard of a residence on the south side of 19th
6 Street between Pennsylvania Avenue and Alabama Avenue. The CNDDDB record indicated that
7 a near-fledgling white-tailed kite was found deceased on the ground near the nest tree (CDFW
8 2019). The City of West Sacramento is a participant in the Yolo HCP/NCCP, which covers
9 impacts from infrastructure and development activities on white-tailed kite.

10 The project area provides a suitable prey base for the merlin due to the abundance of small
11 birds present; however, it is expected that this species would utilize the riparian area near
12 the Deep Water Ship Channel for foraging and roosting in preference to the project area as
13 this species prefers habitats near water. Merlin are a fairly uncommon visitor to California
14 and they do not nest in California. There are no CNDDDB occurrences of merlin within 5 miles
15 of the project area.

16 Although it is not expected that purple martins would utilize the project area for nesting, they
17 could forage in the area. Purple martins are known to forage in a wide variety of habitats,
18 including over cities and parks. Numerous CNDDDB occurrences report purple martins nesting
19 under long overpasses and elevated freeways in “weep holes” in Sacramento (CDFW 2019).
20 The nearest CNDDDB occurrence was reported approximately 1.5 miles northeast of the
21 project area.

22 Most native migratory birds and active nest sites are protected under MBTA; active bird nests
23 are protected by F&G Code Section 3503; and raptor nests are protected under F&G Code
24 Section 3503.5. The various trees located within the project area have potential to be used by
25 nesting raptor species, such as Cooper’s hawk and white-tailed kite, as well as other nesting
26 birds, such as the American robin and house finch. As described in item 3.4(e) below, a review
27 of the project area by a City surveyor and the City arborist identified 79 trees within the
28 project area as having the potential to be removed, trimmed, or pruned as result of
29 construction activities (Appendix B). Most of these trees are anticipated to remain; however,
30 removal or disturbance of vegetation and trees within the project area could directly affect
31 foraging and nesting habitat for special-status birds and other birds protected under the
32 MBTA and F&G Code. Construction activities could also disturb breeding, nesting, and
33 foraging birds by generating noise and creating visual distractions that could affect nesting
34 birds within the project area and adjacent areas to the point of resulting in nest abandonment
35 and/or failure. Impacts on an active nest of a protected bird species during construction
36 would violate protections under MBTA and F&G Code, and such an impact would be
37 considered significant.

38 With implementation of **Mitigation Measures BIO-1a (Compliance with the**
39 **Requirements of the Yolo HCP/NCCP for Swainson’s Hawk and White-Tailed Kite) and**
40 **BIO-1b (Conduct Preconstruction Surveys for Nesting Birds and Implement Non-**
41 **disturbance Buffer Areas)**, the Proposed Project would avoid impacts on nesting birds by
42 identifying and avoiding disturbance to occupied nests.

1 **Mitigation Measure BIO-1a. Compliance with the Requirements of the Yolo**
2 **HCP/NCCP for Swainson’s Hawk and White-Tailed Kite**

3 The Yolo HCP/NCCP contains avoidance and minimization measures that the City of
4 West Sacramento shall adopt for Swainson’s hawk and white-tailed kite. Specifically,
5 implementation of Avoidance and Minimization Measure 15 in the Yolo HCP/NCCP
6 will:

- 7 ▪ Identify and quantify (in acres) Swainson’s hawk and white-tailed kite habitat in
8 and within 1,320 feet of the project footprint, and identify suitable nest trees.
- 9 ▪ Avoid potential nesting trees, with 1,320-foot setbacks from the trees during
10 nesting, to the extent practicable.
- 11 ▪ During construction, if activities would occur within 1,320 feet of nesting habitat
12 between March 15 and August 30, preconstruction activities would be conducted
13 for active nests consistent with the Swainson’s Hawk Technical Advisory
14 Committee (2000). For operation and maintenance, if activities involve pruning
15 or removal of suitable nest trees, preconstruction activities will be conducted for
16 active nests, consistent with the Swainson’s Hawk Technical Advisory Committee
17 (2000).
- 18 ▪ For construction activities occurring from March 15 to August 30, no activities
19 will occur within 1,320 feet of active nests, unless a qualified biologist has
20 determined that the young have fledged and the nest is no longer active or the
21 Yolo Habitat Conservancy, USFWS, and CDFW agree to a lesser buffer distance.
22 For operations and maintenance, if occupied nest sites are present within 1,320
23 feet, tree pruning and removal will be deferred until the nest is no longer being
24 used by adults and young.

25 **Mitigation Measure BIO-1b. Conduct Preconstruction Surveys for Nesting**
26 **Birds and Implement Non-disturbance Buffer Areas.**

27 To the extent feasible, all vegetation removal shall occur between September 1 and
28 January 31, outside the bird/raptor nesting season, to avoid potential impacts on
29 nesting birds. If construction activities (including staging and tree or vegetation
30 removal) will occur during the nesting season (February 1 through August 31), the
31 City shall retain a qualified wildlife biologist to conduct focused surveys for active
32 bird nests in project areas currently under construction and within a 250-foot buffer
33 no more than 7 days before initiation of construction activities. If no work occurs for
34 a period of 5 days during the nesting season, repeat surveys must be performed
35 before work within 250 feet of suitable nesting substrate is resumed. If the survey
36 indicates that no active nests are present, no further mitigation shall be required.

37 If an active bird or raptor nest is located during preconstruction surveys, a qualified
38 biologist shall establish appropriate species-specific non-disturbance buffer zones in
39 consultation with USFWS and/or CDFW (typical buffers are 250 feet for passerines
40 and 500 feet for raptors). No project-related activity shall commence within the non-
41 disturbance buffer until the qualified biologist confirms that the nest is no longer
42 active.

1 *Special-status Mammals and Bats*

2 The American badger was identified in the CNDDDB as having potential to occur in the vicinity
3 of the project area; however, this species would not be expected to occur within the project
4 area due a lack of suitable habitat. Three bat species were identified in the CNDDDB: pallid bat
5 (*Antrozous pallidus*), silver-haired bat (*Lasionycteris noctivagans*), and hoary bat (*Lasiurus*
6 *cinereus*). One species, western red bat (*Lasiurus blossevillii*), was identified through personal
7 communication with bat biologist Kim Fettke (pers. comm., April 29, 2019). Appendix B,
8 Table B-1, discusses these four bat species and their potential to occur within the project area.
9 Additionally, there is potential for other California bat species to occur within the project
10 area. Currently, little is known about the range and distribution of California bat populations
11 and their migratory routes, so it is difficult to rule out any species until a habitat assessment
12 (see Mitigation Measure BIO-2b) is performed.

13 Most California bat species form nursery colonies in the summer that number from several
14 to hundreds of thousands of female bats and their young (Zeiner et al. 1988). Several of these
15 colonial species have also been documented coming together in hibernacula during the
16 winter (Weller et al. 2018). This colonial trait can make local populations of these species,
17 such as silver-haired bat, particularly vulnerable to roost removal or disturbance, especially
18 during these sensitive seasons. Removal of an occupied maternity roost (e.g., via tree felling)
19 could result in the fatality of an entire colony as bats retreat rather than flush from the roost.
20 Likewise, disturbance of an occupied maternity roost (e.g., via construction activities) could
21 result in the abandonment of an entire generation of nonvolant pups (pups that cannot fly).
22 Removal of an occupied hibernaculum could result in the fatality of an entire colony of
23 nonvolant bats in hibernation or torpor. Additionally, disturbance of an occupied
24 hibernaculum could arouse bats in hibernation or torpor during the winter, depleting their
25 energy reserves and potentially resulting in death.

26 Roosts can be an essential and limiting resource for colonial bat species. Colonial bats exhibit
27 high roost fidelity, using the same roosts for generations, and the parameters for suitable
28 roosting conditions (e.g., thermal stability) can be narrow. As such, colonial bat roosts are
29 considered a sensitive resource by CDFW.

30 Two generally-solitary foliage-roosting bat species are known to roost in the project study
31 area. The hoary bat typically roosts alone except during the maternity season when females
32 roost with their pups. Likewise, the western red bat typically roosts alone, but several females
33 and their young have been documented forming small maternity colonies.

34 No bats or their sign (e.g., guano) were observed within the project area during the
35 reconnaissance survey; however, a focused bat habitat assessment and focused bat surveys
36 have not been conducted in the project area for potential roosting habitat. As such, use of the
37 trees within the project area as roosting habitat cannot be ruled out. Construction activities
38 that could cause temporary disturbance or permanent removal of trees that are used by
39 colonial roosting bats, particularly maternity roosts or hibernacula, could result in mortality
40 or injury to a large number of bats. Such mortality and habitat loss could be a substantial
41 adverse effect and could cause a local bat population to drop below self-sustaining levels,
42 resulting in a significant impact. Temporary construction disturbance or permanent tree
43 removal during the maternity season could also impede the use of a native wildlife nursery,
44 causing bats that roost in small numbers to abandon their nonvolant pups, which would
45 result in a significant impact. Implementation of **Mitigation Measure BIO-2a (Remove or**

1 **Disturb Trees Outside of the Maternity Season), Mitigation Measure BIO-2b (Conduct a**
2 **Habitat Assessment and Surveys for Bats),** and if necessary, **Mitigation Measures BIO-2c**
3 **(Avoid and Minimize Impacts on Bats Roosting in Structures), and Mitigation Measure**
4 **BIO-2d (Prepare Bat Roost Compensation Plan and Provide Replacement Roosts for**
5 **Roosts That Cannot Be Avoided)** would reduce impacts on bats by identifying the location
6 of bat roosts and implementing measures to avoid and minimize disturbance to roosting bats.
7 Therefore, the impact of the Proposed Project on bats would be less than significant with
8 mitigation.

9 **Mitigation Measure BIO-2a. Remove and Disturb Trees Outside of the Maternity**
10 **and Winter Seasons**

11 To avoid disturbing or eliminating occupied maternity roosts or winter roosts, all tree
12 removal and pruning shall occur outside of the maternity season (May 1 – August 31)
13 and winter season (November 1 – March 1) to the extent feasible.

14 **Mitigation Measure BIO-2b. Conduct a Habitat Assessment and Surveys for Bat**
15 **Roosts**

16 Before the commencement of tree removal, a CDFW-approved biologist with
17 experience identifying bat roosts will conduct a daytime habitat suitability
18 assessment to determine if any of the trees in the project area that may be removed,
19 trimmed, or pruned contain potential colonial bat roosting (e.g., large tree cavities,
20 basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch) or
21 indications of bat use (e.g., occupancy, guano, staining, smells, or sounds). Each tree
22 shall be rated on a scale of 1-3: 1 = unsuitable/low suitability; 2 = potentially suitable;
23 and, 3 = identifiable roost. If all trees within the project area are rated 1, no additional
24 measures will be taken. If any trees are rated 2, a CDFW-approved biologist with
25 experience surveying tree roosts shall conduct evening bat surveys at potential sites
26 to assess roosting patterns during the maternity season. Evening emergence surveys
27 will be conducted using night-vision technology and acoustic monitoring from one
28 half hour before sunset to at least 1 hour after sunset for a minimum of two nights.
29 The survey methodology will be submitted and approved by CDFW prior to the
30 survey. If the bat biologist determines that that any of the trees rated 2 are identifiable
31 roosts, their rating will be changed to 3. If any trees are rated 3, the City shall
32 implement Mitigation Measure BIO-2c.

33 **Mitigation Measure BIO-2c. Avoid and Minimize Impacts on Bats and Bat Roosts**

34 The City shall avoid removal and disturbance of all bat roosts within the project area
35 to the greatest extent feasible. If it is not possible to avoid the disturbance or removal
36 of all roosts, alternative impact minimization measures will be developed according
37 to specific site conditions and degree of impact (e.g., species, size of colony, season of
38 use). These measures may include roost exclusion prior to the sensitive seasons of
39 use, tiered tree pruning or removal under the supervision of a qualified biologist, and
40 compensatory roost replacement. A plan detailing the methods and specifications of
41 the minimization measures will be prepared by a qualified bat biologist and
42 submitted to CDFW for approval prior to implementation, and prior to the start of
43 tree removal or other construction disturbance.

1 If roosts are identified that cannot be avoided or it is determined that construction
 2 activities may cause roost abandonment, the City shall implement Mitigation Measure
 3 BIO-2d.

4 **Mitigation Measure BIO-2d. Prepare Bat Roost Compensation Plan and Provide**
 5 **Replacements for Roosts That Cannot Be Avoided**

6 If bat roosts cannot be avoided or if it is determined that construction activities may
 7 cause roost abandonment, the City shall refrain from such activities until roost sites
 8 have been replaced.

9 For replacement of roost sites established in the existing trees, the City shall retain a
 10 qualified bat biologist to develop a Bat Roost Compensation Plan that addresses the
 11 use of the trees, identifies appropriate compensation measures commensurate with
 12 the size of the colony, and provides for no net loss in roosting areas for the bats.

13 *Conclusion*

14 As described above, the Proposed Project would have no impact on special-status plants,
 15 natural communities, amphibians and reptiles, and fish. Impacts on invertebrates would be
 16 less than significant. Impacts on nesting birds would be reduced to a less-than-significant
 17 level with implementation of Mitigation Measure BIO-1, requiring the City to identify and
 18 avoid direct and indirect impacts on occupied nests. Bats have the potential to be affected by
 19 construction activities such as trimming or removal of trees in which they roost, causing roost
 20 abandonment; Mitigation Measures BIO-2a, BIO-2b, BIO-2c, and BIO-2d provide a process for
 21 the City to avoid, minimize, and compensate for any impacts on these species. Overall, the
 22 impact on special-status species would be **less than significant with mitigation**.

23 ***b. Substantial adverse effect on any riparian habitat or other sensitive***
 24 ***natural community (No Impact)***

25 No riparian habitat or sensitive natural communities occur within the project area. Riparian
 26 habitat does exist approximately 170 feet south of the project area boundary; however, the
 27 project area is separated from the riparian habitat by two sets of railroad tracks and a strip
 28 of land between the tracks. **No impact** on riparian habitat or other sensitive natural
 29 communities would occur as part of the Proposed Project.

30 ***c. Substantial adverse effects on state or federally protected wetlands***
 31 ***(No Impact)***

32 A search of the USFWS National Wetlands Inventory (USFWS 2019c) and the California
 33 EcoAtlas (California Wetlands Monitoring Workgroup 2019) revealed no state or federally
 34 protected wetlands within the project area, and no potential wetland features or waters of
 35 the U.S. were observed within the project area during the March 19, 2019 site visit. The
 36 nearest water features to the project area are the Deep Water Ship Channel, approximately
 37 260 feet south of the project area, and the Sacramento River, approximately 1,100 feet to the
 38 east. According to mapping from the California Aquatic Resources Inventory (San Francisco
 39 Estuary Institute 2017) (depicted in **Figure 3-4**), the Deep Water Ship Channel is separated
 40 from the project area by two sets of railroad tracks and a riparian habitat corridor and has

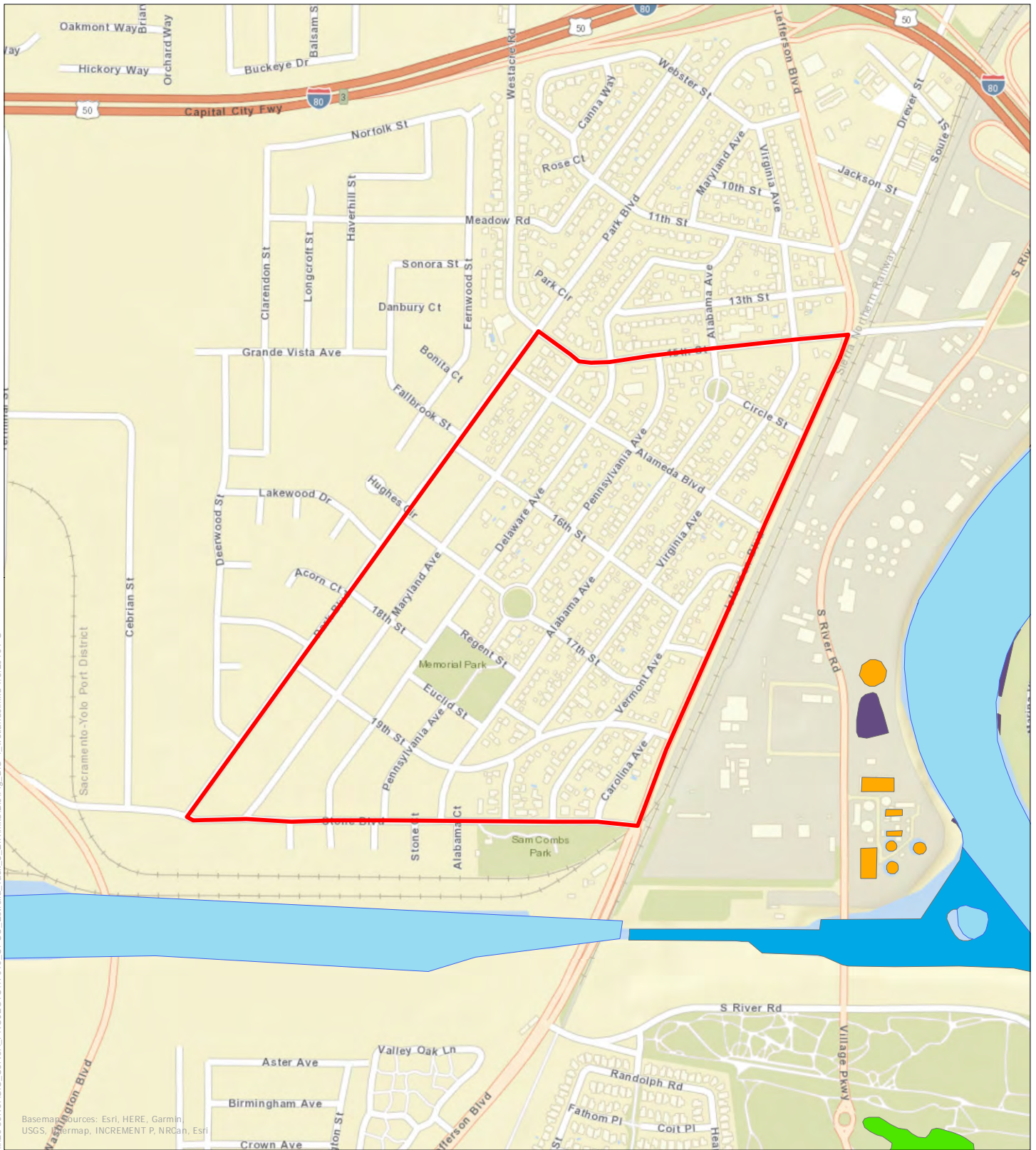
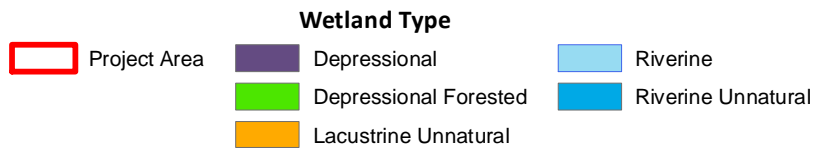
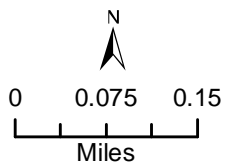


Figure 3-4.
Wetlands in the Vicinity
of the Proposed Project



Source: SFEI 2017, California Aquatic Resource Inventory (CARI).

1

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1 no identified wetland features. The Sacramento River is separated from the project area by
2 industrial development; several minor wetland features have been identified near the river.
3 Because of the distance and intervening features, it is unlikely that sediment or pollutant (e.g.,
4 fuel, oil) runoff from construction-related ground disturbance and equipment operations
5 would reach the Deep Water Ship Channel or Sacramento River. Nevertheless, the City would
6 be required to comply with conditions of the National Pollutant Discharge Elimination
7 System (NPDES) permitting process, including BMPs to avoid and minimize any impacts as a
8 result of sediment or pollutant runoff to jurisdictional waters. As discussed in Section 3.10,
9 "Hydrology and Water Quality," the NPDES requires implementation of a stormwater
10 pollution prevention plan (SWPPP) to prevent discharges of sediment and other
11 construction-related pollutants to surface waters. Because the Proposed Project does not
12 support any state or federally protected wetlands and no impact on the Deep Water Ship
13 Channel or Sacramento River would occur, the Proposed Project would result in **no impact**
14 on state or federally protected wetlands.

15 ***d. Substantial interference with wildlife movement, established wildlife***
16 ***corridors, or the use of native wildlife nursery sites (Less than***
17 ***Significant with Mitigation)***

18 The project area is located within a residential neighborhood and is surrounded by developed
19 urban areas to the north, east, and west. The south side of the project area is bounded by two
20 sets of railroad tracks, a strip of riparian habitat, and the Deep Water Ship Channel.

21 Implementation of the Proposed Project would not interfere substantially with the
22 movement of any native resident or migratory wildlife species because the project area
23 supports limited to no value as a wildlife movement corridor. The area does not provide an
24 important connection for any other special-status species or any areas of natural habitat that
25 would otherwise be isolated, nor does it occur along any established wildlife migration
26 routes. Therefore, the Proposed Project would not interfere with the movement of any native
27 or migratory wildlife species. The Sacramento River corridor, located approximately 1,100
28 feet to the east, and the Deep Water Ship Channel and established riparian habitat that
29 borders it, located approximately 160 feet to the south, are examples of migration corridors
30 within the vicinity of the project. Neither of these features would be affected by project
31 activities.

32 It is expected that many nesting birds use the trees within the project area for nesting. If birds
33 nest within the project area, the project area could be considered as a native wildlife nursery.
34 As discussed above Mitigation Measure BIO-1 would ensure that preconstruction surveys are
35 conducted for nesting birds and buffers are implemented, if necessary, to avoid or minimize
36 potential impacts on nesting birds. In addition, the trees within the project area may provide
37 nursery sites for bats. If bats use the trees within the project area to raise their young, the
38 project area could be considered a native wildlife nursery area for bats. As discussed in item
39 3.4(a) above, Mitigation Measures BIO-2a, BIO-2b, and BIO-2c would ensure that impacts on
40 special-status bats would be less than significant. Overall, the impact of the Proposed Project
41 on wildlife corridors and nurseries would be **less than significant with mitigation**.

1 ***e. Conflict with local policies or ordinances protecting biological***
 2 ***resources (Less than Significant with Mitigation)***

3 The City of West Sacramento’s Tree Preservation Ordinance in Chapter 8.24 of the Municipal
 4 Code regulates the removal and protection of heritage, landmark, native oak, and street trees
 5 within the city on public and private property. On December 12, 2018, West Coast Arborists
 6 identified, measured, and assessed the health of 68 trees identified by a City surveyor as
 7 potentially being affected by construction activities within the project area. Eleven additional
 8 trees were later added to the evaluation. A total of 21 species of trees were identified
 9 (Appendix A, *Arborist Report*). Each tree was first identified to determine the species, and the
 10 trunk diameter was measured 4.5 feet above grade (known as diameter at standard height,
 11 or DSH). The vigor/ structural condition, crown spread, recommended maintenance, distance
 12 to hardscape, presence of overhead utilities, location, and estimated height range of each tree
 13 were also evaluated (Appendix A).

14 Of the 79 trees that were evaluated, the arborist report recommended that three London
 15 Plane (*Platanus X hispanica*), one Box Elder (*Acer negundo*), and one Silver Maple (*Acer*
 16 *saccharinum*) should be removed to grade level, regardless of whether they would be affected
 17 by construction, because their close proximity to high voltage lines, poor crown structure,
 18 and declining health posed a risk to public safety (Appendix A). Additionally, the arborist
 19 recommended that greater-than-routine pruning should be conducted for one American
 20 Sweetgum (*Liquidamber styraciflua*), one Chinese Hackberry (*Celtis sinensis*), one Modesto
 21 Ash (*Fraxinus velutina* ‘Modesto’), one Siberian Elm (*Ulmus pumila*), and one Silver Maple
 22 (*Acer saccharinum*) because their poor crown structure was causing hazardous conditions.
 23 The remaining 64 trees were recommended for routine maintenance/grid trimming and did
 24 not show any signs of significant structural defects or decline in vigor. No trees that were
 25 evaluated within the project area meet the classification in the City’s Tree Preservation
 26 Ordinance of a heritage, landmark, or native oak tree. Nevertheless, protection is still
 27 warranted for street trees, defined in the ordinance as any tree growing or placed within the
 28 tree maintenance strip or public right-of-way (within 12.5 feet of the curb or edge of the
 29 paved portion of the street if the street does not have a curb). Where landscape strips are
 30 7 feet wide or wider, any trees removed during construction would be replanted.

31 Because of the large number of trees in the State Streets neighborhood, construction activities
 32 to replace water and sewer lines or retrofit curb, gutter, and street surface would likely affect
 33 some street trees and landscaping trees. Under the Tree Preservation Ordinance, removal or
 34 any activities (e.g., root trimming) that would interfere with or retard the natural growth of
 35 street trees would be considered a significant impact. Implementation of **Mitigation**
 36 **Measures BIO-3a (Minimize Potential Impacts on Trees)** and **BIO-3b (Replace Trees**
 37 **That Are Removed)** would ensure that conflicts with the City of West Sacramento’s Tree
 38 Preservation Ordinance remain **less than significant with mitigation**.

39 **Mitigation Measure BIO-3a: Minimize Potential Impacts on Trees**

40 Upon receiving and reviewing detailed specifications (site plans) for the Proposed
 41 Project’s construction activities, the City shall provide plans to the arborist for review
 42 to identify with more certainty the trees that are likely to be affected by construction.
 43 During construction, the arborist will work on-site with City staff to identify which
 44 trees will need to be removed or trimmed/pruned. Existing trees will be avoided and
 45 retained where practicable, using techniques such as the following:

- 1 ▪ Design sidewalks to meander around the existing trees.
- 2 ▪ Install water lines above or below tree roots to avoid the need to trim roots.
- 3 ▪ Because vertical placement of sewer lines is not flexible, rehabilitation of
- 4 sewer lines rather than replacements will be implemented when possible.
- 5

6 The City shall mitigate for trees that are removed by implementing Mitigation
7 Measure BIO-3b.

8 **Mitigation Measure BIO 3b: Implement Mitigation for Removed Trees**

9 All impacts on trees resulting from trimming, pruning, or removal due to construction
10 activities must be reviewed by a City Tree Administrator if the tree's diameter at
11 breast height (dbh) is greater than 2 feet for non-native oak and 16 inches for native
12 oak. If the City's arborist indicates that a tree within the City right-of-way on private
13 property must be removed, the homeowner will be notified of the decision and may
14 choose to obtain a free replacement tree through the City Parks and Recreation
15 Department's West Sacramento Tree Program (information is available at
16 [www.cityofwestsacramento.org/government/departments/parks-recreation/
17 trees](http://www.cityofwestsacramento.org/government/departments/parks-recreation/trees)).

18 The homeowner may choose from the City's list of replacement trees: Emerald
19 Sunshine (*Ulmus propinqua*), Golden Rain (*Koelreuteria paniculata*), Trident maple
20 (*Acer buergerianum*), Texas red oak (*Quercus buckleyi*), Deodar cedar (*Cedrus
21 deodara*), or Cork Oak (*Quercus suber*). These trees have been selected because they
22 are drought resistant and utility-friendly (i.e., their height and branching structure
23 are not likely to interfere with power lines, and their root system is not likely to affect
24 underground pipelines or sidewalks).

25 Replacement trees will be planted by the City's arborist in coordination with the
26 homeowner.

27 Trees will be replaced at a 1:1 ratio (i.e., one replacement tree for each tree removed).
28 Replacement trees will have a 24-inch-box tree to accelerate the processing of
29 achieving the size of the removed tree. If a 24-inch-box tree is not available, 15-gallon
30 trees will be used.

31 Where a street tree must be removed, the replacement tree will not be planted within
32 5 feet of any fire hydrant and will be placed 4 feet outside of any drainage, sewer, or
33 water easement and sidewalk, as determined by the City Capital Projects &
34 Transportation Department.

35 All removed trees will be chipped and used as mulch in city parks and/or made
36 available to residents at the City's corporation yard at 1801 West Capitol Avenue.

37 As noted in Chapter 2, *Project Description*, the City has determined that, because of the
38 significance of trees as a key element of the neighborhood's identity, this mitigation would be
39 applied to all trees that require removal, rather than only street trees.

1 Implementation of Mitigation Measures BIO-3a and BIO-3b would ensure that the Proposed
2 Project does not conflict with the City of West Sacramento's Tree Preservation Ordinance.
3 The Proposed Project would not conflict with any other local policies and ordinances. Impacts
4 on protected trees within the project area would be **less than significant with mitigation.**

5 ***f. Conflict with the provisions of an adopted HCP, Natural Community***
6 ***Conservation Plan, or other approved local, regional, or state HCP***
7 ***(Less than Significant with Mitigation)***

8 The project is under the jurisdiction of the Yolo Habitat Conservation Plan/Natural
9 Community Conservation Plan (HCP/NCCP). Two species (Swainson's hawk and white-tailed
10 kite) covered in the HCP/NCCP have been identified in the CNDDDB and USFWS database
11 searches as occurring within the vicinity of the project area. It is possible that both species
12 could utilize trees within the project area for nesting. Construction activities occurring within
13 the project area would be covered under the HCP/NCCP as defined in Section 3.5, "Covered
14 Activities Description," of the HCP/NCCP. As described in item 3.4(a) above, Mitigation
15 Measure BIO-1a would ensure that the Proposed Project proceeds in accordance with
16 requirements of the Yolo HCP/NCCP. Therefore, the impact would be **less than significant**
17 **with mitigation.**

1 **3.5 CULTURAL RESOURCES**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2

3 **Discussion**

4 The Proposed Project is located in the City of West Sacramento, in the States Streets
 5 subdivision, which is one of the oldest developed neighborhoods in the city. As discussed
 6 more thoroughly below, large valley oaks (*Quercus lobata*) growing in the area were retained
 7 as part of the subdivision design. Many other trees were planted as the neighborhood was
 8 developed since the late 1910s. These largely include London Plane trees (*Platanus X*
 9 *hispanica*), but Deodar Cedar (*Cedrus deodara*), Silver Maple (*Acer saccharinum*), and
 10 Modesto Ash (*Fraxinus velutina* “Modesto”) were among the varieties planted (West Coast
 11 Arborists 2018). As a result, the project area contains a large number of mature trees that
 12 provide a high canopy of vegetation over the neighborhood houses and streets.

13 **Prehistory**

14 The prehistory of the Central Valley of California is generally defined by the following periods,
 15 which serve to identify changes in how the indigenous populations lived upon the landscape
 16 and used the abundant resources of the region over the last 13,000 years.

- 17 ■ Paleo-Indian Period (11,550 to 8550 B.C.)
- 18 ■ Lower Archaic Period (8550 to 550 B.C.)
- 19 ■ Middle Archaic Period/Windmiller Pattern (ca. 3000 B.C. to 500 B.C.)
- 20 ■ Upper Archaic/Berkeley Pattern (ca. 500 B.C. to A.D. 500)
- 21 ■ Emergent Period/Augustine Pattern (ca. A.D. 500 to A.D. 1880)

22 The Paleo-Indian Period was a time when the Central Valley was sparsely populated by
 23 groups who were highly mobile, hunted large game, and frequented the shores of late
 24 Pleistocene lakes and sloughs. By the Lower Archaic Period, seasonal plants had become
 25 more important for subsistence, and populations tended to settle in places for longer periods
 26 of time and in larger groups. Data from site CA-SAC-38, located within the project area of

1 potential effect, indicate that people were living in the Sacramento area from the earliest
2 times within this period. As time progressed, populations grew denser and more sedentary,
3 tools became more diverse and complex, and social structure became more stratified. The
4 people living in the project area during the Emergent Period represent the tribes encountered
5 by the first colonists who arrived in the early to mid-1800s.

6 ***Ethnography***

7 Ethnographic literature suggests that the west side of the Sacramento River was likely within
8 the ancestral territory of several tribal groups as it borders the Yolo Basin, a vast marshland
9 that was subject to annual flooding during the winter months and that often stayed at least
10 somewhat inundated for the remainder of the year. However, numerous sources indicate that
11 the territory was ethnographically in the southwest corner of Nisenan territory and that their
12 western neighbors, the Patwin, held lands west of the marshlands that bordered much of the
13 Sacramento River, and thus west of the project area (Bennyhoff 1977; Johnson 1978; Kroeber
14 1932; Wilson and Town 1978). It is likely, however, that the Patwin also accessed the
15 resources available in the Yolo Basin. Available sources (Bennyhoff 1977; Johnson 1978;
16 Kroeber 1932; Wilson and Town 1978) do not identify any recorded ethnographic villages
17 on the west side of the Sacramento River adjacent to the Project, though communities are
18 known to have been located on areas of high ground (natural levees) along the Sacramento
19 River.

20 ***History***

21 The historic era (i.e., since Euro-American contact) in the project vicinity began when two
22 Spanish exploration groups travelled up the Sacramento Valley in the early 1800s. These
23 were the 1808 Moraga expedition and the 1821 Arguello expedition. The Spanish
24 explorations were closely followed by those of fur trappers and traders in the late 1820s and
25 early 1830s. The dire outcome of these expeditions led not only to a quick depletion of valued
26 fur animals in the Sacramento Valley, but also the introduction of malaria to the indigenous
27 population. By the summer of 1833, entire villages had been decimated by the disease (Kyle
28 et al. 2002).

29 Permanent colonists did not settle in the region until the Mexican Period, when large land
30 grants were bestowed upon trusted Mexican citizens, many of whom were Americans who
31 had converted to Catholicism and married the daughters of the Mexican nationals, or had
32 otherwise become Mexican citizens. John Sutter was among the first to receive a land grant
33 in the Sacramento Valley. He established a fort and trading post at the location of modern-
34 day Sacramento in 1841 and soon expanded his holdings north to the vicinity of Yuba City
35 and east into the Sierra Nevada. It was at his mill, located near Coloma, where gold was
36 initially discovered in California in the early months of 1848. The news spread quickly and
37 the famed Gold Rush began, bringing thousands of people to the Sacramento region ready to
38 make their fortunes.

39 The first known European to settle in the area of West Sacramento was Jon Lows de Swart
40 (or John Schwartz), a Flemish settler. Schwartz acquired a 13,000-acre land grant on the west
41 bank of the Sacramento River, naming it Nuevo Fladria. James McDowell bought 600 acres
42 from Schwartz in 1846, and the newly-widowed Margaret McDowell subdivided Washington
43 Township in 1850. The first bridge across the Sacramento River was built in 1858.
44 Washington quickly became the political center of Yolo County and served as county seat for

1 the better part of its first decade. However, in 1862, the county seat was permanently moved
 2 to Woodland due to consistent winter flooding on the west side of the Sacramento River.
 3 Washington Township undertook a number of flood control and mitigation efforts, ranging
 4 from raising the level of the streets and building levees, to keeping living quarters on the
 5 second floor of houses (West Sacramento Historical Society 2004).

6 As steamship and other Sacramento River traffic increased in the 1850s, Washington
 7 Township grew into a port town. In 1859, the California Steam Navigation Company
 8 established a shipyard for riverboats in town; it quickly became a major local industry, and it
 9 remained in operation for nearly a century. Washington Township also shipped fish, dairy,
 10 and produce to Sacramento and San Francisco Bay Area markets, as well as profiting from
 11 miners passing through. The township was divided for decades on the issue of incorporation;
 12 repeated unsuccessful attempts were made to either incorporate (beginning in 1893) or
 13 pursue annexation by Sacramento (beginning in 1861). The post office, established 1893, was
 14 called Broderick because the name Washington was in use in Nevada County; while locals
 15 initially resisted the name, they began to refer to the area as Broderick by the 1910s. The
 16 population reached 1,000 by 1915 (Walters 1986:13-14, 19-20, 24; West Sacramento
 17 Historical Society 1986:7).

18 San Francisco-based D.W. Hobson Company purchased land immediately north of Broderick
 19 in 1910, and began to develop it as the community of Riverbank. The area was quickly
 20 populated, primarily by Italian, Portuguese, Russian, and Japanese farmers. Residents began
 21 to call Riverbank “Bryte” after the post office was established in 1915 and to discuss
 22 incorporation in the 1920s, but as with Broderick, actual steps toward incorporation were
 23 not made. The West Sacramento Land Company was formed in 1907 to develop the area
 24 south of Broderick and Bryte by the capitalists who had started Pacific Gas and Electric
 25 Company (PG&E), but the economic difficulties caused by flooding and the cost of reclaiming
 26 the swampy land soon forced them to reorganize as the West Sacramento Company. The
 27 company mapped out a plan for a “model city” under the name West Sacramento in 1913.
 28 They hired San Francisco architects Lewis P. Hobart and Charles H. Cheney to lay out the new
 29 city. Hobart & Cheney had studied architecture in Paris, and Cheney was to become a
 30 pioneering advocate of city planning in the United States. They devised an ambitious plan for
 31 West Sacramento modeled on Paris, with radial layout and grand boulevards. The plan could
 32 not be realized until much of the land had been cleared, reclaimed, and freed from the danger
 33 of flooding by levee construction. West Sacramento Company used engineering company
 34 Haviland, Dozier, and Tibbets for the reclamation and levee work. By early 1913, the company
 35 was advertising with claims that it had cleared hundreds of acres for farming, established a
 36 nursery for boulevard and park plantings, and graded 30 miles of roadways. By 1917, the
 37 reclamation work was complete, and the company was able to sell lots in West Sacramento,
 38 although most land sold for farms rather than development of the grand city of the Hobart &
 39 Cheney plan. Financial difficulties once again forced the company to reorganize in the 1920s
 40 (Coast Banker 1913:262-263; Larkey and Walters 1987:64; Walters 1968:28-30).

41 The levees were completely stabilized in the 1920s, reducing the threat of flooding, and the
 42 area remained agricultural, growing slowly for decades. Prohibition largely passed the area
 43 by; with a thriving hop industry, too many people ignored the law for it to be enforceable, and
 44 many sellers continued to advertise openly. Hollywood filmmakers began regularly using
 45 Broderick as a filming location in the 1930s (Walters 1987: 28-30, 32).

1 East Yolo’s population boomed following the end of World War II, growing from 5,185 in
2 1940 to 11,225 ten years later and 25,032 in 1960; much of the growth was focused in West
3 Sacramento. This growth was due in large part to the Sacramento-Yolo Port, an ambitious
4 undertaking approved in 1947 that required the construction of a thirty-foot-deep ship
5 channel and a sixty-acre deep water harbor and turning basin. Ground was broken in 1949,
6 and the port, delayed by the Korean War in the 1950s, opened to sea traffic in 1963. Costing
7 \$55 million, the port generated 7,200 jobs and \$135 million. East Yolo developed from an
8 agricultural area into a distribution hub and commercial and industrial center for the
9 Sacramento Valley. A new freeway through the area opened in 1954, increasing traffic across
10 the river. West Sacramento, Broderick, and Bryte also began to grow as bedroom
11 communities for Sacramento during this era. The farmland between Broderick and Bryte
12 filled in with development, and West Sacramento expanded southward. Southport, south of
13 the barge canal, was developed beginning in the late 1960s and officially designated as a town
14 in 1970 (Walters 1987: 35-38, 41).

15 Sidelined for decades, incorporation efforts began anew in the 1960s, but measures to
16 incorporate were defeated in the 1960s and 70s. It was not until 1986 that a measure to
17 incorporate passed; by this point, the East Yolo area had relied exclusively on county services
18 for more than a century. The City of West Sacramento incorporated in 1987, combining
19 Broderick, Bryte, West Sacramento, and Southport under one municipality. Growth slowed
20 after the postwar boom resulting from the port, but West Sacramento continued to gradually
21 develop as a smaller bedroom community just across the river from the city of Sacramento,
22 and the population reached 34,000 by 2004. After decades of little change, West Sacramento’s
23 population began to expand quickly in the 21st century, and the population was 48,744 by
24 2010 (United States Census Bureau 2010; Walters 1987: 46; West Sacramento Historical
25 Society 1986:7).

26 *State Streets Subdivision*

27 As noted above, the State Streets neighborhood (officially West Sacramento City Unit one and
28 Two subdivision) was designed by San Francisco architects Hobart and Cheney. The two
29 “proposed a city which combined elements of English Garden suburbs, Parisian street plans
30 and classical imagery...” that was “arranged in a modified grid plan including curving streets,
31 diagonal streets across the grid, and adjacent grids laid out on different axes” (Corbett
32 1993a). The West Sacramento Company hired engineers Haviland, Dozier & Tibbetts to
33 implement the plan “by laying out the streets, building rose-colored sidewalks, curbs and
34 gutters, and planting street trees” (Corbett 1993a). According to Corbett (1993a), “[r]ows of
35 ash trees on Circle (1913) and Jefferson north of 15th (1941), and two sycamores at Jefferson
36 and Webster (1941) are prominent surviving street trees.”

37 The first model homes were built in 1913, but development was slow and by 1916 only
38 fourteen houses had been constructed; by the 1930s there were only a few dozen homes. The
39 northern portion of the subdivision was resurveyed in 1941 to simplify the street plan and
40 reduce lot size. After World War II, housing in the area boomed, along with a population to
41 match, and the subdivision reached full build out (Corbett 1993a).

42 ***Cultural Resources Studies***

43 Cultural resources include prehistoric archaeological sites; historic-era archaeological sites;
44 traditional cultural properties; tribal cultural resources (TCRs); and historic buildings,

1 structures, landscapes, districts, and linear features. TCRs are addressed in Section 3.17 of
2 this IS/MND.

3 Archival Search

4 A record search was conducted by Horizon cultural resources staff at the Northwest
5 Information Center (NWIC) of the California Historical Resources Information System at
6 Sonoma State University on January 24, 2019. The purpose of the record search was to
7 identify the presence of any previously recorded cultural resources within the project site, as
8 well as within a ¼-mile buffer, and to determine whether any portions of the project site had
9 been surveyed for cultural resources. The record search indicated that ten cultural resources,
10 including the State Streets neighborhood had been recorded within the project limits, and
11 another three resources were recorded within the ¼-mile buffer. All of the resources are of
12 the built environment, or are heritage oak trees (see **Table 3-2**). One of the resources (P-57-
13 000742), a Craftsman Bungalow built in 1913 at 10 Alameda Boulevard, has been
14 recommended as eligible for listing in the National Register of Historic Places (NRHP)
15 (Corbett 1993b). The house appears eligible for listing under Criterion A because “it is the
16 best surviving example of an original town lot development in West Sacramento City Unit
17 One, and is associated with the initial establishment of the new town. It includes an example
18 of one of the five model house types...” (Corbett 1993b).

19 **Table 3-2.** NWIC Records Search Results – Previously Recorded Resources

NWIC No.	Date (Author)	Resource Name or Location (Date Constructed)	Within Project Site or Buffer
P-57-000195	Numerous recordations	Sacramento Northern/Yolo Shortline Railroad (1912)	Buffer
P-57-000564	2007 (A. Tomes, EDAW, Inc.)	West Sacramento Wastewater Treatment Plant (ca. 1955)	Buffer
P-57-000702	2013 (Maria Leon, City of West Sacramento, Real Estate Project Specialist)	1628 Virginia Avenue (1935)	Project Site
P-57-000739	1993 (Michael R. Corbett, Dames & Moore, Inc.)	West Sacramento City State Streets Subdivision Plan (1913-1950s)	Project Site
P-57-000740	1993 (Michael R. Corbett, Dames & Moore, Inc.)	1536 Jefferson Boulevard (1930)	Project Site
P-57-000742	1993 (Michael R. Corbett, Dames & Moore, Inc.)	10 Alameda Boulevard (1913)	Project Site
P-57-000743	1993 (Michael R. Corbett, Dames & Moore, Inc.)	Picturesque Oaks	Project Site
P-57-000744	1993 (Michael R. Corbett, Dames &	1531 Virginia Avenue (1945)	Project Site

NWIC No.	Date (Author)	Resource Name or Location (Date Constructed)	Within Project Site or Buffer
	Moore, Inc.)		
P-57-000745	1993 (Michael R. Corbett, Dames & Moore, Inc.)	1527 Virginia Avenue (1939)	Project Site
P-57-000746	1993 (Michael R. Corbett, Dames & Moore, Inc.)	1521 Virginia Avenue (1915)	Project Site
P-57-000747	1993 (Michael R. Corbett, Dames & Moore, Inc.)	Picturesque Oak; SW Cor of Jefferson Blvd & Circle St	Project Site
P-57-000748	1993 (Michael R. Corbett, Dames & Moore, Inc.)	Picturesque Oak; SE Cor of 15th St & Virginia Ave	Project Site
P-57-000749	1993 (Michael R. Corbett, Dames & Moore, Inc.)	Pop's Drive-In; Whitey's Jolly Kone (1960)	Project Site
P-57-000750	1993 (Michael R. Corbett, Dames & Moore, Inc.)	Picturesque Oaks	Buffer

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The record search determined that one cultural resources survey, for the parcel at 1628 Virginia Avenue, had previously been conducted in the project area, and another 16 studies had occurred within the ¼-mile record search area, some of which were along Jefferson Boulevard. In addition, the project area is within the boundaries of 11 large archaeological or ethnographic overviews, or other regional studies.

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The archival search also included a review of historic U.S. Geological Survey (USGS) maps, including the Davisville (USGS 1907) topographic quadrangle and the Lovdal (USGS 1916) topographic quadrangle. The 1907 map shows one building existed at the north end of the project area at that time. By 1916, the Sacramento Northern Railroad and a portion of what was to become Jefferson Boulevard were both present, along with several isolated structures within the future State Streets neighborhood. These early maps also show that the project area had some elevation (ca. 19 to 29 feet above mean sea level), relative to the swampy ground to the south and west, and adjacent to the Sacramento River. The West Sacramento topographic quadrangle from 1948 (USGS 1948), which is the next quadrangle available after the 1916 map, shows the area developed with the State Streets neighborhood.

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Soils within the project limits largely consist of Lang sandy loam, though the northeast corner of the area is classified as Lang sandy loam deep (U.S. Department of Agriculture [USDA] 2019). These are deep Holocene alluvial deposits that are identified as being rarely flooded.

1 Native American Consultation

2 An email request was made to the Native American Heritage Commission (NAHC) on January
3 17, 2019 to review its files for the presence of recorded sacred sites on the project site. The
4 NAHC responded on January 25, 2019, stating that significant resources are located in the
5 vicinity of the Project area as a result of a search of their files. The NAHC also provided a list
6 of three tribes with a traditional and cultural affiliation with the project area for notification
7 pursuant to PRC Section 21080.3.1 (AB 52). Consultation with tribes is described in Section
8 3.17, "Tribal Cultural Resources." The Yocha Dehe Wintun Nation and the United Auburn
9 Indian Community of the Auburn Rancheria (UAIC) both expressed concerns about the
10 potential for buried Native American sites within the Project vicinity.

11 Archaeological Resources

12 No archaeological survey was conducted for the purposes of the Proposed Project since the
13 entire project footprint consists of paved streets and the ground surface is not visible. The
14 record search, furthermore, did not identify previously recorded archaeological resources
15 within or near the Proposed Projects. The lack of known archaeological resources, or ground
16 surface visibility, does not preclude the possibility of buried archaeological resources within
17 the Project footprint, as discussed below in Section 3.5.3.

18 Built Environment Resources

19 As discussed in Section 3.5.2, the State Streets neighborhood is one of the oldest in West
20 Sacramento. The earliest homes in the neighborhood date to 1913, when the original model
21 homes were constructed, but a majority of the houses are post-World War II. A windshield
22 survey of the project area indicates that most, if not all, of the homes have reached 50 years
23 of age and are, therefore, old enough to be considered for listing in the California Register of
24 Historical Resources (CRHR) or NRHP. However, an evaluation of each property within the
25 project area is far beyond the scope of the current project, given that the proposed work will
26 not directly impact any of the existing structures, and will either replace facilities in kind or
27 install new but similar facilities adjacent to existing water lines.

28 That being said, the record search revealed that seven buildings (six of which are houses)
29 within or adjacent to the project limits have previously been recorded, and six of the seven
30 structures have been evaluated for NRHP¹ listing. Only one of the six evaluated structures
31 was recommended eligible for the NRHP, while all of the remaining buildings were
32 determined to have undergone too many modifications or were not architecturally significant
33 enough to be considered eligible. The single resource considered eligible (P-57-000742),
34 located at 10 Alameda Boulevard, is one of the original model homes for the subdivision, and
35 is considered eligible for the NRHP under Criterion A for being associated with events that
36 have made a significant contribution to the broad patterns of our history (Corbett 1993b).

¹ The eligibility criteria for the NRHP and the CRHR are virtually identical. Although the resources recorded in 1993 were evaluated only for the NRHP, it is assumed that their eligibility determinations would be the same with regard to the CRHR. Furthermore, resources determined eligible for listing on the NRHP, are automatically included in the CRHR.

1 This resource is outside the boundaries of the project area, which end at Alameda Boulevard
2 and Alabama Avenue.

3 The States Streets subdivision (P-57-000739) was also evaluated for NRHP listing, but was
4 determined to not meet the eligibility criteria (Corbett 1993a). According to Corbett (1993a),
5 the resource “has lost integrity through elimination of small lots, replotting of streets in a
6 substantial area, and numerous other changes which were critical to its potential
7 significance.”

8 ***a. Adverse change in the significance of a historical resource (Less than***
9 ***Significant)***

10 Historical resources, as defined in Section 15064.5 of the CEQA Guidelines, are resources that
11 are listed on or eligible for listing on the CRHR. The house at 10 Alameda Boulevard (P-57-
12 000742) was evaluated as eligible for listing in the NRHP and it is, therefore, assumed eligible
13 for listing on the CRHR; however, that structure is not within the project area and would not
14 be affected by project activities. Other individual structures within the States Streets
15 subdivision, as well as the subdivision itself, were assessed for NRHP eligibility and found not
16 eligible for listing.

17 A significant adverse change to a historical resource is defined under PRC 915064.5(b)(1) as
18 the “physical demolition, destruction, relocation, or alteration of the resource or its
19 immediate surroundings such that the significance ... would be materially impaired.” The
20 proposed projects would not affect the area beyond Alameda Boulevard and Alabama
21 Avenue, and therefore would not directly affect those characteristics of the property at 10
22 Alameda Boulevard that contribute to its NRHP/CRHR eligibility. The replacement of the
23 water main within Alameda Boulevard will be adjacent to the existing water main and will
24 not encroach on the parcel that contains the historic property. It is likely that water line
25 repairs or replacement have occurred at some time since the structure was built in 1913, so
26 the scheduled activity will not be anything different than what has previously occurred.
27 Furthermore, none of the activities that could require removal of trees would take place at
28 the location of 10 Alameda Boulevard, so the setting of the parcel would not be affected, and
29 the sewer main project area does not include Alameda Boulevard. As a result, the proposed
30 projects would have **less than significant** impacts on the significance of historical resources
31 within or adjacent to the project site, including the house at 10 Alameda Boulevard.

32 Historical resources that are archaeological in nature may be accidentally discovered during
33 project construction; archaeological resources are discussed further in item (b) below.

34 ***b. Adverse change in the significance of an archaeological resource (Less***
35 ***than Significant with Mitigation)***

36 No archaeological resources, as defined in Section 15064.5 of the CEQA Guidelines, were
37 identified within the project area during archival research and archaeological surveys were
38 not undertaken due to the fact that the project area is comprised of paved city streets.
39 However, archaeological resources in the region are known to exist under city streets and/or
40 under many feet of alluvial soils. A Native American cemetery was found during construction
41 of a new West Sacramento subdivision (Sacramento Bee 2015, 2018), less than 1.5 miles
42 south of the current project area, and buried archaeological resources have been uncovered

1 in other areas of the City. Similarly, a Native American village site was found buried under 10
2 feet of alluvium during construction of the new Sacramento County Administration building
3 in Sacramento (Tremaine 2008). In addition, both a Native American village and a Gold Rush
4 era encampment were uncovered at 3 and 5 feet, respectively, during construction of the
5 Light Rail Train in downtown Sacramento (Tremaine and Ferris 2009). These discoveries are
6 indicative of the potential for uncovering buried cultural resources during project
7 construction, even though the area has previously been disturbed by the installation and
8 maintenance or upgrading of sewer and water infrastructure elements over the decades. This
9 is particularly applicable to the installation of the water mains, which will be placed adjacent
10 to the existing lines, and will require new excavations to depths of 5 feet. The placement of
11 fire hydrants at new locations, could similarly impact buried cultural resources. Although any
12 excavations for the sewer main would be in areas previously disturbed by sewer line
13 installation, cultural resources could still be identified.

14 Though archaeological remains have not previously been reported in the project area, project
15 excavation activities could uncover buried archaeological materials. Prehistoric materials
16 most likely would include obsidian and chert flaked stone tools (e.g., projectile points, knives,
17 and choppers), tool-making debris, or milling equipment such as mortars and pestles.
18 Historic-era materials that might be uncovered would likely be related to the agricultural
19 activities in the project area prior to construction of the subdivision. Such items might include
20 square cut or wire nails, tin cans, metal equipment parts, or other items related to operating
21 an agricultural field.

22 If archaeological remains are accidentally discovered that are determined eligible for listing
23 in the CRHR or determined to be a TCR, and Proposed Project activities would affect them in
24 a way that would render them ineligible for such listing, a significant impact would result.
25 Implementation of **Mitigation Measure CR-1 (Conduct Cultural Resources Awareness
26 Training) and Mitigation CR-2 (Immediately Halt Construction if Cultural Resources
27 Are Discovered, Evaluate All Identified Cultural Resources for Eligibility for Inclusion
28 in the CRHR, and Implement Appropriate Mitigation Measures for Eligible Resources)**
29 would ensure that impacts on CRHR-eligible archaeological sites accidentally uncovered
30 during construction are reduced to a less-than-significant level by immediately halting work
31 if materials are discovered, evaluating the finds for CRHR eligibility, and implementing
32 appropriate mitigation measures, as necessary. Implementation of Mitigation Measure CR-1
33 would reduce impacts related to accidental discovery of archaeological resources to a level
34 that is *less than significant with mitigation*.

35 **Mitigation Measure CR-1: Conduct Cultural Resources Awareness Training**

36 A cultural resources awareness training program will be provided to all construction
37 personnel active on the Project site during earth moving activities. The training will
38 be provided prior to the initiation of ground disturbing activities. The training will be
39 developed and conducted in coordination with a qualified archaeologist meeting the
40 U.S. Secretary of Interior professional standards in archaeology, as defined in 48 Code
41 of Federal Register Parts 44720–44723, and a Native American tribe, who has
42 participated in consultations with the City, will be invited to participate in the
43 training. The program will include relevant information regarding sensitive cultural
44 resources, including applicable regulations, protocols for avoidance, and
45 consequences of violating State laws and regulations. The worker cultural resources
46 awareness program will also describe appropriate avoidance and minimization

1 measures for resources that have the potential to be located on the Project site and
2 will outline what to do and whom to contact if any potential archaeological resources
3 or artifacts are encountered. The program will also underscore the requirement for
4 confidentiality and culturally appropriate treatment of any finds of significance to
5 Native Americans, consistent with Native American tribal values.

6 The Yocha Dehe will also be invited to participate in the Project preconstruction
7 meeting, and the tribe will be kept aware of the Project construction schedule.

8 **Mitigation Measure CR-2: Immediately Halt Construction if Cultural**
9 **Resources Are Discovered, Evaluate All Identified Cultural Resources for**
10 **Eligibility for Inclusion in the CRHR, and Implement Appropriate Mitigation**
11 **Measures for Eligible Resources.**

12 Construction monitoring of ground disturbing activities by archaeological or Native
13 American monitors is not currently planned by the City. However, tribal
14 representatives from a local traditionally and culturally affiliated tribe are invited to
15 visit the construction site at any time to observe construction excavation, as long as
16 the City project manager is notified in advance.

17 If evidence of any subsurface archaeological features or deposits are discovered
18 during construction-related earth-moving activities, such as structural features, bone
19 or shell fragments, flaked or ground stone artifacts, historic-era artifacts, or
20 architectural remains, are encountered during any project construction activities,
21 work shall be suspended immediately at the location of the find and within a radius
22 of at least 50 feet and the City will be contacted. The City will then contact a qualified
23 archaeologist who meet the U.S. Secretary of the Interior's professional standards and
24 a Native American representative from a traditionally and culturally affiliated tribe,
25 as appropriate (i.e., a Native American site rather than a historic era site), to assess
26 the significance of the find and make recommendations for further evaluation and
27 treatment as necessary.

28 All cultural resources accidentally uncovered during construction within the project
29 site shall be evaluated for eligibility for inclusion in the CRHR. Resource evaluations
30 will be conducted by individuals who meet the U.S. Secretary of the Interior's
31 professional standards in archaeology. If any of the resources meet the eligibility
32 criteria identified in PRC Section 5024.1 or CEQA Section 21083.2(g), mitigation
33 measures will be developed and implemented in accordance with CEQA Guidelines
34 Section 15126.4(b) before construction resumes.

35 For resources eligible for listing in the CRHR that would be rendered ineligible by the
36 effects of project construction, additional mitigation measures will be implemented.
37 Mitigation measures for archaeological resource, as outlined in CEQA Guidelines
38 Section 15126.4(b), may include (but are not limited to) avoidance; incorporation of
39 sites within parks, greenspace, or other open space; capping the site; deeding the site
40 into a permanent conservation easement; or data recovery excavation. Mitigation
41 measures for archaeological resources shall be developed in consultation with
42 responsible agencies and, as appropriate, interested parties such as Native American
43 tribes. Native American consultation is required if an archaeological site is
44 determined to be a TCR. Implementation of the approved mitigation would be

1 required before resuming any construction activities with potential to affect
2 identified eligible resources at the site.

3 ***c. Disturbance of any human remains, including those interred outside of***
4 ***formal cemeteries (Less than Significant with Mitigation)***

5 No evidence of human remains was observed within the project site. Even so, there is the
6 possibility that project-related construction may affect human remains. Should any such
7 remains be discovered during construction, California Health and Safety Code Section 7050.5
8 requires that work immediately stop within the vicinity of the finds and that the County
9 coroner be notified to assess the finds. Implementation of **Mitigation Measure CR-3**
10 **(Immediately Halt Construction if Human Remains Are Discovered and Implement**
11 **Applicable Provisions of California Health and Safety Code Section 7050.5)** would
12 ensure that the Proposed Project would not result in substantial adverse effects on human
13 remains uncovered during the course of construction by requiring that, if human remains are
14 uncovered, work must be halted and the Yolo County coroner must be contacted. Adherence
15 to these procedures and provisions of the California Health and Safety Code would reduce
16 potential impacts on human remains to **less than significant with mitigation.**

17 **Mitigation Measure CR-3: Immediately Halt Construction if Human Remains**
18 **Are Discovered and Implement Applicable Provisions of California Health and**
19 **Safety Code Section 7050.5.**

20 If human remains are discovered during the Proposed Project's construction activities,
21 the requirements of California Health and Safety Code Section 7050.5 shall be followed.
22 Potentially damaging excavation shall halt on the Project site within a minimum radius
23 of 100 feet of the remains, and the County coroner shall be notified, as well as the City's
24 project manager. The coroner is required to examine all discoveries of human remains
25 within 48 hours of receiving notice of a discovery on private or state lands (California
26 Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains
27 are those of a Native American, he or she must contact NAHC by phone within 24 hours
28 of making that determination (California Health and Safety Code Section 7050[c]).
29 Pursuant to the provisions of PRC Section 5097.98, NAHC shall identify a Most Likely
30 Descendent (MLD). The MLD designated by NAHC shall have at least 48 hours to inspect
31 the site and propose treatment and disposition of the remains and any associated grave
32 goods. The State shall work with the MLD to ensure that the remains are removed to a
33 protected location and treated with dignity and respect. Native American human remains
34 may also be determined to be tribal cultural resources. The Yolo County coroner will
35 determine the treatment of human remains that are not of Native American origin. Such
36 treatment may include archaeological excavation.

1 **3.6 ENERGY**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2

3 **Discussion**

4 ***a. Result in potentially significant environmental impact due to wasteful,***
 5 ***inefficient, or unnecessary consumption of energy resources (No***
 6 ***Impact)***

7 The Proposed Project would involve upgrading water and sanitary sewer infrastructure,
 8 rehabilitating water and sewer mains, and repairing and/or replacing curbs, gutters,
 9 sidewalks, and retrofits required to comply with the Americans with Disabilities Act (ADA)
 10 and replace deficient and failed street sections. Project-related construction activities would
 11 comply with City and state requirements for control of air pollutant emissions and reduction
 12 of greenhouse gas emissions. Operation of the Proposed Project would not involve additional
 13 consumption of energy resources beyond existing conditions. Therefore, the Proposed
 14 Project would have **no impact** on energy resources.

15 ***b. Conflict with or obstruct a state or local plan for renewable energy or***
 16 ***energy efficiency (No Impact)***

17 As stated in item (a) above, project-related construction activities would comply with City
 18 and state requirements for control of air pollutant emissions and reduction of greenhouse
 19 gas emissions and no additional consumption of energy would result from operational
 20 activities. Therefore, the Proposed Project would have **no impact** related to state or local
 21 plans for renewable energy and energy efficiency.

1 **3.7 GEOLOGY, SOILS, AND SEISMICITY**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2

1 Discussion

2 This section is based on the *Geotechnical Engineering Study for State Streets Water Capacity*
 3 *and Sewer Rehabilitation Project – Jefferson Boulevard, Stone Boulevard, and Park Drive, West*
 4 *Sacramento, California*, prepared in October 2018 by Youngdahl Consulting Group
 5 (Youngdahl). Additional information was provided by the *Pavement Design and Soil*
 6 *Contamination Evaluation* prepared by Youngdahl in January 2019.

7 **a. Directly or indirectly cause substantial adverse effects, including the**
 8 **risk of loss, injury, or death involving:**

9 **i. Seismic-related rupture of a known earthquake fault (*No Impact*)**

10 According to the Fault Activity Map of California and Adjacent Areas (Jennings 2010, as
 11 cited in Youngdahl 2018) and the Peak Acceleration from Maximum Credible
 12 Earthquakes in California (California Division of Mines and Geology 2007, as cited in
 13 Youngdahl 2018), no active faults or Earthquake Fault Zones (Special Studies Zones) are
 14 located on the project site. No evidence of recent or active faulting was observed during
 15 a field study conducted by Youngdahl in 2018. The nearest mapped potentially active and
 16 active faults relevant to the project site are identified in **Table 3-3**.

17 **Table 3-3. Local Active and Potentially Active Faults**

Activity	Fault Name	Distance and Direction
Active	Dunnigan Hills	19.9 mi (32 km) northwest
Active	Midland Fault	18.6 mi (30 km) southwest
Active	Green Valley Fault	38.5 mi (62 km) southwest
Potentially Active	Bear Mountains Fault Zone – West	26 mi (42 km) east
Potentially Active	Bear Mountains Fault Zone – East	33 mi (53 km) east
Potentially Active	Maidu Fault	31 mi (50 km) northeast
Potentially Active	Vaca Fault	29.8 mi (48 km) southwest
Potentially Active	Deadman Fault	32.9 mi (53 km) northeast

18 *Source: Youngdahl Consulting Group 2018*

19 Based on the distances and activity of nearby faults, the Proposed Project would have **no**
 20 **impact** related to seismic-related rupture.

21 **ii. Strong seismic ground shaking (*No Impact*)**

22 The severity of ground shaking experienced at a specific location depends on a variety of
 23 factors, such as the magnitude and duration of the seismic event, fault type associated

1 with the event, distance from the epicenter, and physical properties of the underlying
2 geology and soils. Because the project site is not located near any known active faults and
3 is not in a seismically active region, the area is not likely to experience significant ground
4 shaking. **No impact** would result.

5 **iii. Seismic-related ground failure, including liquefaction (*No Impact*)**

6 Liquefaction can occur when water-saturated, loose sandy soils lose cohesion during
7 seismic shaking. The primary factor that triggers liquefaction is moderate to strong
8 ground shaking. Physical properties that increase susceptibility to liquefaction are
9 relatively clean/loose granular soils, and a shallow depth to groundwater and/or
10 saturated conditions. The project site is not located in a designated liquefaction zone nor
11 is it in a seismically active area (California Governor's Office of Emergency Services [Cal
12 OES] 2018, as cited in Youngdahl 2018). As such, even though the existing site may overlie
13 artificial fill and is located near the Sacramento River (i.e., both factors increasing the
14 propensity for liquefaction), it is unlikely to experience liquefaction. The Proposed
15 Project would not expose people or structures to substantial adverse effects from
16 liquefaction. Therefore, **no impact** would occur.

17 **iv. Landslides? (*No Impact*)**

18 The project site is in a flat, developed area in the City of West Sacramento. The potential
19 for landslides to occur in this location is very low. **No impact** related to landslides would
20 result.

21 **b. Substantial soil erosion or the loss of topsoil (*Less than Significant*)**

22 The Proposed Project's construction activities would occur exclusively within an urban
23 residential neighborhood. Within this area, the work would take place in, on, and immediately
24 adjacent to existing City streets. Very little loss of topsoil would occur, as very little topsoil
25 would be disturbed by project activities.

26 Policy S-3.2 of the General Plan update requires that a geotechnical report be prepared and
27 its mitigation measures be incorporated into the design. The updated General Plan also has
28 two policies to address soil erosion: PFS-4.9 of Goal PFS-4, which imposes conditions on
29 grading projects during the rainy season; and NCR-4.7 of Goal NCR-4, which requires
30 compliance with the City's grading ordinance and NPDES permit, ensuring preparation of a
31 SWPPP and issuance of a grading permit for all construction projects, as required by the
32 Central Valley Regional Water Quality Control Board (RWQCB) and the City's municipal code.
33 These policies are implemented through the regulation and development review process,
34 which requires that all construction comply with the California Building Standards Code
35 (CBC). Therefore, the impacts of the Proposed Project related to erosion and loss of topsoil
36 would be **less than significant**.

1 ***c. Location on a geologic unit or soil that is unstable or that would***
 2 ***become unstable as a result of the Proposed Project and potentially***
 3 ***result in an on-site or off-site landslide, lateral spreading, subsidence,***
 4 ***liquefaction, or collapse (Less than Significant)***

5 The project area is in a topographically flat region and is therefore not susceptible to
 6 landslides. The risk of lateral spreading is low, as the project area does not consist of fill
 7 material. The City's General Plan Update EIR (City of West Sacramento 2016) did not identify
 8 any areas currently experiencing subsidence within West Sacramento. The majority of the
 9 project site has elevation changes of less than 5 feet, which are associated with fills or
 10 stockpiles. No slopes of engineering significance are present or anticipated on the site
 11 following construction activities.

12 Policy S-3.2 of the General Plan update requires that a geotechnical report be prepared and
 13 its mitigation measures be incorporated into the design. This policy is implemented through
 14 the regulation and development review process, requiring that all construction comply with
 15 the CBC, which addresses engineered fills and cuts. Compliance with City policy and the
 16 regulation and development review process would ensure that impacts related to potential
 17 seismic or geologic hazards would be **less than significant**.

18 ***d. Location on expansive soil, creating substantial direct or indirect risks***
 19 ***to life or property (Less than Significant with Mitigation)***

20 Youngdahl (2018) reported that the materials encountered during field investigations were
 21 generally non-plastic (sand and non-plastic silt). The non-plastic materials are generally
 22 considered to be non-expansive; therefore, no special design considerations would be
 23 required for the design or construction of the proposed improvements. Some layers of clay
 24 were encountered at depth, however, raising the potential for expansive soils in these areas.

25 Policy S-3.2 of the General Plan update requires that a geotechnical report be prepared and
 26 its mitigation measures be incorporated into the design. Implementation of **Mitigation**
 27 **Measure GEO-1 (Conduct Construction Monitoring During Clearing and Grading to**
 28 **Provide Supplemental Recommendations if Necessary)** would require that the project
 29 engineer must be present during clearing and grading so that, if additional areas of expansive
 30 soils are encountered, the project engineer would provide recommendations to reduce the
 31 potential for risk to life or property from expansive soils. This impact would be **less than**
 32 **significant with mitigation**.

33 **Mitigation Measure GEO-1. Conduct Construction Monitoring During Clearing**
 34 **and Grading to Provide Supplemental Recommendations if Necessary.**

35 Construction monitoring is a continuation of the findings and recommendations
 36 provided in the Geotechnical Report. The City shall involve the project engineer in all
 37 grading activities to provide supplemental recommendations as field conditions
 38 dictate. The project engineer will be notified at least 2 working days before site
 39 clearing or grading operations commence, and will observe the overexcavation of
 40 existing fills or loose/soft soils and provide consultation to the grading contractor in
 41 the field.

1 ***e. Have soils incapable of adequately supporting the use of septic tanks***
 2 ***or alternative wastewater disposal systems in areas where sewers are***
 3 ***not available for the disposal of wastewater (No Impact)***

4 The Proposed Project involves repair, replacement, and upgrade of a portion of the City's
 5 water and sewer infrastructure; repair and replacement of curb, gutter, and sidewalk; and
 6 rehabilitation of deficient street sections throughout the State Streets neighborhood. Neither
 7 septic tanks nor alternative wastewater disposal systems are present in the project area. **No**
 8 **impact** on such facilities would result.

9 ***f. Directly or indirectly destroy a unique paleontological resource or site***
 10 ***or unique geological feature (Less than Significant with Mitigation)***

11 The Project site is in a previously disturbed area, and ground disturbance is not expected to
 12 extend below a depth of 7 feet. Therefore, the Project is unlikely to impact scientifically
 13 important paleontological resources. In the unlikely event that fossil remains are
 14 encountered, paleontological mitigation will need to be developed. This mitigation would
 15 include paleontological monitoring; collection of observed resources; preservation,
 16 stabilization, and identification of collected resources; curation of resources into a museum
 17 repository; and preparation of a monitoring report of findings.

18 No paleontological resources or unique geologic features are known to exist within or near
 19 the Project site. The site is underlain by Holocene Alluvium, which is considered to have low
 20 paleontological sensitivity from the surface to a depth of 20 feet and high sensitivity below
 21 that mark. However, the Project site is in a previously disturbed area and will have ground
 22 disturbance that extends to a maximum depth of 7 feet. Therefore, the Project is unlikely to
 23 impact scientifically important paleontological resources. Should undiscovered
 24 paleontological resources be found during Project construction, **Mitigation Measure GEO-2**
 25 **(Halt Excavation If Paleontological Resources Are Encountered, Evaluate the Find, and**
 26 **Implement Measures to Avoid Impacts)** shall be implemented to reduce potential impacts
 27 on paleontological resources. This impact would be **less than significant with mitigation**.

28 **Mitigation Measure GEO-2. Halt Excavation If Paleontological Resources Are**
 29 **Encountered, Evaluate the Find, and Implement Measures to Avoid Impacts**

30 If paleontological resources are encountered during Project excavation and no
 31 monitor is present, all ground-disturbing activities within 50 feet of the find shall be
 32 redirected to other areas until a qualified paleontologist can be retained to evaluate
 33 the find and make recommendations for additional paleontological mitigation, which
 34 may include paleontological monitoring; collection of observed resources;
 35 preservation, stabilization, and identification of collected resources; curation of
 36 resources into a museum repository; and preparation of a final report documenting
 37 the monitoring methods and results to be submitted to the museum repository and
 38 the City of West Sacramento.

1 **3.8 GREENHOUSE GAS EMISSIONS**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2

3 **Discussion**

4 As described in more detail in Section 3.3, “Air Quality,” YSAQMD has identified BMPs to
 5 reduce construction equipment exhaust focus on strategies that reduce NOx, ROG, and PM10
 6 emissions (YSAQMD 2007). These strategies may include restricting unnecessary vehicle
 7 idling to 5 minutes, using reformulated and emulsified fuels, incorporating catalyst and
 8 filtration technologies, and modernizing the equipment fleet with cleaner repower and newer
 9 engines, among others.

10 ***a. Generate a net increase in greenhouse gas emissions which may have a***
 11 ***significant impact on the environment (Less than Significant)***

12 As described in Section 3.3, “Air Quality,” the Proposed Project involves repair, replacement,
 13 and upgrade of a portion of the City’s water and sewer infrastructure; repair and replacement
 14 of curb, gutter, and sidewalk; and rehabilitation of deficient street sections throughout the
 15 State Streets neighborhood. Construction activities would take place over an approximately
 16 18-month period, and construction contractors would comply with YSAQMD BMPs. No
 17 operational activities would involve emissions of greenhouse gases beyond the activities
 18 taking place under existing conditions; in fact, replacement of the water main and pipelines
 19 would reduce loss of water due to leaking pipes, resulting in reduced demand for water
 20 supply and treatment. Therefore, the Proposed Project would not generate a net increase in
 21 emissions of greenhouse gases. The impact would be **less than significant**.

22 ***b. Conflict with an applicable plan, policy or regulation adopted for the***
 23 ***purpose of reducing the emissions of greenhouse gases (Less than***
 24 ***Significant)***

25 A project is deemed inconsistent with air quality and greenhouse gas (GHG) reduction plans
 26 if it would result in population and/or employment growth that exceeds growth estimates
 27 included in the applicable air quality plan, which, in turn, would generate emissions not
 28 accounted for in the applicable air quality plan emissions budget. Therefore, projects need to

1 be evaluated to determine whether they would generate population and employment growth
2 and, if so, whether that growth would exceed the growth rates included in the relevant air
3 quality and GHG reduction plans. The Proposed Project involves maintenance activities and
4 installation of utility infrastructure in a fully developed urban area. Therefore, the Proposed
5 Project would be consistent with local plans for growth, traffic, and air quality and would
6 have a **less-than-significant impact** related to GHG emissions.

1 **3.9 HAZARDS AND HAZARDOUS MATERIALS**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2

3 **Discussion**

4 The California Environmental Protection Agency (CalEPA) has been granted primary
 5 responsibility by USEPA for administering and enforcing hazardous materials management
 6 plans within California. CalEPA defines a hazardous material as a material that, because of its

1 quantity, concentration, or physical or chemical characteristics, poses a significant present or
2 potential hazard to human health and safety or to the environment if released (26 California
3 Code of Regulations [CCR] 25501).

4 State regulations include detailed planning and management requirements to ensure that
5 hazardous materials are properly handled, stored, and disposed of to reduce human health
6 risks. In particular, the state has acted to regulate the transfer and disposal of hazardous
7 waste. Hazardous waste haulers are required to comply with regulations that establish
8 numerous standards, including criteria for handling, documenting, and labeling the shipment
9 of hazardous waste (26 CCR 25160 et seq.).

10 CalEPA maintains the Hazardous Wastes and Substances Site (Cortese) List, a planning
11 document used by state and local agencies and developers to comply with CEQA
12 requirements in providing information about the locations of hazardous materials release
13 sites. The California Department of Toxic Substances Control (DTSC), State Water Resources
14 Control Board, and California Department of Resources Recycling and Recovery contribute to
15 the hazardous material release site listings, which are updated annually.

16 CalEPA delegates responsibility for many of its programs to local governments through
17 certification as a Certified Unified Program Agency (CUPA). A CUPA is responsible for
18 implementing a unified hazardous materials and hazardous waste management program. As
19 the designated CUPA for Yolo County, the Environmental Health Services Division of Yolo
20 County is responsible for performing all assessments of environmental contamination
21 and/or human exposure, providing oversight of cleanup activity, and coordinating with the
22 lead state agency having cleanup jurisdiction.

23 As discussed in Section 3.10, "Hydrology and Water Quality," a project that would disturb
24 1 acre or more of soil must obtain coverage under General Permit Order 2010-0014-DWQ.
25 Coverage under the General Permit requires the development and implementation of a
26 SWPPP. A SWPPP includes plans for erosion and sediment control and adheres to the
27 County's grading ordinance and BMPs. Standard BMPs used during construction for erosion
28 control typically include the following:

- 29 ▪ Limit construction access routes and stabilize designated access points.
- 30 ▪ No cleaning, fueling, or maintaining of vehicles is allowed onsite, except in a
31 designated area where washwater is contained and treated.
- 32 ▪ Properly store, handle, and dispose of construction materials/wastes to prevent
33 contact with stormwater.
- 34 ▪ Train and provide instruction to all construction contract employees/
35 subcontractors on implementation of the BMPs.
- 36 ▪ Control all potential pollutants, including pavement cutting wastes, paints, concrete,
37 petroleum products, chemicals, washwater or sediments, rinse water, and non-
38 stormwater discharges and prevent their discharge to storm drains and
39 watercourses.

1 ***a. Create a significant hazard to the public or the environment through***
2 ***the routine transport, use, or disposal of hazardous materials (Less***
3 ***than Significant)***

4 Construction activities for the Proposed Project would require the routine transport, use, or
5 disposal of hazardous materials (e.g., fuel, oil, petroleum products) and hazardous wastes
6 (potentially contaminated soils, as described in item 3.9[d] below), which could result in the
7 release of hazardous materials into the environment. The contractor would be required by
8 existing regulations to implement standard BMPs and SWPPP measures to control erosion,
9 sediment, and runoff in the project area during construction. In the event of releases of
10 hazardous materials into the environment, the CUPA would provide oversight of any
11 necessary cleanup activities.

12 The Proposed Project would be consistent with the City of West Sacramento General Plan,
13 which requires compliance with existing regulations. Existing regulations and BMPs, as
14 described above, would ensure that sites containing hazardous materials are cleaned up to
15 existing standards. This impact would be **less than significant**.

16 ***b. Create a significant hazard to the public or the environment through***
17 ***reasonably foreseeable upset and accident conditions involving the***
18 ***release of hazardous materials into the environment (Less than***
19 ***Significant)***

20 Construction equipment has the potential to release oils, greases, solvents, and other
21 finishing materials through accidental spills. Given the nature of hazardous materials that
22 would be used, stored, or disposed of (e.g., materials for construction equipment, potentially
23 contaminated soil), there is a possibility for upset and accident conditions involving the
24 release of hazardous materials into the environment. Accidental releases of small quantities
25 of these substances could contaminate soils and degrade the quality of surface water and
26 groundwater, resulting in a public safety hazard. However, the handling and disposal of these
27 materials would be governed according to regulations enforced by the West Sacramento Fire
28 Department, the CUPA, California Department of Industrial Relations, Division of
29 Occupational Safety and Health (Cal/OSHA), and DTSC. In addition, regulations under the
30 federal Clean Water Act require contractors to avoid allowing the release of materials into
31 surface waters as part of their SWPPP and National Pollutant Discharge Elimination System
32 permit requirements (see Section 3.10, "Hydrology and Water Quality," for a discussion of
33 SWPPPs). Therefore, the use of hazardous materials during construction would not result in
34 a reasonably foreseeable upset or accident condition that would cause significant hazard to
35 the public or environment.

36 Reasonably foreseeable spills under operational conditions would be handled according to
37 the specifications of the County Hazardous Waste Management Plan. This plan governs the
38 preparation and implementation the County's Area Plan for emergency response to chemical
39 spills in the community.

40 Based on the existing regulatory scheme, this impact would be **less than significant**, and no
41 mitigation is required.

1 ***c. Emit hazardous emissions or involve handling hazardous or acutely***
2 ***hazardous materials, substances, or waste within one-quarter mile of***
3 ***an existing or proposed school (No Impact)***

4 No schools are located within ¼ mile of the project area. Therefore, there would be **no**
5 **impact.**

6 ***d. Located on a site that is included on a list of hazardous materials sites***
7 ***compiled pursuant to Government Code § 65962.5 and, as a result,***
8 ***create a significant hazard to the public or the environment (No***
9 ***Impact)***

10 According to the geotechnical report prepared by Youngdahl (2018), one site in West
11 Sacramento—Capitol Plating—appears on DTSC’s Cortese List. Site assessment has been
12 underway since 1999 and the site’s status has been listed as Open – Inactive since that time.
13 DTSC conducted a targeted site investigation in 2005, and the facility was demolished in
14 2005. The potential for soil or groundwater contamination for this property is considered
15 high; however, this site is not within the project area (City of West Sacramento 2016).

16 No hazardous materials sites included on a list compiled pursuant to Government Code
17 Section 65962.5 are present within the city boundaries, and no Comprehensive
18 Environmental Response, Compensation, and Liability Act (Superfund) or other National
19 Priorities List sites are within the city limits (City of West Sacramento 2016). Therefore, the
20 Proposed Project would not result in a significant hazard to the public or the environment
21 through exposure to such sites.

22 Youngdahl prepared a geotechnical engineering study for the project area (Youngdahl 2018).
23 During field work, petroleum contaminated soils were detected in one soil boring at a depth
24 of 11.5 feet below ground surface (bgs). Based on the literature review for the geotechnical
25 study, the source of the contamination was likely to be a petroleum-contaminated
26 groundwater plume from a former 7-Eleven gas station at the northwest corner of Jefferson
27 Boulevard and Vermont Avenue and another plume from a Buckeye Partners petroleum
28 facility southeast of Alameda Boulevard. Additional borings were conducted to a depth of
29 approximately 9 feet bgs and tested for potential hydrocarbon contamination (Youngdahl
30 2019).

31 Laboratory analysis identified polychlorine biphenyls (PCBs), VOCs, and several TPH
32 constituents in the original soil boring at levels above residential Tier 1 levels established by
33 the San Francisco Bay RWQCB’s Environmental Screening Levels (ESLs), a series of tables
34 that reflect the concentration of hazardous chemicals considered to represent the thresholds
35 of concern for risk to human health. DTSC recognizes the ESLs as a suitable screening level
36 for petroleum hydrocarbons such as gasoline and diesel. However, because the Proposed
37 Project would be located within city street right-of-way rather than on residential properties,
38 the levels were compared to commercial levels and found to be within applicable screening
39 levels established by the RWQCB, USEPA, and DTSC or within background concentrations.
40 The two additional soil borings had no indications of petroleum contamination.

1 The Proposed Project would be consistent with the updated General Plan, which requires
2 compliance with existing provisions regarding hazardous material sites. Existing regulations
3 would ensure that sites containing hazardous materials be cleaned up to existing standards
4 for the proposed land use prior to development. There would be **no impact**.

5 ***e. Located within an airport land use plan area or, where such a plan has***
6 ***not been adopted, be within 2 miles of a private airport or public***
7 ***airport and result in a safety hazard or excessive noise for people***
8 ***residing or working in the study area (No Impact)***

9 The nearest airports to the State Streets neighborhood are Sacramento Executive Airport,
10 located 7 miles southeast on the east side of the Sacramento River at 6151 Freeport
11 Boulevard; and Sacramento International Airport, located approximately 13 miles north on
12 I-5 between Sacramento and Woodland. The project site is not located within 2 miles of an
13 airport or within an airport land use plan area. There would be **no impact**.

14 ***f. Impair implementation of or physically interfere with an adopted***
15 ***emergency response plan or emergency evacuation plan (Less than***
16 ***Significant)***

17 Construction activities for the Proposed Project could cause temporary changes in emergency
18 access. Existing City requirements for construction projects require signage and an access
19 plan to ensure continued emergency access during construction. Consequently, the impact is
20 considered **less than significant**.

21 ***g. Expose people or structures, either directly or indirectly, to a***
22 ***significant risk of loss, injury or death involving wildland fires (No***
23 ***Impact)***

24 The project area is an urban neighborhood that is fully developed. **No impact** related to
25 wildland fires would result.

1 **3.10 HYDROLOGY AND WATER QUALITY**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Proposed Project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2

3 **Discussion**

4 West Sacramento is within the Sacramento Valley Groundwater Basin, Yolo Sub-basin, and is
 5 under the jurisdiction of the Central Valley RWQCB. The Sacramento River flows along the

1 east and northeast boundaries of the city and is the largest river in California. The river's flow
2 is controlled by several principal reservoirs, including Lake Shasta and Trinity Lake to the
3 north, Lake Oroville along the Feather River, and Folsom Lake along the American River. The
4 water quality of the Sacramento River is generally good to excellent and has relatively low
5 biochemical oxygen demand, medium to high dissolved oxygen, and low mineral and nutrient
6 content (City of West Sacramento 2016).

7 The City maintains one groundwater well, which is currently on standby status but is
8 available for emergencies. Surface water from the Sacramento River is used to meet water
9 demands within West Sacramento.

10 Stormwater runoff is collected into gutters, storm drains, and retention basins and ultimately
11 flows into local waterways. Pollutants in West Sacramento's urban stormwater include
12 sediments, non-sediment soils, nutrients, pathogens, oxygen-demanding substances, total
13 petroleum hydrocarbons, heavy metals, floatables, polycyclic aromatic hydrocarbons, trash,
14 pesticides, and herbicides.

15 Given its proximity to the Sacramento River, West Sacramento is located in the river's
16 floodplain. The city is surrounded by levees, including those immediately south and east of
17 the project area, that are maintained by the State and local reclamation districts. The Federal
18 Emergency Management Agency is currently reevaluating flood zone designation maps in
19 West Sacramento. In addition, the City is concurrently working to complete levee
20 improvements to increase flood protection within West Sacramento. At this time, most of the
21 city, including the Project site, is classified as Zone X. Flood Zone X has no statutory
22 requirement for flood insurance and allows new construction and expansion of existing
23 structures without being subject to elevation and flood proofing requirements (City of West
24 Sacramento 2016).

25 ***a. Violate any water quality standards, waste discharge requirements or***
26 ***otherwise substantially degrade water quality (Less than Significant)***

27 Construction activities for the Proposed Project would require excavation, grading, and
28 paving. Any soil removed during construction would be stored and controlled to reduce soil
29 erosion and sedimentation of downstream waterways. Pollutants and hazardous materials,
30 such as gasoline, diesel fuel, oil, solvents, and trash stored and used during construction,
31 would be subject to State and local regulations. Compliance with these regulations would
32 reduce the potential for materials to enter drainages and degrade downstream water quality.

33 The State Water Resources Control Board requires dischargers whose projects disturb 1 or
34 more acres of soil to obtain coverage under the General Permit for Discharges of Storm Water
35 Associated with Construction Activity (Construction General Permit 99-08-DWQ). Effective
36 July 1, 2010, all dischargers are required to obtain coverage under the Construction General
37 Permit Order 2009- 0009-DWQ adopted on September 2, 2009. Construction activity subject
38 to this permit includes clearing, grading, and disturbances to the ground such as stockpiling
39 or excavation. The development and implementation of a SWPPP would be required under
40 the Construction General Permit. The SWPPP would identify BMPs that the discharger would
41 use to control the release of pollutants in stormwater runoff. Additionally, the SWPPP would
42 contain a visual monitoring program and a chemical monitoring program for "nonvisible"
43 pollutants to be implemented if there is a failure of the BMPs.

1 In addition, the Project would comply with the Water Quality Control Plan for the Sacramento
2 and San Joaquin River Basins and would therefore not violate any water quality standards or
3 regulations. The Project would result in a **less-than-significant impact** related to water
4 quality standards or waste discharge requirements.

5 ***b. Substantially decrease groundwater supplies or interfere substantially***
6 ***with groundwater recharge, such that the project may impede***
7 ***sustainable groundwater management of the basin (Less than***
8 ***Significant)***

9 The Proposed Project would involve upgrading water and sanitary sewer infrastructure,
10 rehabilitating water and sewer mains, and repairing and/or replacing curbs, gutters,
11 sidewalks, and retrofits required to comply with the ADA and replace deficient and failed
12 street sections throughout the State Streets neighborhood. No additional use of groundwater
13 would be required for construction or operation of the Proposed Project; in fact, replacement
14 of the water main and pipelines would reduce loss of water due to leaking pipes, resulting in
15 reduced demand for water supply and treatment. Repair and rehabilitation of street sections
16 would involve paving of some segments of neighborhood roadways; however, these
17 roadways are paved under existing conditions, and the amount of pavement would not be
18 increased as a result of the Proposed Project. Therefore, the Proposed Project would have a
19 **less-than-significant impact** on groundwater supplies and groundwater recharge.

20 ***c. Substantially alter the existing drainage pattern of the site or area,***
21 ***including through the alteration of the course of a stream or river or***
22 ***through the addition of impervious surfaces, in a manner which would:***

23 ***i. result in substantial erosion or siltation on- or off-site (Less than***
24 ***Significant)***

25 Construction activities for the Proposed Project would involve excavation within city
26 streets to repair, remove, and/or replace water and sanitary sewer mains and pipelines.
27 Exposure of subsurface soils during the rainy season could result in erosion or siltation
28 of runoff. All construction activities would be conducted in compliance with the City's
29 standards and applicable State Water Resources Control Board (SWRCB) requirements,
30 including preparation of a SWPPP, which would prevent runoff from causing substantial
31 erosion or siltation on- or off-site. Therefore, the impact of the Proposed Project related
32 to erosion or siltation would be **less than significant**.

33 ***ii. substantially increase the rate or amount of surface runoff in a***
34 ***manner which would result in flooding on- or offsite (No Impact)***

35 As described in Chapter 2, *Project Description*, one aspect of the Proposed Project would
36 be rehabilitation of deficient street sections. The project area is a fully developed urban
37 neighborhood, however, and the pavement being laid down would be replacing existing
38 pavement. Therefore, no increase in the amount of impervious surface would result from
39 the Proposed Project, which would have **no impact** on the rate and amount of surface
40 runoff.

1 **iii. create or contribute runoff water which would exceed the**
2 **capacity of existing or planned stormwater drainage systems or**
3 **provide substantial additional sources of polluted runoff (*No***
4 ***Impact*)**

5 The Proposed Project does not include construction of new stormwater drainage
6 facilities; however, street gutters would be repaired in areas where they have been
7 damaged by tree roots or where construction activities require excavation or temporary
8 removal of the curb, gutter, and sidewalk and disturbance of the surface pavement. These
9 activities would involve replacement of existing stormwater drainage systems. The
10 Proposed Project would have **no impact** on stormwater drainage.

11 **iv. impede or redirect flood flows (*No Impact*)**

12 The risk of flooding in the project area is extremely minor because the area is protected
13 by levees certified by Federal Emergency Management Agency (FEMA) to protect against
14 the 100-year storm event. The Proposed Project would have **no impact** related to flood
15 flows.

16 **d. Located in flood hazard, tsunami, or seiche zones, risk release of**
17 ***pollutants due to project inundation (Less than Significant)***

18 West Sacramento is not at risk for tsunami, and the project area is not adjacent to a body of
19 water that could experience seiche. The city is located near the confluence of the American
20 and Sacramento Rivers, and the Sacramento River Deep Water Ship Channel meets the
21 Sacramento River just south of Stone Boulevard, the southern boundary of the project area.
22 As a result, flooding is a concern in parts of West Sacramento. The Proposed Project area is
23 protected by a levee certified by FEMA to provide 100-year protection (FEMA 1995, as cited
24 in LSA Associates 2019), east of Jefferson Boulevard and the Western Pacific Railroad tracks.

25 As described in item (a) above, construction contractors would be required to implement a
26 SWPPP to control the release of pollutants in stormwater. Construction activities would
27 involve handling of fuel, oil, and other pollutants that could be toxic to fish and other aquatic
28 organisms. An accidental spill or inadvertent discharge of these materials could affect the
29 water quality of the Sacramento River. Construction contractors would be required to
30 prepare and implement a SWPPP and comply with the conditions of the National Pollutant
31 Discharge Elimination System general stormwater permit for construction activity. The
32 SWPPP would include implementation of a monitoring program and a Spill Prevention
33 Control and Countermeasures Plan. The contractor would be required to obtain a permit from
34 the Central Valley RWQCB detailing a plan to control any spills that occur during construction.
35 The plan would describe the construction activities to be performed, BMPs that would be
36 implemented to prevent discharges of contaminated stormwater into waterways, and
37 inspection and monitoring activities that would be conducted.

38 Compliance with state and local regulations and implementation of a SWPPP would result in
39 a **less-than-significant impact**.

1 ***e. Conflict with or obstruct implementation of a water quality control***
2 ***plan or sustainable groundwater management plan (No Impact)***

3 As stated in item (b) above, the Proposed Project would involve upgrading water and sanitary
4 sewer infrastructure, rehabilitating water and sewer mains, and repairing and/or replacing
5 curbs, gutters, sidewalks, and retrofits required to comply with the ADA and replace deficient
6 and failed street sections throughout the State Streets neighborhood. All construction
7 activities would be conducted in compliance with City standards, including preparation of a
8 SWPPP with a monitoring program and a Spill Prevention Control and Countermeasures Plan.
9 No additional use of groundwater would be required for construction or operation of the
10 Proposed Project. Therefore, the Proposed Project would have **no impact** on water quality
11 control plans and sustainable groundwater management plans.

1 **3.11 LAND USE AND PLANNING**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2

3 **Discussion**

4 ***a. Divide an established community (No Impact)***

5 During construction activities for the repair, rehabilitation, and replacement of water and
 6 sanitary sewer facilities, city streets in the State Streets neighborhood would be trenched and
 7 excavated to remove and install pipelines. This activity would be conducted incrementally
 8 over a 6-month period. Trenches would be covered during non-work hours to avoid access
 9 limitations for neighborhood residents. Following the completion of construction, no barriers
 10 or division would be visible aboveground. The Proposed Project would have **no impact**
 11 related to division of an established community.

12 ***b. Cause a significant environmental impact due to a conflict with any***
 13 ***land use plan, policy, or regulation adopted for the purpose of avoiding***
 14 ***or mitigating an environmental effect (Less than Significant)***

15 Implementation of the Proposed Project would benefit residents of the State Streets
 16 neighborhood by improving water supply and pressure, sanitary sewer operation, and street
 17 conditions. These improvements would comply with the City’s construction standards and
 18 regulatory requirements. The impact would be **less than significant**.

1 **3.12 MINERAL RESOURCES**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2

3 **Discussion**

4 ***a. Result in the loss of availability of a known mineral resource that***
 5 ***would be of value to the region and the residents of the state (No***
 6 ***Impact)***

7 The project area is a fully developed residential neighborhood in an urban environment. The
 8 City of West Sacramento General Plan (City of West Sacramento 2016) identifies no mineral
 9 resources within the city. There would be **no impact**.

10 ***b. Result in the loss of availability of a locally important mineral resource***
 11 ***recovery site delineated on a local general plan, specific plan or other***
 12 ***land use plan (No Impact)***

13 The project area is a fully developed residential neighborhood in an urban environment. The
 14 City of West Sacramento General Plan (City of West Sacramento 2016) identifies no locally
 15 important mineral resources within the city. There would be **no impact**.

1 **3.13 NOISE**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan area, or, where such a plan has not been adopted, within 2 miles of a public airport or public-use airport, would the project expose people residing or working in the project site to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2 **Overview of Noise and Vibration Concepts and Terminology**

3 **Noise**

4 In the CEQA context, noise can be defined as unwanted sound. Sound is characterized by
 5 various parameters, including the rate of oscillation of sound waves (frequency), the speed
 6 of propagation, and the pressure level or energy content (amplitude). In particular, the sound
 7 pressure level is the most common descriptor used to characterize the loudness of an ambient
 8 sound level, or sound intensity. The decibel (dB) scale is used to quantify sound intensity.
 9 Because sound pressure can vary enormously within the range of human hearing, a
 10 logarithmic scale is used to keep sound intensity numbers at a convenient and manageable
 11 level. The human ear is not equally sensitive to all frequencies in the spectrum, so noise
 12 measurements are weighted more heavily for frequencies to which humans are sensitive,
 13 creating the A-weighted decibel (dBA) scale.

14 In general, human sound perception is such that a change in sound level of 3 dB is barely
 15 noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as
 16 doubling or halving the sound level. **Table 3-4** presents approximate noise levels for common
 17 noise sources, measured adjacent to the source.

1 **Table 3-4. Examples of Common Noise Levels**

Common Outdoor Activities	Noise Level (dBA)
Gas lawnmower at 3 feet	100
Diesel truck at 50 feet traveling 50 miles per hour	90
Noisy urban area, daytime	80
Gas lawnmower at 100 feet, commercial area	70
Heavy traffic at 300 feet	60
Quiet urban area, daytime	50
Quiet urban area, nighttime	40
Quiet suburban area, nighttime	30
Quiet rural area, nighttime	20

2 *Source: Caltrans 2009*3 **Vibration**

4 Ground-borne vibration propagates from the source through the ground to adjacent
5 buildings by surface waves. Vibration may be composed of a single pulse, a series of pulses,
6 or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly
7 it is oscillating, measured in Hertz (Hz). Most environmental vibrations consist of a
8 composite, or "spectrum," of many frequencies. The normal frequency range of most ground-
9 borne vibrations that can be felt generally starts from a low frequency of less than 1 Hz to a
10 high of about 200 Hz. Vibration information for this analysis has been described in terms of
11 the peak particle velocity (PPV), measured in inches per second, or of the vibration level
12 measured with respect to root-mean-square vibration velocity in decibels (VdB), with a
13 reference quantity of 1 micro-inch per second.

14 Vibration energy dissipates as it travels through the ground, causing the vibration amplitude
15 to decrease with distance away from the source. Soil properties also affect the propagation of
16 vibration. Vibration in buildings is typically perceived as rattling of windows, shaking of loose
17 items, or the motion of building surfaces. In some cases, the vibration of building surfaces
18 also can be radiated as sound and heard as a low-frequency rumbling noise, known as
19 ground-borne noise.

20 Ground-borne vibration is generally limited to areas within a few hundred feet of certain
21 types of industrial operations and construction/demolition activities, such as pile driving.
22 Road vehicles rarely create enough ground-borne vibration amplitude to be perceptible to
23 humans unless the receiver is in immediate proximity to the source or the road surface is
24 poorly maintained and has potholes or bumps. Generally, people are more sensitive to low-
25 frequency vibration. Human annoyance also is related to the number and duration of events;
26 the more events or the greater the duration, the more annoying it becomes.

1 Discussion

2 The City’s General Plan Safety Element (City of West Sacramento 2016) identifies Goal S-7:
 3 “To protect city residents from the harmful effects of excessive noise and vibration.” Policies
 4 S-7.1 through S-7.10 are outlined to achieve the City’s goal; however, these policies are
 5 directed primarily to new development. The City’s performance standards for noise and
 6 vibration, found in Chapter 17.28.110 and Chapter 17.28.140 of its Municipal Code, are the
 7 primary enforcement tool for the operation of locally regulated noise sources, such as
 8 construction activity or outdoor recreation facilities. These sections of the Municipal Code set
 9 noise level performance standards for non-transportation noise sources, such as
 10 construction equipment; industrial operations; outdoor recreation facilities; heating,
 11 ventilation, and air-conditioning units; and loading docks. The standards for residential land
 12 uses are shown in **Table 3-5**. Because the City’s performance standards do not specify an
 13 exemption for temporary daytime construction activity, the daytime (7 a.m.-10 p.m.) and
 14 nighttime (10 p.m.-7 a.m.) limits specified in the City’s performance standards for noise apply
 15 to all construction activities in West Sacramento.

16 **Table 3-5.** City of West Sacramento Noise Level Standards for Non-transportation Uses

Land Use	Noise Level Descriptor (dBA)	Exterior		Interior	
		Day	Night	Day	Night
Residential	Hourly Leq	50	45	45	35
	Maximum level	70	65	–	–

17 Note: dBA = A-weighted decibels; Leq = day-night equivalent sound level

18 *Source: City of West Sacramento 2016.*

19 The City’s Municipal Code prohibits the installation of any operation that consistently
 20 produces noticeable construction- or operation-related vibration beyond the property line.
 21 In addition, the City’s General Plan Safety Element includes Policy S-7.6: Vibration Standards,
 22 which states: “The City shall require construction projects and new development anticipated
 23 to generate a significant amount of vibration to ensure acceptable interior vibration levels at
 24 nearby noise-sensitive uses based on Federal Transit Administration criteria.” **Table 3-6**
 25 shows the Federal Transit Administration criteria included in General Plan Policy S-7.6 as the
 26 City’s vibration impact criteria for frequent events, occasional events, and infrequent events.

27 **Table 3-6.** Groundborne Vibration Impact Criteria for General Assessment

Land Use	Impact Levels ¹ (VdB)		
	Frequent	Occasional	Infrequent
Category 1: Buildings where vibrations would interfere with interior operations ²	65	65	65
Category 2: Residences and buildings where people	72	75	80

Land Use	Impact Levels ¹ (VdB)		
	Frequent	Occasional	Infrequent
normally sleep			
Category 3: Institutional land uses with primarily daytime uses	75	78	83

1 1 Impact levels, in vibration decibels (VdB), are defined by event frequency as follows: frequent –
 2 more than 70 vibration events of the same source per day; occasional – 30-70 vibration events of
 3 the same source per day; infrequent – fewer than 30 vibration events of the same source per day.

4 2 This criterion limit is based on levels that are acceptable for most moderately sensitive equipment,
 5 such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed
 6 evaluation to define the acceptable vibration levels.

7 *Source: City of West Sacramento 2016.*

8 ***a. Generation of a substantial temporary or permanent increase in***
 9 ***ambient noise levels in the vicinity of the project in excess of standards***
 10 ***established in the local general plan or noise ordinance, or applicable***
 11 ***standards of other agencies (Less than Significant with Mitigation)***

12 As listed in Section 2.5.5 of Chapter 2, *Project Description*, the following equipment would be
 13 used during construction activities for the Proposed Project:

Water Main and Sewer Main Installation

- track-mounted excavators (2)
- end dump/haul trucks (4)
- flat-bed delivery truck (1)
- concrete truck (1)
- backhoe (1)
- front-end loaders (2)
- vac truck (1)
- concrete saw (1)
- pipe cutting saw (2)
- water truck (1)
- street sweeper (1)
- “Ditch Witch” horizontal directional drill machine (1)
- compressor/jack hammer (1)
- crew trucks (F150-F350) (3)

Sewer CIPP Installation

- TVI truck (1)
- vac truck (2)
- refig truck/liner truck (1)
- generator truck (1)
- water truck (1)
- boiler truck (1)
- crew trucks (F150-F350) (3)

14 Despite the variety in the type and size of construction equipment, similarities in the
 15 dominant noise sources and patterns of operation allow construction-related noise ranges to
 16 be categorized by work phase. **Table 3-7** lists typical construction equipment noise levels

1 (L_{max}) recommended for noise impact assessments based on a distance of 50 feet between
2 the equipment and a noise receptor.

3 Normal construction activity may generate high noise levels from an active construction area.
4 Equipment includes backhoes, compactors, and dump trucks. Typical operating cycles for
5 these types of construction equipment may involve 1 or 2 minutes of full-power operation
6 followed by 3 or 4 minutes at lower power settings. Noise associated with the use of
7 construction equipment is estimated between 55 and 85 dBA L_{max} at a distance of 50 feet
8 from each piece of equipment. As shown in Table 3-7, the maximum noise level generated by
9 a front-end loader, dump truck, excavator, and Ditch Witch would be approximately 80 dBA
10 L_{max}, 84 dBA L_{max}, 85 dBA L_{max}, and 86 dBA L_{max} at 50 feet, respectively. Each piece of
11 construction equipment operates as an individual point source. Using these estimates, the
12 conservative composite noise level during this phase of construction would be approximately
13 90 dBA L_{max} at a distance of 50 feet from an active construction area.

14 **Table 3-7. Typical Construction Equipment Noise Levels**

Equipment	Acoustical Usage Factor (%)	Maximum Noise Level (L _{max}) at 50 Feet*
Compactor (ground)	20	80
Dump Trucks	40	84
Excavators	40	85
Flatbed Trucks	40	84
Forklift	20	85
Front-End Loaders	40	80
Graders	40	85
Jackhammers	20	85
Pickup Truck	40	55
Pavers	40	84
Pneumatic Tools	50	85
Rollers	20	85
Tractors	40	84

15 * Maximum noise levels were developed based on Spec 721.560 from
16 the Central Artery/Tunnel (CA/T) program to be consistent with the
17 City of Boston's Noise Code for the "Big Dig" project.

18 L_{max} = maximum instantaneous noise level

19 *Source: Federal Highway Administration 2018.*

20 Single-family residential units are considered sensitive receptors, and the State Streets
21 neighborhood is a fully developed residential area. In general, construction activities related

1 to water and sanitary sewer pipeline installation would take place along the centerline of the
2 road, approximately 25 feet from the outside wall of the nearest residences.

3 Noise modeling for a similar project, the West Capitol Avenue Road Rehabilitation Project,
4 evaluated a concrete saw at a distance of 20 feet from residences, a cement truck at 35 feet,
5 and a paver at 55 feet (LSA Associates 2019). The results indicate that the residences would
6 be exposed to exterior noise levels of up to 97.5 dBA Lmax and interior noise levels as loud
7 as 65.9 dBA Leq with an exterior-to-interior attenuation of 25 dBA applied. Therefore, some
8 residential sensitive noise receptors could be exposed to short-term noise impacts that would
9 exceed the City's daytime exterior and interior noise level standards for residential uses. In
10 all, active construction would take place in front of each affected residence for approximately
11 6 days over the year-long construction period. However, noise levels during the brief period
12 of active construction outside each residence could exceed the City's noise thresholds,
13 resulting in a significant impact.

14 Following the completion of construction, the Proposed Project would not generate new or
15 increased noise sources or increase long-term noise levels above existing conditions. Once
16 operational, the Project would not result in the exposure of persons to or generation of noise
17 levels in excess of City standards.

18 Implementation of **Mitigation Measures NOI-1** through **NOI-5** would reduce construction
19 noise levels at the sensitive receptors to the extent feasible and, in addition, would require
20 the City to provide lodging accommodations to affected residents, if requested, while active
21 construction is taking place, thus removing affected residents from the construction areas
22 and eliminating construction noise impacts for such sensitive receptors. Therefore,
23 construction noise impacts on sensitive receptors would be **less than significant with**
24 **mitigation.**

25 **Mitigation Measure NOI-1. Equip Construction Equipment with Mufflers.**

26 Prior to any construction activity, the construction contractor (confirmed by the City),
27 shall equip all construction equipment, fixed or mobile, with properly operating and
28 maintained mufflers, consistent with manufacturers' standards.

29 **Mitigation Measure NOI-2. Locate Staging Areas Away from Residences.**

30 Prior to and during any construction activity, the construction contractor (confirmed
31 by the City or a City-appointed noise liaison) shall locate equipment staging in areas
32 that would create the greatest possible distance between construction-related noise
33 sources and residences.

34 **Mitigation Measure NOI-3. Limit Construction Hours.**

35 The construction contractor, through enforcement by the City, shall ensure that all
36 general construction-related activities be restricted to the daytime hours of 7:00 a.m.
37 to 7:00 p.m., Monday through Friday. Construction activities shall be restricted from
38 occurring on weekends (Saturday and Sunday) and on holidays.

1 **Mitigation Measure NOI-4. Appoint a Construction Noise Liaison, Enforce Noise**
2 **Requirements, and Respond to Noise Complaints.**

3 The City shall appoint a construction noise liaison who shall be responsible for
4 responding to any local complaints about construction noise. The City shall facilitate
5 a focus meeting with project area residents, the construction contractor, and the noise
6 liaison to notify residents of potential impacts and measures to reduce such impacts.

7 If a noise complaint related to construction is received, the construction noise
8 liaison shall determine the cause of the construction noise issue (e.g., construction
9 activities outside of City authorized times, bad muffler) and shall enforce existing
10 City noise requirements with the construction contractor. If the noise complaint
11 cannot be resolved through enforcement, Mitigation Measure NOI-5 shall be
12 implemented.

13 **Mitigation Measure NOI-5. Notify Residents Before Active Construction Begins**
14 **and Provide Lodging Accommodations by Request.**

15 At least 2 weeks (14 days) prior to commencement of construction activities within
16 500 feet (two blocks) of residences, the City (in coordination with the construction
17 contractor and construction noise liaison) shall provide written notification to those
18 residences of construction activities, the intended length of occurrence, the potential
19 occurrence for short-term noise level increases, and noise liaison contact
20 information. The written notification may be distributed to residences in person or
21 by mail.

22 The City shall also inform residents of the option to relocate temporarily to off-site lodging
23 accommodations during active construction to reduce construction noise impacts. Lodging
24 accommodations will be arranged at the City's discretion. Affected residents shall request
25 such accommodations through the City-appointed noise liaison.

26 ***b. Generation of excessive groundborne vibration or groundborne noise***
27 ***levels (Less than Significant with Mitigation)***

28 Vibration thresholds for buildings occur at a PPV of 0.12 in/sec for buildings extremely
29 susceptible to vibration damage; the human perception threshold is at 65 VdB. Vibration and
30 ground-borne noise levels were estimated following methods described in the Federal
31 Transit Administration (FTA) Noise and Vibration Impact Assessment (FTA 2006) to
32 determine the PPV that would potentially impact buildings and the VdB for annoyance.

33 Ground vibrations from construction activities do not often reach the levels that can damage
34 structures, but they can achieve the audible and feelable ranges in buildings very close to the
35 site. The construction activities that typically generate the most severe vibrations are blasting
36 and impact pile driving. The primary concern associated with such vibrations is annoyance.
37 Various types of construction equipment have been measured under a wide variety of
38 construction activities, with an average of source levels reported in terms of velocity. During
39 construction, general construction equipment is expected to be used, including off-highway
40 trucks, off-highway tractors, excavators, pavers, compaction equipment (rollers), dump
41 trucks, hauling equipment, and loaders. **Table 3-8** shows the vibration levels of various types

1 of construction equipment measured in PPV and VdB at a distance of 25 feet from the
2 equipment.

3 **Table 3-8.** Vibration Source Levels for Construction Equipment

Construction Equipment	PPV at 25 feet (in/sec)	Approximate VdB at 25 feet
Loaded Trucks	0.076	86
Jackhammer	0.035	79
Small Bulldozer	0.003	58

4 *Notes: in/sec = inches per second; PPV = peak particle velocity; VdB =*
5 *vibration velocity decibels*

6
7 *Source: Federal Transit Administration 2006.*

8 As indicated in Table 3-8, construction equipment used in the project area would be well
9 below the damage threshold for typical residential buildings. Construction-generated
10 vibrations are not expected to cause damage to nearby buildings or sensitive receptors.
11 However, implementation of Mitigation Measures NOI-3 through NOI-5 would further reduce
12 impacts related to groundborne vibration or groundborne noise. Therefore, this impact
13 would be **less than significant with mitigation**.

14 ***c. For a project located within the vicinity of a private airstrip or an***
15 ***airport land use plan area, or, within 2 miles of a public airport or***
16 ***public-use airport, would the project expose people residing or***
17 ***working in the project site to excessive noise levels (No Impact)***

18 The project area is not within an airport land use plan or within 2 miles of a public airport;
19 therefore, **no impact** would occur.

1 **3.14 POPULATION AND HOUSING**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2

3 **Discussion**

4 ***a. Induce unplanned population growth (No Impact)***

5 The Proposed Project would involve repair, rehabilitation, and replacement of water and
 6 sanitary sewer infrastructure and minor street improvements in a fully developed urban
 7 neighborhood. Water and sewer conveyance facilities would be upgraded but the capacity to
 8 serve new connections would not be increased. Therefore, no potential for population growth
 9 would result from the Proposed Project, and there would be **no impact**.

10 ***b. Displace a substantial number of existing people or housing (No***
 11 ***Impact)***

12 During construction activities for the repair, rehabilitation, and replacement of water and
 13 sanitary sewer facilities, city streets in the State Streets neighborhood would be trenched and
 14 excavated to remove and install pipelines. This activity would be conducted incrementally
 15 over a 6-month period. Trenches would be covered during non-work hours to maintain
 16 access for neighborhood residents. The Proposed Project would have **no impact** related to
 17 displacement of people or housing.

1 **3.15 PUBLIC SERVICES**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2

3 **Discussion**

4 ***a. Result in adverse physical impacts associated with the provision of***
 5 ***new or physically altered governmental facilities or a need for new or***
 6 ***physically altered governmental facilities***

7 ***i. Fire protection (Less than Significant)***

8 Repair, rehabilitation, and replacement of water and sanitary sewer mains and pipelines, as
 9 well as repair of curb, gutter, and sidewalk and street repair, would not create additional
 10 demand for fire protection services. In fact, replacement of the aging water main, as identified
 11 in the City's *2015 Water Master Plan Update* (Carollo 2017), would improve water system
 12 reliability and supply to customers and improve fire flows in the area. The impact would be
 13 **less than significant.**

1 **ii. Police protection (*Less than Significant*)**

2 Repair, rehabilitation, and replacement of water and sanitary sewer mains and pipelines, as
3 well as repair of curb, gutter, and sidewalk and street repair, would not create additional
4 demand for police protection services. Construction activities would be temporary, and
5 operation of the upgraded facilities following construction would be almost entirely
6 belowground. The impact would be **less than significant**.

7 **iii. Schools (*No Impact*)**

8 The nearest school to the project area is Westmore Oaks Elementary School, located 0.8 mile
9 northwest of the neighborhood at 1100 Clarendon Street. No schools are located within the
10 project area or would be affected by construction activities. As described in item 3.14(a) in
11 Section 3.14, "Population and Housing," the Proposed Project would not induce population
12 growth. There would be **no impact** on schools.

13 **iv. Parks (*Less than Significant*)**

14 Three small neighborhood parks are located within the project area: Circle Park, Memorial
15 Park, and Sam Combs Park. Construction activities for the Proposed Project would not
16 preclude neighborhood residents from visiting these parks, except for the brief periods when
17 work is actively underway in the streets adjacent to each park. The Proposed Project may
18 improve the quality of water service to the parks by eliminating leaks in the pipelines, which
19 would benefit park visitors. The impact of the Proposed Project on parks would be **less than
20 significant**.

21 **v. Other public facilities (*No Impact*)**

22 No public library or other public facilities are located within the project area that could be
23 affected by the Proposed Project. There would be **no impact** on other public facilities.

1 **3.16 RECREATION**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2

3 **Discussion**

4 Three neighborhood parks are located with the project area, as described in **Table 3-9**.

5 **Table 3-9. Recreational Facilities in the Project Area**

Park	Address	Size	Facilities	Ownership
Sam Combs Park	205 Stone Boulevard	4.5 acres	Picnic area; BBQs; tot lot; horseshoe pits; fenced, off-leash dog play area; restrooms; walking paths	Owned by Port of Sacramento; maintained by the City of West Sacramento
Memorial Park	401 Regent Street	4.0 acres	4 baseball diamonds; picnic area; tot lot; horseshoe pits; half-court basketball; restrooms	City of West Sacramento
Circle Park	1509 Circle Street	0.3 acre	Picnic tables, trees	City of West Sacramento

6 *Source: Local Wiki West Sacramento 2019*

1 ***a. Increase use of existing parks or recreational facilities (Less than***
2 ***Significant)***

3 The Proposed Project would involve repair, rehabilitation, and replacement of water and
4 sanitary sewer infrastructure and minor street improvements in a fully developed urban
5 neighborhood. Construction activities would not obstruct or interfere with access to or use
6 of the existing parks in the project area because construction would proceed as with the
7 adjacent residential properties. Operation of the improved infrastructure could benefit park
8 landscaping and restrooms, and ADA-related installation of curb ramps would improve
9 access to these areas; however, the Proposed Project would not generate additional
10 population that could increase use of the facilities. The impact would be **less than significant**
11 related to existing parks.

12 ***b. Creation of new or altered recreational facilities (No Impact)***

13 As described in item 3.14(a) in Section 3.14, "Population and Housing," the Proposed Project
14 would not induce population growth. Therefore, there would be no need for creation of new
15 or altered recreational facilities. There would be **no impact**.

1 **3.17 TRANSPORTATION**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b), "Criteria for Analyzing Transportation Impacts"?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2

3 **Discussion**

4 Project-related activities would take place entirely within the State Streets residential
 5 neighborhood, bounded by Jefferson Boulevard, Park Boulevard, 15th Street, and Stone
 6 Boulevard. Construction activities would consist of trenching, excavation, removal,
 7 installation, and recovering of water and sewer mains and pipelines within the right-of-way
 8 of residential streets. Rehabilitation of curb, gutter, and sidewalk and repaving would also
 9 take place in some areas. As described in Section 2.5.5, "Construction Equipment," in Chapter
 10 2, *Project Description*, approximately 20-35 construction workers would commute to and
 11 from the project site each work day over the approximately 18-month work period. Following
 12 the completion of construction activities, operation of the Proposed Project facilities would
 13 remain unchanged from existing conditions, and no increase in traffic would result in the long
 14 term.

15 The City of West Sacramento General Plan EIR indicates that no intersections in the project
 16 area are operating at unacceptable levels of service (LOS), although the Jefferson
 17 Boulevard/Park Street interchange with U.S. Highway 50 westbound ramps operates at LOS
 18 E during the a.m. peak hour (City of West Sacramento 2016a). The Stone Boulevard and 15th
 19 Street intersections with Jefferson Boulevard operate at acceptable LOS during a.m. and p.m.
 20 peak hours (City of West Sacramento 2016a).

21 The project area is served by YOLOBUS Routes 35 and 39, and Class II bike lanes are present
 22 on Park Boulevard and Jefferson Boulevard in and adjacent to the project area (City of West

1 Sacramento 2016a). Pedestrian facilities in the project area consist of sidewalks throughout
2 the neighborhood on both sides of the street.

3 ***a. Conflict with program, plan, ordinance or policy addressing the***
4 ***circulation system, including transit, roadways, bicycle and pedestrian***
5 ***facilities (No Impact)***

6 In addition to replacing and rehabilitating water and sanitary sewer mains and pipelines, the
7 Proposed Project repair curb, gutter, and sidewalk and rehabilitate deteriorating pavement
8 along residential streets in the State Streets neighborhood. These improvements would be
9 consistent with policies on Complete Streets, including accessibility (M-2.4), street amenities
10 (M-2.5) and retrofits (M-2.10); and policies on walkability, including sidewalk safety and
11 pedestrian-friendly sidewalk design (M-6.1, 6.2, and 6.3), found in the City of West
12 Sacramento General Plan Mobility Element (City of West Sacramento 2016b). The Proposed
13 Project would not conflict with any applicable plan, ordinance, or policy establishing
14 measures of effectiveness for the performance of the circulation system. **No impact** would
15 result.

16 ***b. Conflict or be inconsistent with CEQA Guidelines section 15064.3,***
17 ***subdivision (b), "Criteria for Analyzing Transportation Impacts" (No***
18 ***Impact)***

19 The Proposed Project would increase construction vehicle traffic in the short term during
20 construction activities, but operation of project facilities would remain essentially the same
21 as under existing conditions and would result in no additional long-term vehicle trips. As a
22 result, there would be **no impact** related to vehicle miles traveled as a result of the Proposed
23 Project.

24 ***c. Result in increased hazards resulting from geometric design features***
25 ***(Less than Significant)***

26 During construction, the Proposed Project would not require any planned detours, and
27 existing driveways to residences would be maintained. Construction is expected to have a
28 duration of approximately 18 months overall and would occur in a linear pattern, such that
29 construction activities at any specific location would occur for a limited duration.
30 Construction activities would generate an increase in vehicular traffic associated with
31 construction equipment/trucks and personnel traveling to and from the project site.
32 However, 25-30 construction workers would commute to the area each day and would park
33 nearby; in addition, construction equipment would need to be stored over nights and
34 weekends. Parking worker vehicles and construction equipment on city streets could
35 obstruct traffic on narrow residential streets, make parking access difficult for residents, and
36 create hazards for vehicles and pedestrians related to obstructed views. Although the
37 increase in traffic hazards resulting from construction activities would be temporary, the
38 resulting traffic conditions for neighborhood residents could be significant. Implementation
39 of **Mitigation Measure TR-1 (Park and Stage Construction Equipment in Off-street**
40 **Areas Where Possible)** would reduce hazards related to construction traffic by removing
41 the source of potential hazard.

1 **Mitigation Measure TR-1. Park and Stage Construction Equipment in Off-street**
2 **Areas Where Possible.**

3 Before construction begins, the City shall identify parking lots or other off-street
4 locations within or near the project roadways where construction worker vehicles
5 and construction equipment can be parked without interfering with the safety and
6 visibility of streets in the project area. Such areas may include parking lots of
7 commercial establishments, churches, and other facilities. The City will identify
8 appropriate areas for construction worker vehicles that are near to work zones, as
9 well as staging areas that can be appropriately secured. These areas will be indicated
10 on project plans and specifications.

11 As described in item 3.17(a) above, the Proposed Project includes features that would
12 improve safety for motorized vehicles, nonmotorized transport, and pedestrians traveling in
13 and through the area. Deteriorating pavement and sidewalks would be repaired, reducing the
14 potential for accidents that could result in damage to people or property. Operation of the
15 Proposed Project would not result in any hazardous design features or incompatible uses.

16 Overall, Mitigation Measure TR-1 would avoid potential traffic and pedestrian hazards from
17 on-street crowding and obstructed visibility. This impact would be **less than significant**
18 **with mitigation.**

19 ***d. Result in inadequate emergency access (Less than Significant)***

20 Construction of the Proposed Project would not require roadway closure or detours. Because
21 the residential streets are narrow and on-street parking is permitted in the project area,
22 however, construction activities could partially obstruct travel on these streets, which could
23 impair emergency access within the State Streets neighborhood. No road closures or traffic
24 detours are anticipated as a result of project-related construction. As required by City
25 standards, the construction contractor would provide advance notice to emergency service
26 providers regarding the timing, location, and duration of construction activities. The impact
27 on emergency access would be **less than significant.**

28

1 **3.18 TRIBAL CULTURAL RESOURCES**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Proposed Project:				
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)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2

3 **Discussion**

4 As discussed in Section 3.5, "Cultural Resources", the Proposed Project is in the ancestral
 5 territory of the Nisenan peoples and the area was likely used by the Patwin. The UAIC and the
 6 Yocha Dehe Wintun Nation, both tribes with a traditional and cultural affiliation to the Project
 7 area, had previously requested consultation with the City on department projects pursuant
 8 to PRC § 21080.3.1. As a result, the City sent Project notification letters, dated February 1,
 9 2019, to both tribes via U.S. mail with a returned receipt. The Yocha Dehe Wintun Nation
 10 responded in a letter dated February 19, 2019, stating that the tribe "would like to participate
 11 in ongoing consultation." The City met with Yocha Dehe representatives on April 8, 2019 to
 12 discuss tribal concerns such as the need to conduct sensitivity training for construction
 13 workers and monitoring of the project for the discovery of buried Native American resources.
 14 Yocha Dehe subsequently sent a letter, dated May 2, 2019, in which they requested a meeting
 15 to set up a monitoring agreement. A second meeting was held on August 7, 2019. At both
 16 meetings, the City agreed to conduct cultural resources sensitivity training for construction

1 personnel but did not commit to having archaeological or tribal monitors present during
 2 construction since information about the presence of buried resources could not be
 3 substantiated. The tribe's request for monitoring was based on the locations of buried
 4 deposits that had previously been discovered during construction within West Sacramento,
 5 and because the States Streets area had been paved over since the early to mid-1900s, prior
 6 to the advent of conducting environmental review.

7 The UAIC responded in a letter dated March 11, 2019. The letter requested consultation
 8 under AB 52, copies of all cultural resources record search materials and environmental
 9 documents, and indicated a desire to meet to discuss the project. The City provided the tribe
 10 with the available requested information on March 26, 2019. In an email dated March 29,
 11 2019, UAIC declined a field review of the project area since the entire area is developed and
 12 paved; however, they expressed concern over the presence of a village site near the project
 13 area. UAIC ultimately decided against a meeting with the City but offered to forward
 14 mitigation measures for consideration. However, additional information was not
 15 forthcoming from the tribe. After several unsuccessful attempts to engage the tribe about the
 16 mitigation measures, the City requested termination of AB 52 consultation in an email dated
 17 August 30, 2019.

18 **Table 3-10** lists all those contacted and summarizes the results of the consultation. All
 19 correspondence between the NAHC, Native American tribes, and the City is provided in
 20 **Appendix C**.

21 **Table 3-10.** Native American Consultation

Organization/Tribe	Name of Contact	Letter Date	Comments
United Auburn Indian Community of the Auburn Rancheria	Gene Whitehouse, Chairperson	February 1, 2019	03/11/2019: UAIC requested consultation under AB52, copies of all reports and record search material. Requested meeting to discuss the project. 03/26/2019: The City responded via email requesting preferred dates for a meeting. 03/29/2019: UAIC noted that a site visit would not be productive since the area is developed. They also noted the presence of a village nearby, and offered to send TCR mitigation measures preferred by the tribe. 04/03/2019: City requested copy of mitigation measures. 05/08/2019: City followed up with request for MMs; noted that they will move forward with the project if they don't hear from the tribe. 05/22/2019: City again followed up; requested response by May 29, 2019. 06/19/2019: The tribe was supplied a link to the 65% design plans for their review.

Organization/Tribe	Name of Contact	Letter Date	Comments
			8/30/19: Mitigation measures provided for review and comment; email sent by City indicating that, unless additional response was received, consultation would be terminated on September 20, 2019.
Yocha Dehe Wintun Nation	Laverne Bill, Cultural Resources Manager	February 1, 2019	02/19/2019 letter: Tribe “would like to participate in ongoing consultation.” Does not specifically refer to AB52 03/18/2019: City emailed Laverne to schedule a meeting. 04/08/2019: Meeting with City and Yocha Dehe. 05/02/2019: City received letter requesting meeting to set up monitoring agreement. 05/06/2019: City sent email requesting dates for a meeting. 06/19/2019: The tribe was supplied a link to the 65% design plans for their review. 08/07/2019: Meeting with City and Yocha Dehe. 08/27/2019: Mitigation measures provided for review and comment. Consultation concluded.

1

2 ***a. Cause a substantial adverse change in the significance of a tribal***
 3 ***cultural resource, defined in Public Resources Code section 21074 as***
 4 ***either a site, feature, place, cultural landscape that is geographically***
 5 ***defined in terms of the size and scope of the landscape, sacred place, or***
 6 ***object with cultural value to a California Native American tribe, and***
 7 ***that is:***

8 ***i. Listed or eligible for listing in the California Register of Historical***
 9 ***Resources, or in a local register of historical resources as defined***
 10 ***in Public Resources Code section 5020.1(k) (Less than Significant)***

11 No known TCRs that are listed or eligible for listing in the CRHR or a local register of
 12 historical resources have been identified within the project area. Therefore, the impact
 13 on TCRs under this category would be **less than significant**.

14 Native American archaeological deposits may be identified during project construction.
 15 These resources may be determined to be TCRs and eligible for listing in the California

1 Register of Historical Resources. Impacts to TCRs discovered in this manner are discussed
2 under item 3.18(b) below.

3 **ii. A resource determined by the lead agency, in its discretion and**
4 **supported by substantial evidence, to be significant pursuant to**
5 **criteria set forth in subdivision (c) of Public Resources Code**
6 **Section 5024.1. In applying the criteria set forth in subdivision (c)**
7 **of Public Resource Code Section 5024.1, the lead agency shall**
8 **consider the significance of the resource to a California Native**
9 **American tribe (*Less than Significant with Mitigation*)**

10 As mentioned above, although the City notified tribes with a traditional and cultural
11 affiliation with the area about the Proposed Project, none of the tribes contacted
12 identified TCRs in the Project area. Furthermore, no TCRs determined by the lead agency,
13 in its discretion and supported by substantial evidence, to be significant are known to be
14 located in the project vicinity. As a result, it appears that there would be no impact to
15 known TCRs.

16 However, both the UAIC and Yocha Dehe expressed concerns over the potential for buried
17 native American Resources within the Project footprint and it is possible that Native
18 American archaeological remains or Native American human remains that could be
19 determined to be TCRs could be discovered during construction. If such resources are
20 identified, they would be treated according to Mitigation Measure CR-1 or Mitigation
21 Measure CR-2, respectively, as described in Section 3.5, Cultural Resources.
22 Implementation of these mitigation measures would result in a less-than-significant
23 impact with regard to TCRs. As a result, this impact would be **less than significant with**
24 **mitigation.**

1 **3.19 UTILITIES AND SERVICE SYSTEMS**

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
Would the Project:				
a. Require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2

3 **Discussion**

4 The City obtains water supplies from the Sacramento River, which is then treated at its
 5 George Kristoff Water Treatment Plant (GKWTP) (City of West Sacramento 2016). The City’s
 6 total annual production ranged from 4,490 million gallons (MG) in 2010 to 5,260 MG in 2013.
 7 The average daily demand in 2015 was 14.2 million gallons per day (MGD); this value is
 8 projected to increase to 23.9 MGD by 2035 (City of West Sacramento 2016).

9 The City collects sewage within its City limits and then conveys it to the Sacramento Regional
 10 Wastewater Treatment Plant (SRWWTP) for treatment (City of West Sacramento 2018a). The
 11 City operates a separate storm sewer system that collects stormwater runoff in its service

1 area and discharges it to local waterways, such as the Sacramento River and the deep water
2 ship channel (City of West Sacramento 2018b).

3 The Yolo County Central Landfill is the only active solid waste landfill in Yolo County. This
4 landfill accepts 1,800 tons of solid waste per day and is projected to close operations in 2081
5 (Cal Recycle 2018a).

6 Hazardous waste landfills in California are approaching capacity issues, but the Clean
7 Harbors, LLC facility in Buttonwillow accepts 10,500 tons per day and is not projected to close
8 until 2040 (California Department of Resources Recycling and Recovery [CalRecycle] 2018b).
9 The Kettleman Hills facility in Kettleman City operated by Chemical Waste Management, Inc.
10 accepts 8,000 tons per day and had a remaining capacity of 6,000,000 cubic yards in 2000
11 (the last year for which information was available) (CalRecycle 2018c).

12 The purpose of the State Streets Water Capacity and Sewer Rehabilitation Project is to correct
13 some of the infrastructure deficiencies identified in the *2015 Water System Master Plan*
14 *Update* (City of West Sacramento 2017a) and *2015 Sanitary Sewer Master Plan Update* (City
15 of West Sacramento 2017b), as well as conducting additional pavement and curb/gutter
16 maintenance activities in the area. The Proposed Project would replace approximately 9,600
17 feet of water main within eight residential streets in the State Streets neighborhood and
18 approximately 36,000 feet of sewer pipelines within the area bounded by Jefferson
19 Boulevard, Park Boulevard, Stone Boulevard, and 15th Street.

20 ***a. Require the relocation or construction of new or expanded water,***
21 ***wastewater treatment, or stormwater drainage, electric power,***
22 ***natural gas, or telecommunications facilities, or expansion of existing***
23 ***facilities, the construction or relocation of which could cause***
24 ***significant environmental effects (No Impact)***

25 The Proposed Project would consist of relocation/replacement and construction of new
26 water and sanitary sewer pipelines. The environmental effects of these activities are the
27 subject of this IS/MND. **no impact** related to stormwater drainage, electrical power, natural
28 gas, or telecommunications facilities would result.

29 ***b. Have sufficient water supplies available to serve the project and***
30 ***reasonably foreseeable future development during normal, dry and***
31 ***multiple dry years (No Impact)***

32 The Proposed Project involves repair, rehabilitation, and replacement of water and sewer
33 pipelines in a fully developed urban area. No additional water supply would be needed for
34 construction or operation of the Proposed Project; in fact, the water main repair could result
35 in water savings because existing leaks in the system would be identified and corrected.
36 There would be **no impact**.

1 ***c. Result in a determination by the wastewater treatment provider which***
2 ***serves or may serve the project that it has adequate capacity to serve***
3 ***the project's projected demand in addition to the provider's existing***
4 ***commitments (No Impact)***

5 The Proposed Project involves repair, rehabilitation, and replacement of water and sewer
6 pipelines in a fully developed urban area. No additional wastewater treatment would be
7 needed for construction or operation of the Proposed Project. There would be **no impact**.

8 ***d. Generate solid waste in excess of state or local standards, or in excess***
9 ***of the capacity of local infrastructure, or otherwise impair the***
10 ***attainment of solid waste reduction goals (Less than Significant)***

11 Project construction activities could generate solid waste as a result of excavation and
12 removal of water and sanitary sewer mains, pipelines, and associated materials. Much of this
13 material could potentially be recycled rather than disposed of in a landfill; however, assuming
14 all the material were sent to the landfill, it would not exceed existing landfill's capacity. As
15 described above, the Yolo County Central Landfill accepts 1,800 tons of solid waste per day
16 and is projected to close operations in 2081. As also described above, hazardous waste
17 landfills in Kettleman City and/or Buttonwillow would have capacity to accept any hazardous
18 waste that would require disposal during project construction activities.

19 Following installation of water and sanitary sewer pipelines and associated street
20 improvements, no additional facilities would be constructed and no solid waste would be
21 generated in the project area. Therefore, this impact would be **less than significant**.

22 ***e. Comply with federal, state, and local management and reduction***
23 ***statutes and regulations related to solid waste (Less than Significant)***

24 The California Integrated Waste Management Act (CIWMA) of 1989 (PRC, Division 30)
25 requires all California cities and counties to implement programs to reduce, recycle, and
26 compost wastes by at least 50 percent by 2000 (PRC § 41780). The State, acting through the
27 California Integrated Waste Management Board, determines compliance with this mandate
28 based on jurisdictions' per-capita disposal rates. In accordance with the CIWMA, the City
29 would seek to divert at least 50% of the Project's solid waste from the landfill; the majority
30 of excavated soil would be returned to the source trenches, and replaced piping would be
31 recycled where possible. This impact would be **less than significant**.

1 **3.20 WILDFIRE**

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

2

3 **Discussion**

4 The California Department of Forestry and Fire Protection (CAL FIRE) has classified the City
 5 of West Sacramento as a Local Responsibility Area – Unzoned with regard to fire hazard
 6 severity (CAL FIRE 2007). In 2008, CAL FIRE determined that Yolo County has no Very High
 7 Fire Hazard Severity Zones (CAL FIRE 2008). Therefore, the questions in Section 3.20,
 8 “Wildfire,” of the Environmental Checklist do not apply and the Proposed Project would have
 9 **no impact** related to very high fire hazard severity zones.

1 **3.21 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 substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2 **Discussion**

3 ***a. Effects on environmental quality, fish or wildlife, and historic***
 4 ***resources (Less than Significant with Mitigation)***

5 Implementation of the Proposed Project would not adversely affect sensitive natural
 6 communities or special-status animals, but would have the potential to affect nesting birds
 7 and mammals and previously undiscovered cultural resources and/or human remains. With
 8 implementation of the mitigation measures identified in this IS/MND, compliance with City
 9 General Plan policies, and application of standard BMPs during construction, development of
 10 the Project would not:

- 11 ▪ Degrade the quality of the environment;
- 12 ▪ Substantially reduce or impact the habitat of fish or wildlife species;
- 13 ▪ Cause fish or wildlife populations to drop below self-sustaining levels;
- 14 ▪ Threaten to eliminate a plant or animal community;

- 1 ▪ Reduce the number or restrict the range of a rare or endangered plant or animal; or
2 ▪ Eliminate important examples of the major periods of California history or
3 prehistory.

4 Therefore, the Proposed Project's impact would be **less than significant with mitigation**.

5 ***b. Cumulative impacts (Less than Significant with Mitigation)***

6 The impacts of the Proposed Project would be individually limited and not cumulatively
7 considerable. The Proposed Project would involve upgrading water and sanitary sewer
8 infrastructure, rehabilitating water and sewer mains, and repairing and/or replacing curbs,
9 gutters, sidewalks, and retrofits required to comply with the ADA and replace deficient and
10 failed street sections. All environmental impacts that could occur as a result of the Proposed
11 Project would be **less than significant with mitigation** recommended throughout this
12 IS/MND. When viewed in conjunction with other closely related past, present, or reasonably
13 foreseeable future projects, development of this Proposed Project would not make a
14 significant contribution to significant cumulative impacts.

15 ***c. Effects on human beings (Less than Significant with Mitigation)***

16 The purpose of the Proposed Project is to upgrade water and sanitary sewer infrastructure,
17 replace water and sewer mains, replace or rehabilitate aging sewer pipelines as needed, and
18 repair and/or remove and replace curbs, gutters, sidewalks, and retrofits required to comply
19 with the ADA and replace deficient and failed street sections. As described in this IS/MND,
20 implementation of the Proposed Project could result in temporary biology, cultural,
21 geology/soils/seismicity, noise, transportation, and tribal cultural resource impacts during
22 the construction period. Implementation of the mitigation measures recommended in this
23 IS/MND, compliance with City regulations, and application of standard construction practices
24 would ensure that the Proposed Project would not result in environmental impacts that
25 would cause substantial direct or indirect adverse impacts on human beings. The impact
26 would be **less than significant with mitigation** recommended throughout this IS/MND.

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Chapter 4 Report Preparers

3

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Chapter 1, Introduction

No references cited.

Chapter 2, Project Description

City of West Sacramento. 2017a. *2015 Water System Master Plan Update*. Prepared by Carollo.

City of West Sacramento. 2017b. *2015 Sanitary Sewer Master Plan Update*. Prepared by West Yost Associates.

City of West Sacramento. No date. Welcome to the Free Tree Workshop. Available at: www.cityofwestsacramento.org/Home/ShowDocument?id=7883. Accessed October 10, 2019.

Domenichelli and Associates. 2018. *Design Criteria Technical Memorandum*. Prepared for City of West Sacramento Public Works Department.

Youngdahl Consulting Group. 2018. *Geotechnical Engineering Study for State Streets Water Capacity and Sewer Rehabilitation Project*. Prepared for Domenichelli and Associates.

Chapter 3, Environmental Analysis

Section 3.1, Aesthetics

California Department of Transportation. 2018. Scenic Highways – Frequently Asked Questions. Available at: dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways/lap-liv-i-scenic-highways-faq2. Accessed September 3, 2019.

California Department of Transportation. 2019. California Scenic Highway Program – ArcGIS Map. Available at: www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=f0259b1ad0fe4093a5604c9b838a486a&layerId=0. Accessed September 3, 2019.

Caltrans. See California Department of Transportation.

1 **Section 3.2, Agriculture and Forestry Resources**

2 California Department of Conservation. 2017. Yolo County Important Farmland 2016.
3 Published July 2017. Available at: [www.conservation.ca.gov/dlrp/fmmp/Pages/
4 Yolo.aspx](http://www.conservation.ca.gov/dlrp/fmmp/Pages/Yolo.aspx). Accessed September 3, 2019.

5 CDOC. *See* California Department of Conservation.

6 **Section 3.3, Air Quality**

7 Yolo-Solano Air Quality Management District. 2007. Handbook for Assessing and Mitigating
8 Air Quality Impacts. Available at: [www.ysaqmd.org/wp-content/uploads/2016
9 /06/CEQAHandbook2007.pdf](http://www.ysaqmd.org/wp-content/uploads/2016/06/CEQAHandbook2007.pdf). Accessed August 10, 2019.

10 Yolo-Solano Air Quality Management District. 2013. PM2.5 Implementation/Maintenance
11 Plan and Redesignation Request for Sacramento PM2.5 Nonattainment Area.
12 October. Available at: [www.ysaqmd.org/wp-content/uploads/Planning/Sac-Region-
13 PM2.5-Maintenance-Plan.pdf](http://www.ysaqmd.org/wp-content/uploads/Planning/Sac-Region-PM2.5-Maintenance-Plan.pdf). Accessed September 3, 2019.

14 Yolo-Solano Air Quality Management District. 2018. Attainment Status Table. Available at:
15 www.ysaqmd.org/wp-content/uploads/2016/06/Attainment_Detailed.jpg.
16 Accessed August 10, 2019.

17 Youngdahl Consulting Group. 2018. Geotechnical Engineering Study for State Streets Water
18 Capacity and Sewer Rehabilitation Project. October. Prepared for the City of West
19 Sacramento.

20 YSAQMD. *See* Yolo-Solano Air Quality Management District.

21 **Section 3.4, Biological Resources**

22 City of West Sacramento. 2016. General Plan 2035 Policy Document. Approved November
23 2016. Available at: [www.cityofwestsacramento.org/government/departments/
24 community-development/planning-division/general-plan-2035](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035). Accessed January
25 20, 2019.

26 California Department of Fish and Wildlife. 2019. California Natural Diversity Database.
27 Available: www.wildlife.ca.gov/Data/CNDDDB. Accessed March 18, 2019.

28 California Native Plant Society. 2019. Rare and Endangered Plant Inventory. Available:
29 www.rareplants.cnps.org. Accessed March 18, 2019.

30 California Wetlands Monitoring Workgroup. 2019. EcoAtlas. Available at: ecoatlas.org.
31 Accessed September 17, 2019.

32 CDFW. *See* California Department of Fish and Wildlife.

33 CNPS. *See* California Native Plant Society.

- 1 Fettke, Kim. Bat biologist. April 29, 2019. – Email communication with Carley Dutra,
2 Horizon Water and Environment, regarding bats in the project area.
- 3 San Francisco Estuary Institute (SFEI). 2017. “California Aquatic Resource Inventory (CARI)
4 version 0.3.” Available at: [www.sfei.org/data/california-aquatic-resource-inventory-](http://www.sfei.org/data/california-aquatic-resource-inventory-cari-vers)
5 [cari-vers](http://www.sfei.org/data/california-aquatic-resource-inventory-cari-vers). Accessed July 9, 2019.
- 6 Swainson’s Hawk Technical Advisory Committee. 2000. Recommended timing and
7 methodology for Swainson’s Hawk nesting surveys in California’s Central Valley.
- 8 U.S. Fish and Wildlife Service. 2019a. Information for Planning and Consultation (IPaC)
9 Resource List. Provided by ECOS – the Environmental Online Conservation System.
10 U.S. Fish and Wildlife Service. Available: ecos.fws.gov/ipac. Accessed March 18,
11 2019.
- 12 U.S. Fish and Wildlife Service. 2019b. Critical Habitat for Threatened and Endangered
13 Species. Map. Available: [fws.maps.arcgis.com/home/item.html?id=](http://fws.maps.arcgis.com/home/item.html?id=9d8de5e265ad4fe09893cf75b8dbfb77#!)
14 [9d8de5e265ad4fe09893cf75b8dbfb77#!](http://fws.maps.arcgis.com/home/item.html?id=9d8de5e265ad4fe09893cf75b8dbfb77#!). Accessed September 17, 2019.
- 15 U.S. Fish and Wildlife Service. 2019c. National Wetlands Inventory. Available:
16 www.fws.gov/wetlands/data/Mapper.html. Accessed September 17, 2019.
- 17 USFWS. *See* U.S. Fish and Wildlife Service.
- 18 Weller, T. J., T. J. Rodhouse, D. J. Neubaum, P. D. Ormsbee, R. D. Dixon, D. L. Popp, et al. 2018.
19 A review of bat hibernacula across the western United States: Implications for
20 white-nose syndrome surveillance and management. PLoS ONE 13(10):e0205647.
21 Available: doi.org/10.1371/journal.pone.0205647. Accessed September 23, 2019.
- 22 West Coast Arborists. 2018. Arborist Report, West Sacramento, CA – State Streets Project
23 Inventory. December 17. Prepared for the City of West Sacramento.
- 24 Western Bat Working Group. 2013. Species Matrix. Available: [wbwg.org/matrices/species-](http://wbwg.org/matrices/species-matrix/)
25 [matrix/](http://wbwg.org/matrices/species-matrix/). Accessed September 17, 2019.
- 26 Yolo Habitat Conservancy. 2019. Overview of the Yolo HCP/NCCP. Available at:
27 https://docs.wixstatic.com/ugd/8f41bd_b1473daf3a204203a0af03da879411c1.pdf
28 [f](https://docs.wixstatic.com/ugd/8f41bd_b1473daf3a204203a0af03da879411c1.pdf). Accessed September 11, 2019.
- 29 Zeiner, D. C., W. F. Laudenslayer Jr., and K. E. Mayer, (eds.). 1988. California’s wildlife.
30 Volume 1. California Statewide Wildlife Habitat Relationship System, California
31 Department of Fish and Game, Sacramento, CA.
- 32 **Section 3.5, Cultural Resources**
- 33 Bennyhoff, J. A. 1977. Ethnogeography of the Plains Miwok. In Center for Archaeological
34 Research at Davis Publication 5. University of California, Davis.

- 1 Coast Banker Publishing Co. 1913. Coast Banker, Volume 10 (January – June 2013). Coast
2 Banker Publishing Co., San Francisco, California. Available at: [babel.hathitrust.org/
3 cgi/pt?id=uiug.30112064679704](http://babel.hathitrust.org/cgi/pt?id=uiug.30112064679704). Accessed February 11, 2019.
- 4 Corbett, M. 1993a. DPR Series 523 Form for the State Streets Neighborhood (P-57-000739)
5 in West Sacramento, California. On file at the Northwest Information Center of the
6 California Historical Resources Information System, Sonoma State University,
7 Rohnert Park, California.
- 8 Corbett, M. 1993b. DPR Series 523 Form for 10 Alameda Boulevard (P-57-000742) in West
9 Sacramento, California. On file at the Northwest Information Center of the California
10 Historical Resources Information System, Sonoma State University, Rohnert Park,
11 California.
- 12 Johnson, P. J. 1978. Patwin. In *California*, Vol. 8, Handbook of North American Indians, pp.
13 350-360. R. F. Heizer, editor. Smithsonian Institution, Washington, D.C.
- 14 Kroeber, A. L. 1932. The Patwin and Their Neighbors. *University of California Publications in
15 America Archaeology and Ethnology* 29(4):253-423. Berkeley.
- 16 Kyle, D. E., M. B. Hoover, H. E. Rensch, E. G. Rensch, and W. N. Abeloe. 2002. *Historic Spots in
17 California*. Stanford, CA: Stanford University Press.
- 18 Larkey, J., and S. Waters. 1987. *Yolo County: Land of Changing Patterns*. Windsor
19 Publications, Inc., Northridge, California.
- 20 The Sacramento Bee. 2015. Skulls, bones unearthed in West Sacramento are from American
21 Indians. Published October 8, 2015. Available at: [www.sacbee.com/news/
22 local/article38100066.html](http://www.sacbee.com/news/local/article38100066.html). Accessed February 11, 2019.
- 23 The Sacramento Bee. 2018. Yolo County files suit against developers that built on Native
24 American burial site improperly. Published July 14, 2018. Available at:
25 www.sacbee.com/news/business/real-estate-news/article214859865.html.
26 Accessed February 11, 2019.
- 27 Tremaine, K. J. 2008. Investigations of a Deeply Buried Early and Middle Holocene Site (CA-
28 SAC-38) for the City Hall Expansion Project, Sacramento, California. Prepared for the
29 City of Sacramento.
- 30 Tremaine, K. J., and G. Farris. 2009. Rediscovering a Legacy: Archaeological Monitoring
31 Report for the Sacramento Regional transit District Light Rail Extension Project.
32 Prepared for the City of Sacramento.
- 33 United States Census Bureau. 2010. Census 2010 for West Sacramento, California. Available
34 at: factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml?src=bkml.
35 Accessed February 11, 2019.
- 36 United States Department of Agriculture. 2019. Natural Resource Conservation Service Web
37 Soil Survey for West Sacramento, California. Available at:
38 websoilsurvey.sc.egov.usda.gov. Accessed February 8, 2019.

- 1 United States Geological Survey. 1907. Davisville, CA 7.5" topographic quadrangle. Available
2 at: historicalmaps.arcgis.com/usgs/. Accessed February 8, 2019.
- 3 United States Geological Survey. 1916. Lovdal, CA 7.5" topographic quadrangle. Available at:
4 historicalmaps.arcgis.com/usgs/. Accessed February 8, 2019.
- 5 United States Geological Survey. 1948. Sacramento West, CA 7.5" topographic quadrangle.
6 Available at: historicalmaps.arcgis.com/usgs/. Accessed February 8, 2019.
- 7 USDA. *See* United States Department of Agriculture.
- 8 USGS. *See* United States Geological Survey.
- 9 Walters, S. 1987. *West Sacramento: The Roots of a New City*. Yolo County Historical Society,
10 Woodland, California.
- 11 West Coast Arborists. 2018. Arborist Report: State Streets Project Inventory, West
12 Sacramento, CA. Report prepared for the City of West Sacramento.
- 13 West Sacramento Historical Society. 2004. *Images of America: West Sacramento*. Arcadia
14 Publishing, Charleston, South Carolina.
- 15 Wilson, N. L., and A. H. Towne. 1978. Nisenan. In *California*, Vol. 8, Handbook of North
16 American Indians, pp. 387-397. R. F. Heizer, editor. Smithsonian Institution,
17 Washington, D.C.
- 18 **Section 3.6, Energy**
- 19 None cited.
- 20 **Section 3.7, Geology, Soils, and Seismicity**
- 21 City of West Sacramento. 2016. City of West Sacramento General Plan Update Draft
22 Environmental Impact Report. Available at: [www.cityofwestsacramento.org/
23 government/departments/community-development/planning-division/general-
24 plan-2035](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035). Accessed September 16, 2019.
- 25 Youngdahl Consulting Group. 2018. *Geotechnical Engineering Study for State Streets Water
26 Capacity and Sewer Rehabilitation Project*. Prepared for Domenichelli and
27 Associates.
- 28 Youngdahl Consulting Group. 2019. *Pavement Design and Soil Contamination Evaluation*.
29 Prepared for Domenichelli and Associates.
- 30 **Section 3.8, Greenhouse Gas Emissions**
- 31 Yolo-Solano Air Quality Management District. 2007. Handbook for Assessing and Mitigating
32 Air Quality Impacts. Available at: [www.ysaqmd.org/wp-content/uploads/2016
33 /06/CEQAHandbook2007.pdf](http://www.ysaqmd.org/wp-content/uploads/2016/06/CEQAHandbook2007.pdf). Accessed August 10, 2019.

1 YSAQMD. *See* Yolo-Solano Air Quality Management District.

2 **Section 3.9, Hazards and Hazardous Materials**

3 City of West Sacramento. 2016. City of West Sacramento General Plan Update Draft
4 Environmental Impact Report. Available at: [www.cityofwestsacramento.org/
5 government/departments/community-development/planning-division/general-
6 plan-2035](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035). Accessed September 16, 2019.

7 Youngdahl Consulting Group. 2018. *Geotechnical Engineering Study for State Streets Water
8 Capacity and Sewer Rehabilitation Project*. Prepared for Domenichelli and
9 Associates.

10 Youngdahl Consulting Group. 2019. *Pavement Design and Soil Contamination Evaluation*.
11 Prepared for Domenichelli and Associates.

12 **Section 3.10, Hydrology and Water Quality**

13 City of West Sacramento. 2016. City of West Sacramento General Plan Update Draft
14 Environmental Impact Report. Available at: [www.cityofwestsacramento.org/
15 government/departments/community-development/planning-division/general-
16 plan-2035](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035). Accessed September 16, 2019.

17 LSA Associates. 2019. Initial Study/Mitigated Negative Declaration – West Capitol Avenue
18 Road Rehabilitation Project, West Sacramento, California. Prepared for the City of
19 West Sacramento.

20 **Section 3.11, Land Use and Planning**

21 None cited.

22 **Section 3.12, Mineral Resources**

23 City of West Sacramento. 2016. City of West Sacramento General Plan Update Draft
24 Environmental Impact Report. Available at: [www.cityofwestsacramento.org/
25 government/departments/community-development/planning-division/general-
26 plan-2035](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035). Accessed September 16, 2019.

27 **Section 3.13, Noise**

28 California Department of Transportation. 2009. Technical Noise Supplement. Available:
29 www.dot.ca.gov/env/noise/resources.html. Accessed September 19, 2019.

30 Caltrans. *See* California Department of Transportation.

31 City of West Sacramento. 2016. General Plan 2035 Policy Document. Approved November
32 2016. Available at: [www.cityofwestsacramento.org/government/departments/
33 community-development/planning-division/general-plan-2035](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035). Accessed January
34 20, 2019.

1 Federal Highway Administration. 2018. Construction Noise Handbook. Available at:
 2 www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook0
 3 [9.cfm](http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm). Accessed September 19, 2019.

4 Federal Transit Administration. 2006. Transit Noise and Vibration Impact Assessment.
 5 Available at:
 6 [www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual](http://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf)
 7 [.pdf](http://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf). Accessed September 19, 2019.

8 FTA. *See* Federal Transit Administration.

9 LSA Associates. 2019. Initial Study/Mitigated Negative Declaration – West Capitol Avenue
 10 Road Rehabilitation Project, West Sacramento, California. Prepared for the City of
 11 West Sacramento.

12 **Section 3.14, Population and Housing**

13 None cited.

14 **Section 3.15, Public Services**

15 Carollo Engineers. 2017. 2015 Water System Master Plan Update. Final November 2017.

16 **Section 3.16, Recreation**

17 Local Wiki West Sacramento. 2019. West Sacramento – Parks. Available at: [localwiki.org/](http://localwiki.org/westsac/Parks)
 18 [westsac/Parks](http://localwiki.org/westsac/Parks). Accessed September 4, 2019.

19 **Section 3.17, Transportation**

20 City of West Sacramento. 2016a. City of West Sacramento General Plan Update Draft
 21 Environmental Impact Report. Available at: [www.cityofwestsacramento.org/](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035)
 22 [government/departments/community-development/planning-division/general-](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035)
 23 [plan-2035](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035). Accessed September 16, 2019.

24 City of West Sacramento. 2016b. General Plan 2035 Policy Document. Approved November
 25 2016. Available at: [www.cityofwestsacramento.org/government/departments/](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035)
 26 [community-development/planning-division/general-plan-2035](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035). Accessed January
 27 20, 2019.

28 **Section 3.18, Tribal Cultural Resources**

29 None cited.

30 **Section 3.19, Utilities and Service Systems**

31 California Department of Resources Recycling and Recovery. 2018a. Facility/Site Summary
 32 Details: Yolo County Central Landfill (57-AA-0001). Available at:
 33 www.calrecycle.ca.gov/SWFacilities/Directory/57-AA-0001/Detail/. Accessed
 34 September 16, 2019.

- 1 California Department of Resources Recycling and Recovery. 2018b. Facility/Site Summary
2 Details: Clean Harbors Buttonwillow LLC (15-AA-0257). Available at:
3 www.calrecycle.ca.gov/SWFacilities/Directory/15-AA-0257/Detail/. Accessed
4 September 16, 2019.
- 5 California Department of Resources Recycling and Recovery. 2018c. Facility/Site Summary
6 Details: Kettleman Hills – B18 Nonhaz Codisposal (16-AA-0023). Available at:
7 www.calrecycle.ca.gov/SWFacilities/Directory/16-AA-0023/Detail/. Accessed
8 September 16, 2019.
- 9 CalRecycle. See California Department of Resources Recycling and Recovery.
- 10 City of West Sacramento. 2016. City of West Sacramento General Plan Update Draft
11 Environmental Impact Report. Available at: [www.cityofwestsacramento.org/
12 government/departments/community-development/planning-division/general-
13 plan-2035](http://www.cityofwestsacramento.org/government/departments/community-development/planning-division/general-plan-2035). Accessed September 16, 2019.
- 14 City of West Sacramento. 2017a. *2015 Water System Master Plan Update*. Prepared by
15 Carollo.
- 16 City of West Sacramento. 2017b. *2015 Sanitary Sewer Master Plan Update*. Prepared by West
17 Yost Associates.
- 18 City of West Sacramento. 2018a. City Utility Services. Available at:
19 www.cityofwestsacramento.org/city/depts/pw/utilityservices.asp. Accessed
20 September 16, 2019.
- 21 City of West Sacramento. 2018b. Stormwater FAQs. Available at:
22 [www.cityofwestsacramento.org/city/depts/pw/public_works_operations/enviromental_services_division/storm_water/stormwater_faqs.asp](http://www.cityofwestsacramento.org/city/depts/pw/public_works_operations/environmental_services_division/storm_water/stormwater_faqs.asp). Accessed September
23 16, 2019.
24
- 25 **Section 3.20, Wildfire**
- 26 CAL FIRE. 2007. Draft Fire Hazard Severity Zones in LRA – Yolo County. Fire and Resource
27 Assessment Program. Available at: [osfm.fire.ca.gov/media/6854/
28 fhszl06_1_map57.pdf](http://osfm.fire.ca.gov/media/6854/fhszl06_1_map57.pdf). Accessed September 4, 2019.
- 29 **Section 3.21, Mandatory Findings of Significance**
- 30 None cited.