

RICHARDS BOULEVARD OFFICE COMPLEX

Draft Environmental Impact Report

Prepared for
California State Department of General
Services

March 2019



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Prepared for
California State Department of General
Services
P.O. Box 989052
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March 2019

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EXECUTIVE SUMMARY

ES.1 Introduction

The California State Department of General Services (DGS) proposes to construct a new office building complex on the site currently occupied by the State Printing Plant located on North 7th Street in the River District of the City of Sacramento (**Figure ES-1**).

This summary is provided in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15123. As stated in Section 15123(a), “an EIR [environmental impact report] shall contain a brief summary of the proposed action and its consequences. The language of the summary should be as clear and simple as reasonably practical.” As required by the guidelines, this chapter includes:

- a summary description of the Richards Boulevard Office Complex (RBOC) project,
- areas of known controversy,
- environmental impacts of the RBOC project, and
- alternatives to the project.

Table ES-1 includes a summary of all impacts and mitigation measures aimed at reducing or avoiding environmental effects described in Chapter 3 of the EIR.

This EIR is being published as a Draft EIR. The Draft EIR will be subject to review and comment by the public, as well as responsible agencies and other interested jurisdictions, agencies, and organizations for a minimum of forty-five (45) days, starting on March 12, 2019. The public may comment on the EIR by submitting written comments at any time during the public review period. DGS will complete a Final EIR, which will include the written comments received regarding the Draft EIR, responses to substantial environmental issues raised in the comments, and any changes to the Draft EIR that are required by the responses to written comments, or that are initiated by staff.

ES.1.1 Document Review

Upon publication, the environmental documents described above are available online at <http://www.dgs.ca.gov/resd/Programs/EnvironmentalServicesSection/CaliforniaEnvironmentalQualityAct.aspx>, and may be viewed in printed form:

- At Sacramento Central Library at 828 I Street during library hours;



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SOURCE: Esri, 2015; ESA, 2019

Richards Boulevard Office Complex

Figure ES-1
Regional Location



- At the Department of General Services, Environmental Services Section between 8:00 a.m. and 4:30 p.m. (707 3rd Street, 4th Floor, West Sacramento, CA 95605); or
- By requesting a copy by email from environmental@dgs.ca.gov.

ES.1.2 Comments on the Draft EIR

A meeting regarding the project will occur on April 9, 2019, from 4:30 p.m. to 5:30 p.m. in the first floor auditorium at 707 3rd Street, West Sacramento, CA 95605. The public is invited to attend and provide written comments on the Draft EIR.

Comments may be delivered by hand to the meeting described above or to the street address below, or sent to the following mailing address or email address. Comments must be received no later than April 26, 2019 at 5 p.m.:

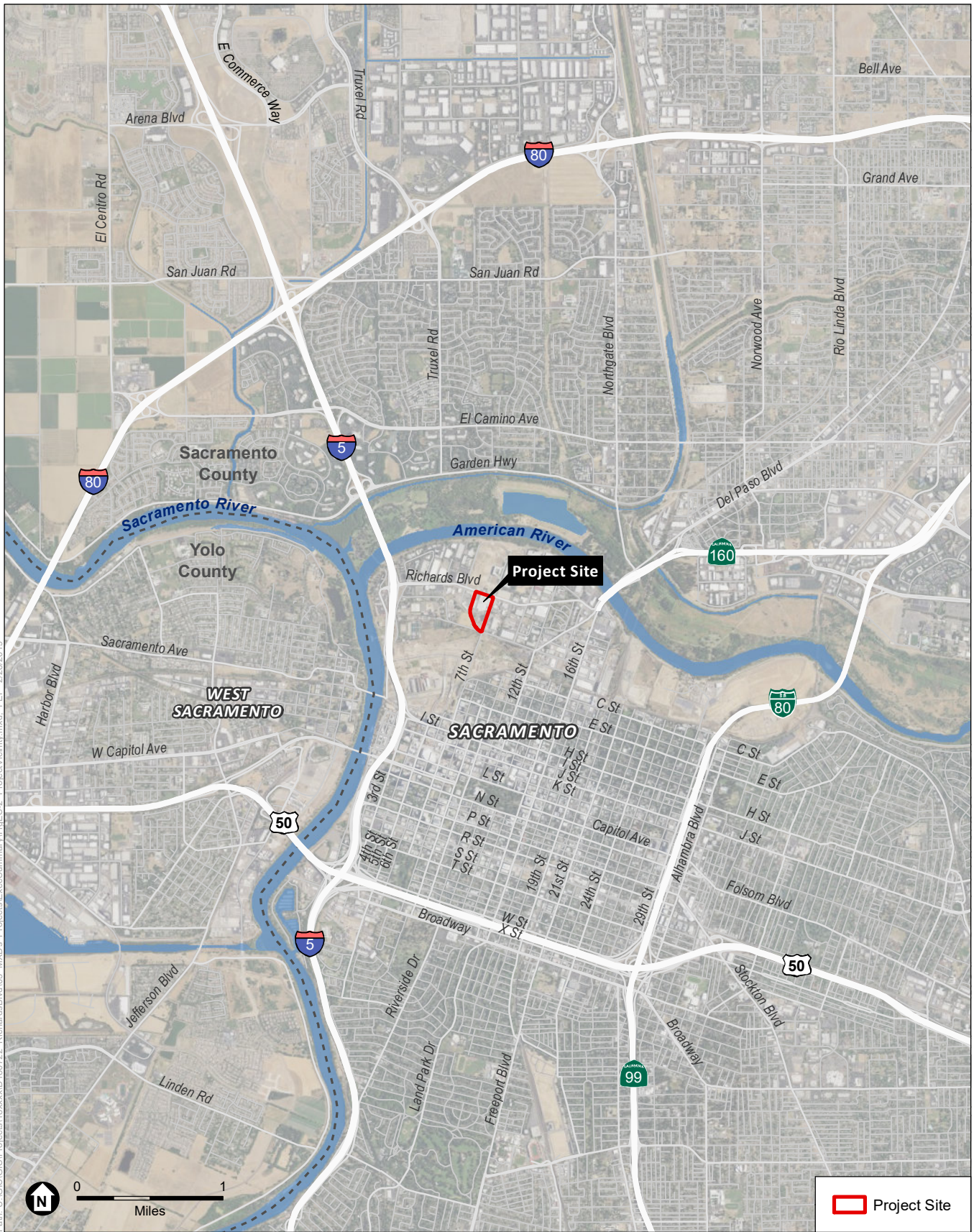
Stephanie Coleman, Senior Project Manager
Department of General Services, Environmental Services Section
Street Address: 707 3rd Street, 4th Floor, West Sacramento, CA 95605
Mailing Address: P.O. Box 989052, West Sacramento, CA 95798
Email: environmental@dgs.ca.gov
Phone: (916) 376-1602
Comment Period: March 12, 2019 – April 26, 2019

In compliance with CEQA, DGS must review and consider the findings of the EIR prior to approving the project and certifying the EIR. DGS may also need to consider adoption of Findings of Fact pertaining to this EIR, specific mitigation measures, a Statement of Overriding Considerations relating to any identified significant and unavoidable effects, and a Mitigation Monitoring and Reporting Program.

ES.2 Summary Description of the Project

ES.2.1 Project Location

The project site is located on a site in the River District of the City of Sacramento (**Figure ES-2**) which currently houses the State Printing Plant. The site is bounded by Richards Boulevard on the north, North 7th Street on the east, and North B Street on the south, and is immediately east of the Coastline Equipment Crane Division Building and the Capital Investments & Loans Building (**Figure ES-3**).



SOURCE: Esri, 2012; USDA, 2016; ESA, 2019

Richards Boulevard Office Complex

Figure ES-2
Project Vicinity





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SOURCE: USDA, 2016; HGA, 2018; ESA, 2019

Richards Boulevard Office Complex

Figure ES-3
Project Site



ES.2.2 Existing Land Uses and Land Use Designations

The existing site is located in a largely commercial/industrial area at 344 North 7th Street in Sacramento, Sacramento County, California (**Figure ES-4**). The property is located approximately 1.25 miles north of the State Capitol building and directly north of the Sacramento Railyards redevelopment area. Interstate 5 (I-5) is less than a mile (0.65 mile) west of the site and is directly accessible on Richards Boulevard. State Route 160 (SR 160) is similarly situated to the east (Figure ES-1). The location is also near the confluence of the American and Sacramento rivers, which are approximately 0.4 and 0.6 miles to the north and west of the existing site's perimeter, respectively.

The existing site covers approximately 17.3 acres on two parcels: APN No. 001-0210-010-0000 (17.3 acres) and APN No. 001-0210-054-0000 (0.05 acre). The parcels occupy the entire block between Richards Boulevard on the north, North B Street to the south, North 7th Street on the east, and commercial and vacant uses on the west.

As of December 2018, the site continues to be in use for the State Printing Plant. Land uses surrounding the existing site are primarily commercial or industrial, although some existing residences, and State and local offices are located nearby (Figure 2-4). A Sacramento Regional Transit (SacRT) Light Rail Station lies directly across from the printing plant to the north on the opposite side of Richards Boulevard. The station was opened in 2012 and currently links Richards Boulevard to the city center via tracks that run down North 7th Street.

The California Office of State Publishing (OSP) portion of the existing site includes the State Printing Plant, a textbook warehouse, associated parking and loading areas, a railroad spur, and a water pump. Access is available from both Richards Boulevard and North 7th Street. An approximately 6-foot latticed chain link fence, topped with barbed wire, separates the OSP and FMD facilities.

ES.2.3 Office Building Elements

This project will include the design and construction of a new office complex on the 17-acre State-owned site located between Richards Blvd and North 7th Street. The project includes up to 1.375 million gross square feet (GSF) of office space. The complex would provide up to 1.225 million GSF of workspace (approximately 920,000 net usable square feet) and up to 150,000 GSF of amenity space. Amenities could include lobbies, cafeteria(s), fitness center, an auditorium, up to 15,000 sf of retail space, training and conference rooms, daycare (up to 15,000 sf of space), and up to 5,000 sf of bike storage (for approximately 500 bikes). The work station and office sizes would be based on DGS' Recommended State Administrative Manual standards for workstations and offices by job category.

ES.2.4 Height and Massing

DGS anticipates that the office complex would include multiple office buildings, including three mid-rise buildings and one high-rise building. Heights may vary but the tallest structure would be up to 29 stories and no more than 418 feet tall. A parking garage may also be constructed onsite.



SOURCE: USDA, 2016; Sacramento County, 2008; HGA, 2018; ESA, 2019

Richards Boulevard Office Complex

Figure 2-4
Existing Land Uses

ES.2.5 Staff Relocation

It is anticipated that the up to 6,000 staff occupying the new buildings would be relocated from 28 different locations throughout Sacramento and include staff from the California Business, Consumer Services, and Housing Agency and Government Operations Agency.

ES.2.6 Landscaping and Lighting

The project would construct sidewalk, curb, and gutters along Richards Boulevard and North 7th Street during project construction within the boundaries of the project site. Street trees may also be planted along the project's frontage, as appropriate.

Safety lighting would be installed on and around the project site, particularly along pedestrian walkways. Any street lights that need to be removed for construction would be replaced. Exterior lighting would use the lowest possible wattage and energy-efficient luminaire for each application. In addition, exterior light fixtures would be shielded and directed down to preserve the night sky, and directed away from adjacent residential buildings. The new office complex would achieve at least LEED Silver certification. Implementing a lighting plan that reduces both the generation of exterior light and the potential for light trespass to affect off-site areas would support meeting or exceeding the LEED Silver rating.

ES.2.7 Transportation, Transit, and Parking

Transportation/Access

At least two points of primary vehicular access to the site will be available—one would be located at the northwest corner of the site along Richards Boulevard and the other would be mid-block along North 7th Street. Secondary and/or emergency vehicle access could be provided at additional locations along Richards Boulevard or North 7th Street or at North B Street.

The project site may include a pedestrian/bicycle path traversing west to east through the center of the site. DGS does not intend to provide a public motor vehicle right-of-way through the site.

Transit

The project site is located directly across from the Sacramento Regional Transit Township 9 light rail station and there are also several bus stops for several different routes on the same block as the project site.

Parking

The project would include up to 1,420 parking spaces, which is approximately one parking space for every 1,000 square feet. Approximately 1,000 parking spaces would be provided within a garage. The remaining parking spaces would be located in a surface parking lot. Electric vehicle charging stations will be available.

ES.2.8 Construction Schedule

Project construction is anticipated to begin as early as March 2020. Completion of construction and tenant occupancy is anticipated sometime in 2024. The proposed phasing of demolition and construction is as follows:

- site preparation,
- grading,
- excavation/shoring,
- utilities installation,
- building construction,
- architectural coating, and
- paving and landscaping.

The construction labor force would fluctuate depending on the phase of work. Building construction would range from approximately 20 workers during initial phases and up to approximately 700 workers during the peak of construction.

ES.3 Areas of Known Controversy

The notice of preparation (NOP) for the RBOC project was distributed on December 14, 2018 to responsible and trustee agencies and organizations, as well as parties and individuals who may have an interest in the project. The NOP and comments on the NOP are included in this EIR in Appendix A. The following are the key issues and concerns provided through the NOP comments:

- Potential habitat for nesting birds and birds of prey occurs within the project area. The EIR should disclose all potential activities which may impact nesting birds in the vicinity of the project site, including those birds which may nest in trees, underground, or in piles of debris resulting from prior demolition activities, and should include relevant mitigation to reduce potential impacts to nesting birds.
- Plans, regulations, analyses, and permits relevant to protecting the quality of surface and groundwater within the State of California and applicable to the proposed project should be considered within the scope of the EIR.
- Traffic studies should be included within the EIR to identify potential negative impacts to increased traffic resulting from the proposed project at the intersection of Richards Boulevard and North 7th Street. These studies should consider current and project movement of pedestrians, vehicles, and Sacramento Regional Transit District (SACRTD) light rail operations through the intersection. The EIR should also address relevant mitigation which may be required to reduce potential traffic impacts, depending on the results of these studies.

- The proposed project could potentially contribute to substantial traffic congestion along Interstate 5 (I-5) and State Route 160 (SR 160). Potential impacts to these routes should be evaluated using a multi-modal transportation impact analysis and the most current available traffic volumes. This analysis should also consider vehicle miles traveled (VMT) generated by the proposed project and identify potential safety impacts for all modes of transportation. Mitigation proposed by the analysis should include Transportation Demand Management and Access Management strategies to promote multi-modal access and reduce VMT.
- Consideration should be given to the goals of the River District Specific Plan and River District Design Guidelines to develop streets and intersections at a scale attractive to pedestrians and bicyclists.
- The River District Specific Plan envisions multiple street extensions through the proposed project site, including one north-south extension of North 6th Street and two east-west extensions of Bannon Street and North C Street.
- The EIR should consider the adequacy of the infrastructure related to utilities, infrastructure, and energy to serve the project area under future buildout of the River District, and how the project design will affect the ability of the City of Sacramento to provide services to the area.
- Existing infrastructure by which the Sacramento Municipal Utility District (SMUD) provides electricity to the project area should be included in the Project Description of the EIR, and environmental analysis related to utilities and infrastructure should also address the electrical service requirements of the RBOC project. The analysis should also consider areas of interest and proposed or in-progress utilities infrastructure within the project area which may contribute to cumulative impacts to utilities service and delivery.

These issues are further addressed within the relevant environmental analyses of this EIR, in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures.

ES.4 Summary of Impacts

Pursuant to CEQA (Public Resources Code [PRC] Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Section 15000, et seq.), this EIR has been prepared to analyze potential environmental effects which may result from implementation of the RBOC project and to inform the public and relevant agencies about potential environmental consequences of the project. As the lead agency for the project, DGS is responsible for ensuring that the requirements of CEQA have been met prior to approval of the project and that the EIR adequately considers the impacts of the RBOC.

Table ES-1, Summary of Impacts and Mitigation Measures, presented at the end of the Executive Summary, lists the environmental impacts resulting from the proposed project, in addition to recommended mitigation measures and the significance of those impacts preceding and following implementation of suggested mitigation.

ES.4.1 Effects Not Found to be Significant

Effects which are determined not to be significant are not required to be discussed in detail within the scope of an EIR (PRC Section 21100, State CEQA Guidelines Section 15128). Rather, the lead agency may provide a brief rationale for the determination of non-significance for relevant effects. Following review of the proposed project and in consideration of the physical characteristics of the project site, DGS determined that the following topics would not result in significant environmental impacts and therefore would not require mitigation or further consideration within the EIR: Agriculture and Forestry Resources; Aesthetics, Light, and Glare; Geology, Soils, and Seismicity; and Hazards and Hazardous Materials. Statements briefly discussing the reasons for these determinations are provided in Section 1.4, “Public Review Process.”

ES.4.2 Environmental Impacts and Mitigation

Under CEQA, potential environmental effects are considered “significant” when they result in a substantial or potentially substantial “adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”¹ Under PRC Section 21002.1, lead agencies are required to mitigate or avoid both direct and indirect significant environmental impacts resulting from projects whenever feasible.

Implementation of the RBOC project would result in significant or potentially significant impacts to some of the resources and topics analyzed in Sections 3.1 through 3.12 of this EIR. These sections of the EIR also propose mitigation measures, actions and strategies by which the environmental effects of those impacts could be avoided or mitigated to less-than-significant levels. These impacts and potential mitigation measures are summarized at the end of this section in Table ES-1. The following topic areas are considered within the scope of this EIR: Air Quality, Biological Resources, Cultural Resources, Energy, Greenhouse Gas Emissions and Climate Change, Hydrology and Water Quality, Land Use and Planning, Noise and Vibration, Population and Housing, Public Services, Transportation and Circulation, and Utilities and Infrastructure.

ES.4.3 Cumulative Impacts

In addition to discussing project-specific impacts, this EIR also considers cumulative impacts resulting from the proposed project, or impacts of the proposed project as well as the effects of broader growth throughout the Sacramento area and region. Per Section 15065(a)(3) of State CEQA Guidelines, environmental effects are “cumulatively considerable” when the incremental effects of the individual project are significant when considered in conjunction with the effects of past, current, and future projects which are likely to occur. Cumulative impacts associated with the RBOC project are also summarized in Table ES-1.

¹ California Public Resources Code, Division 13, *California Environmental Quality Act Guidelines*, Section 15382.

ES.4.4 Significant and Unavoidable Impacts

In some cases, significant environmental effects resulting from a project cannot be avoided or reduced to less-than-significant levels, even following application of feasible mitigation measures. These impacts are considered significant and unavoidable. Implementation of the proposed RBOC project results in multiple significant and unavoidable impacts for both project-specific and cumulative environmental effects, which are listed below.

Project-Specific Impacts

Air Quality

Impact 3.1-2: Implementation of the project could result in a net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Transportation and Circulation

Impact 3.11-1: Implementation of the project could worsen conditions at intersections in the City of Sacramento.

Impact 3.11-2: Implementation of the project could worsen conditions on freeway facilities maintained by Caltrans.

Impact 3.11-4: Implementation of the project could adversely affect public transit operations or fail to adequately provide access to transit.

Impact 3.11-5: Implementation of the project could adversely affect existing or planned bicycle facilities or fail to provide for access by bicycle.

Impact 3.11-6: Implementation of the project could adversely affect existing or planned pedestrian facilities or fail to provide for access for pedestrians.

Cumulative Impacts

Air Quality

Impact 3.1-4: The project, in conjunction with other planned projects, could cumulatively impact a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Transportation and Circulation

Impact 3.11-8: Implementation of the project, in combination with other development, could contribute to cumulatively worsened conditions at intersections in the City of Sacramento.

Impact 3.11-9: Implementation of the project, in combination with other development, could contribute to cumulatively worsened conditions on freeway facilities maintained by Caltrans.

Impact 3.11-11: Implementation of the project, in combination with other development, could adversely affect public transit operations or fail to adequately provide access to transit under cumulative conditions.

Impact 3.11-12: Implementation of the project could adversely affect existing or planned bicycle facilities or fail to provide for access by bicycle under cumulatively conditions.

Impact 3.11-13: Implementation of the project could adversely affect existing or planned pedestrian facilities or fail to provide for access for pedestrians under cumulative conditions.

Utilities and Infrastructure

Impact 3.12-9: Implementation of the project, in combination with other development, could contribute to cumulative impacts to water supplies available to the City's service area during normal, dry, and multiple dry years.

ES.5 Alternatives to the Proposed Project

The following alternatives to the proposed project were considered within the scope of Draft EIR:

- **Alternative 1: No Project Alternative** assumes that the project site will remain a vacant fenced lot, with no structures or other facilities, other than a small pump house on the northwest corner of the site. The project site would remain as it is left after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete.
- **Alternative 2: Reduced Employees Alternative** assumes that the project would retain the same uses but the site would be less intensely developed. In this alternative, it is assumed that only the California Department of Tax and Fee Administration (CDTFA) would be relocated to the project site, with accommodations for up to 2,400 staff onsite.
- **Alternative 3: More Onsite Parking Alternative** assumes that the site design will include enough additional parking to reduce the mode share of ride hailing trips to zero.
- **Alternative 4: River District Specific Plan Street Network Alternative** assumes that the site design will include two east-west extensions across the project site to accommodate extended Bannon Street and North C Street, and one north-south extension of North 6th Street through the project site.

These alternatives, including the environmentally superior alternative and a comparison of the project-specific environmental impacts between the alternatives and the proposed project, are further addressed in Chapter 5, Project Alternatives.

ES.5.1 Environmentally Superior Alternative

Because the No Project Alternative would avoid all adverse impacts resulting from construction and operation of the RBOC project analyzed in Chapter 3, it is the environmentally superior alternative. However, the No Project Alternative would not meet the project objectives. When the environmentally superior alternative is the No Project Alternative, the State CEQA Guidelines

(Section 15126.6[e][2]) requires selection of an environmentally superior alternative from among the other action alternatives evaluated. As illustrated in Table 5-1, below, Alternative 2, Reduced Employees, would be environmentally superior action alternative because this alternative would significantly reduce the transportation-related impacts, avoiding several significant and unavoidable impacts. The reduced degree of construction and reduced building size would also reduce the employee population and reduce the emissions of criteria air pollutants and GHGs generated by the construction and operation of the project.

ES.6 Summary Table

Table ES-1, Summary of Impacts and Mitigation Measures, compiles the environmental impacts and associated mitigation identified within the analyses discussed in Section 3.0, “Introduction to the Analysis.” The table arranges this summary into four columns:

- Environmental impacts (“Impacts”)
- Level of significance before application of mitigation (“Significance Before Mitigation”)
- Feasible mitigation measures (“Mitigation Measures”)
- Level of significance following implementation of relevant mitigation measures (“Significance After Mitigation”)

If any impact is determined to be “potentially significant” or “significant,” feasible mitigation measures are identified to reduce or compensate for the environmental effects of the proposed project, where appropriate. Mitigation measures are developed following consideration of relevant federal, State, and local laws, regulations, guidelines, and policies. Compliance with these regulations is assumed; as such, actions required by these regulations which may reduce project impacts are not considered as mitigation within this EIR. These actions and the laws, regulations, and policies from which they are derived are identified and addressed in the Regulatory Setting of each technical section, as well is in the analysis of pertinent environmental impacts.

As the RBOC project would be implemented on State-owned property under DGS, the project is not subject to local plans, policies, and zoning regulations; however, local plans, policies, and regulations relevant to the project are included in the Regulatory Settings for reference. Further description of how the environmental analyses are organized and conducted is presented in Chapter 3.0, Introduction to the Analysis.

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
3.1 Air Quality			
Impact 3.1-1: Implementation of the project could conflict with or obstruct implementation of an applicable air quality plan.	PS	<p>Mitigation Measure 3.1-1:</p> <p>The project applicant shall implement the emission reduction strategies contained in the RBOC project AQMP (see Appendix D2), or other strategies which achieve equivalent reductions, as approved by SMAQMD, in order to achieve a minimum 82.7 percent reduction in NO_x. Endorsement of the AQMP by SMAQMD shall be obtained prior to issuance of building permits. Documentation confirming implementation of the AQMP shall be provided to SMAQMD prior to issuance of occupancy permits.</p>	LTS
Impact 3.1-2: Implementation of the project would result in a net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	PS	<p>Mitigation Measure 3.1-2(a):</p> <p>DGS shall require all construction plans to include the following required SMAQMD Basic Construction Emission Control Practices:</p> <ul style="list-style-type: none"> • Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads. • Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways shall be covered. • Use wet power vacuum street sweepers to remove any visible track-out mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. • Limit vehicle speeds on unpaved roads to 15 miles per hour (mph). • Pave all roadways, driveways, sidewalks, parking lots as soon as possible. In addition, building pads shall be laid immediately after grading unless seeding or soil binders are used. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (as required by the state airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site. • Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment shall be checked by a certified mechanic and determine to be running in proper condition before it is operated. <p>Mitigation Measure 3.1-2(b):</p> <p>DGS shall require all construction plans to include the following SMAQMD Enhanced Exhaust Control Practices:</p> <ul style="list-style-type: none"> • Provide a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the project to DGS and SMAQMD. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The construction contractor shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. This information shall be submitted at least four business days prior to the use of subject heavy-duty off-road equipment. The inventory shall be updated and submitted monthly throughout the duration of construction, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. 	SU

**TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.1-2 (cont.)		<ul style="list-style-type: none"> • Provide a plan in conjunction with the equipment inventory, approved by SMAQMD, demonstrating that the heavy-duty (50 horsepower or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. • Emissions from all off-road diesel powered equipment used on the project site shall not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and DGS and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this measure shall supersede other SMAQMD or state rules or regulations. • If at the time of granting of each building permit, SMAQMD has adopted a more restrictive regulation applicable to construction emissions, DGS may completely or partially replace this mitigation with compliance with the new regulation. Consultation with SMAQMD prior to construction will be necessary to make this determination. <p>Mitigation Measure 3.1-2(c): DGS shall require grading or improvement plans to include the following SMAQMD Fugitive Dust Control Practices:</p> <ul style="list-style-type: none"> • Water exposed soil with adequate frequency for continued moist soil. • Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 mph. • Install wind breaks (e.g., solid fencing) on windward side(s) of construction areas. • Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site. • Treat site accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads. • Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the District shall also be visible to ensure compliance. 	

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.1-2 (cont.)		<p>Mitigation Measure 3.1-2(d): Prior to the issuance of a building permit, developers shall quantify the construction emissions of NO_x. DGS shall require all construction plans to include the following SMAQMD off-site fee mitigation:</p> <ul style="list-style-type: none"> The project applicant shall pay into SMAQMD's construction mitigation fund to offset construction-generated emissions of NO_x that exceed SMAQMD's daily emission threshold of 85 ppd. The project applicants shall coordinate with SMAQMD for payment of fees into the Heavy-Duty Low-Emission Vehicle Program designed to reduce construction related emissions within the region. Fees shall be paid based upon the applicable current SMAQMD Fee. The applicants shall keep track of actual equipment use and their NO_x emissions so that mitigation fees can be adjusted accordingly for payment to SMAQMD. 	
Impact 3.1-3: The project could expose sensitive receptors to substantial pollutant concentrations.	PS	<p>Mitigation Measure 3.1-3(a): Implement Mitigation Measure 3.1-2(b).</p> <p>Mitigation Measure 3.1-3(b): The contractor shall utilize one of the following strategies to reduce the cancer risk related to TAC construction emissions to no greater than 10 people in one million.</p> <ul style="list-style-type: none"> Use Tier 4 engines on all construction equipment; or Use Tier 3 engines equipped with Level 3 Diesel Particulate Filters (DPF) on all construction equipment; or Use a combination of Tier 4 engines and Tier 3 engines equipped with Level 3 DPF on all construction equipment; or Use a combination of technological solutions to ensure that construction-related emissions do not exceed a cancer risk of 10 people in one million. 	LTS
Impact 3.1-4: The project, in conjunction with other planned projects, could cumulatively impact a net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard.	PS	<p>Mitigation Measure 3.1-4: Implement Mitigation Measures 3.1-2(a), (b), (c), and (d).</p>	SU
Impact 3.1-5: The project, in conjunction with other planned projects, could cumulatively expose sensitive receptors to substantial pollutant concentrations.	LTS	None required.	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
3.2 Biological Resources			
Impact 3.2-1: Implementation of the project could impact valley elderberry longhorn beetle.	PS	<p>Mitigation Measure 3.2-1:</p> <ul style="list-style-type: none"> a) Activities that may damage or kill an elderberry shrub (e.g. trenching, paving, etc.) will have an avoidance area of at least 20 feet from the drip-line of the elderberry shrubs. If activities must occur within 20 feet, the project applicant shall consult with the USFWS to determine potential effects and mitigation requirements. b) All areas within 165 feet of the elderberry shrubs to be avoided during construction activities will be fenced using high visibility construction fencing, followed by silt fencing, as close to construction limits as feasible. The silt fencing shall be installed to prevent migration of soils into the protected zone around the elderberry shrubs. c) A qualified biologist will provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for non-compliance. d) During work within 165 feet of the elderberry shrubs, a qualified biologist will monitor the work area on a weekly basis to ensure that all avoidance and minimization measures are implemented. Time spent onsite will be sufficient to verify that no damage to elderberry shrubs has occurred, to ensure that protective fencing is in place and in good working order, and to coordinate any concerns with the client/contractor. e) As much as feasible, all activities that occur within 165 feet of an elderberry shrub will be conducted outside the flight season of the VELB (March – July). f) Herbicides will not be used within the drip-line of any elderberry shrubs. Insecticides will not be used within 98 feet of an elderberry shrub. All chemicals will be applied using a backpack sprayer or similar direct application method. g) Mechanical weed removal within the drip-line of the shrub will be limited to the season when adults are not active (August – February) and will avoid damaging the elderberry. 	LTS
Impact 3.2-2: Implementation of the project could result in impacts to nesting migratory birds and birds of prey.	PS	<p>Mitigation Measure 3.2-2:</p> <ul style="list-style-type: none"> a. Project construction shall occur outside of the nesting season to the extent feasible. If project construction begins during the nesting season (Table 3.2-2), a qualified biologist shall conduct a preconstruction survey for active nests on and adjacent to the project site. The pre-construction survey shall be conducted within 14 days prior to commencement of ground disturbing activities. If no active nests are found during the pre-construction survey, no additional mitigation measures are required. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, an additional pre-construction survey is required. Additional survey requirements for Swainson's hawk and burrowing owl are provided below. 	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation										
Impact 3.2-2 (cont.)		<p>TABLE 3.2-2 NESTING SEASON FOR SPECIAL-STATUS AND COMMON NESTING BIRDS</p> <table border="1"> <thead> <tr> <th style="text-align: left;">Species</th> <th style="text-align: left;">Nesting Season</th> </tr> </thead> <tbody> <tr> <td>White-tailed kite</td> <td>February 1 to September 30</td> </tr> <tr> <td>Swainson's hawk</td> <td>March 1 to September 15</td> </tr> <tr> <td>Burrowing owl</td> <td>Year-round: February 1 to August 31 (nesting); September 1 to January 31 (wintering)</td> </tr> <tr> <td>Common nesting birds (raptors, passerines, herons and egrets)</td> <td>February 1 to August 31</td> </tr> </tbody> </table>	Species	Nesting Season	White-tailed kite	February 1 to September 30	Swainson's hawk	March 1 to September 15	Burrowing owl	Year-round: February 1 to August 31 (nesting); September 1 to January 31 (wintering)	Common nesting birds (raptors, passerines, herons and egrets)	February 1 to August 31	
Species	Nesting Season												
White-tailed kite	February 1 to September 30												
Swainson's hawk	March 1 to September 15												
Burrowing owl	Year-round: February 1 to August 31 (nesting); September 1 to January 31 (wintering)												
Common nesting birds (raptors, passerines, herons and egrets)	February 1 to August 31												
		<p>b. If an active nest is located on or adjacent to the construction footprint, an appropriate buffer zone shall be established around the nest, as determined by the qualified biologist. The biologist shall mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or until the young have successfully fledged or the nest is determined to no longer be active. Buffer zones are typically 50-100 feet for migratory bird nests and 250-500 feet for bird of prey nests (excluding Swainson's hawk). Buffer size will be determined by the qualified biologist based on the species of bird, the location of the nest relative to the project, project activities during the time the nest is active, and other project-specific conditions.</p> <p>c. If establishing the typical buffer zone is impractical, the qualified biologist may reduce the buffer depending on the species and daily monitoring would be required to ensure that the nest is not disturbed and no forced fledging occurs. Daily monitoring shall occur until the qualified biologist determines that the nest is no longer active.</p> <p>Additional Measures for Burrowing Owl</p> <p>d. Prior to project initiation, a qualified biologist will conduct preconstruction Take Avoidance Surveys in accordance with Appendix D of the CDFW <i>Staff Report on Burrowing Owl Mitigation</i>. One survey will be conducted no less than 14 days prior to initiating ground disturbance activities. A second survey will be conducted within 24 hours prior to ground disturbance. If no burrowing owls are identified on or in the vicinity of the project site, no additional mitigation measures are required.</p> <p>e. If burrowing owls are discovered on the project site or in the vicinity of the project site, a qualified biologist shall establish a fenced exclusion zone around each occupied burrow. No construction activities shall be allowed within the exclusion buffer zone until such time that the burrows are determined to be unoccupied by a qualified biologist. The buffer zones shall be a minimum of 160 feet from an occupied burrow during the non-breeding season (September 1 through January 31), and a minimum of 500 feet from an occupied burrow during the breeding season (February 1 through August 31). If work will occur within the buffer zones, construction will be monitored daily by a qualified biologist to ensure no disturbance occurs to the burrowing owl.</p> <p>f. A biologist monitor will conduct weekly monitoring of the burrowing owl during construction activities.</p> <p>g. If complete avoidance is not feasible, the CDFW shall be consulted regarding the implementation of avoidance or passive relocation methods. All activities that will result in a disturbance to burrows shall be approved by the CDFW prior to implementation.</p>											

**TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.2-2 (cont.)		<p>Additional Measures for Swainson's Hawk</p> <ul style="list-style-type: none"> h. If construction activities are anticipated to commence during the Swainson's hawk nesting season (March 1 to September 15), a qualified biologist shall conduct a minimum of two pre-construction surveys during the recommended survey periods in accordance with the <i>Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley</i>. All potential nest trees within 0.25 mile of the project footprint shall be visually examined for potential Swainson's hawk nests, as accessible. If no active Swainson's hawk nests are identified on or within 0.25-mile of the project site, no additional mitigation measures are required. i. If an active Swainson's hawk nest is found within 0.25 mile of the project site, the following measures will be implemented to avoid and minimize impacts to the nest: <ul style="list-style-type: none"> a. A Worker Awareness Training Program will be conducted prior to the start of construction; b. A no-disturbance buffer zone will be established and work will be scheduled to avoid impacting the nest during critical periods. To the extent feasible, no work will occur within 500 feet of the nest while it is in active use. If work will occur within 500 feet of the nest, then construction will be monitored daily by a qualified biologist to ensure no disturbance occurs to the nest; c. A biological monitor will conduct weekly monitoring of the nest during construction activities; and d. The biologist may halt construction activities if s/he determines that the construction activities are disturbing the nest. CDFW will be consulted prior to re-initiation of activities that maybe disturb the nest. 	
Impact 3.2-3: Implementation of the Project, in combination with other development in the Central Sacramento Valley, would contribute to cumulative loss of nesting habitat for burrowing owl.	LTS	None required.	LTS
3.3 Cultural Resources			
Impact 3.3-1: Implementation of the project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	PS	<p>Mitigation Measure 3.3-1(a):</p> <p>If evidence of any subsurface archaeological features or deposits are discovered during construction-related earth-moving activities (e.g., lithic scatters, midden soils, historic era farming or construction materials), all ground-disturbing activity in the area of the discovery shall be halted until a qualified archaeologist and Native American representative, as appropriate, can assess the significance of the find. If after evaluation, a resource is considered significant, or is considered a tribal cultural resource, all preservation options shall be considered as required by Public Resources Code 21084.3, including possible capping, data recovery, mapping, or avoidance of the resource. If artifacts are recovered from significant prehistoric archaeological resources or tribal cultural resources, the first option shall be to transfer the artifacts to an appropriate tribal representative. If possible, accommodations shall be made to re-enter the artifacts at the project site. Only if no other options are available will recovered prehistoric archaeological material be housed at a qualified curation facility. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the public.</p>	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.3-1 (cont.)		<p>Mitigation Measure 3.3-1(b):</p> <p>A cultural resources awareness training program will be provided to all construction personnel active on the project site during earth moving activities. The first training will be provided prior to the initiation of ground disturbing activities. The training will be developed and conducted in coordination with a qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists. The program will include relevant information regarding sensitive cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered.</p> <p>Where ground disturbing activities occur in native soils, or there is no evidence of extensive past ground disturbances, a qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists will monitor ground- disturbing activities, as needed. If evidence of any historic-era subsurface archaeological features or deposits are discovered during construction-related earth-moving activities (e.g., ceramic shard, trash scatters), all ground-disturbing activity in the area of the discovery shall be halted until a qualified archaeologist can access the significance of the find. If after evaluation, a resource is considered significant, all preservation options shall be considered as required by CEQA, including possible data recovery, mapping, capping, or avoidance of the resource. If artifacts are recovered from significant historic archaeological resources, they shall be housed at a qualified curation facility. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the public.</p>	
Impact 3.3-2: Implementation of the project could cause a substantial adverse change in the significance of tribal cultural resources, as defined in PRC section 21074(a).	PS	<p>Mitigation Measure 3.3-2:</p> <p>Implement Mitigation Measures 3.3-1(a) and 3.3-1(b).</p>	LTS
Impact 3.3-3: Implementation of the project could disturb any human remains, including those interred outside of formal cemeteries.	PS	<p>Mitigation Measure 3.3-3: Inadvertent Discovery of Human Remains:</p> <p>Consistent with the California Health and Safety Code and the California Native American Historical, Cultural, and Sacred Sites Act, if suspected human remains are found during project construction, all work shall be halted in the immediate area, and the County coroner shall be notified to determine the nature of the remains. The coroner shall examine all discoveries of suspected human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The NAHC shall then assign a Most Likely Descendent (MLD) to serve as the main point of Native American contact and consultation. Following the coroner's findings, the MLD, in consultation with the State, shall determine the ultimate treatment and disposition of the remains.</p>	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.3-4: Implementation of the project, in combination with other development, would contribute to cumulative adverse impacts on archaeological resources.	PS	Mitigation Measure 3.3-4: Implement Mitigation Measure 3.3-1(a) and Mitigation Measure 3.3-1(b).	LTS
Impact 3.3-5: Implementation of the project, in combination with other development, would contribute to cumulative adverse impacts on tribal cultural resources.	PS	Mitigation Measure 3.3-5: Implement Mitigation Measure 3.3-1(a) and Mitigation Measure 3.3-1(b).	LTS
Impact 3.3-6: Implementation of the project, in combination with other development, would contribute to cumulative adverse impacts on human remains.	PS	Mitigation Measure 3.3-6: Implement Mitigation Measure 3.3-3.	LTS
3.4 Energy			
Impact 3.4-1: The RBOC could result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	LTS	None required.	LTS
Impact 3.4-2: The RBOC could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LTS	None required.	LTS

**TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.4-3: Implementation of the project, in combination with other development, could contribute to wasteful, inefficient, or unnecessary consumption of energy resources.	LTS	None required.	LTS
Impact 3.4-4: Implementation of the project, in combination with other development, could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	LTS	None required.	LTS
3.5 Greenhouse Gas Emissions and Climate Change			
Impact 3.5-1: The project could generate greenhouse gas emissions, either directly or indirectly, that may have significant impact on the environment.	LTS	None required.	LTS
Impact 3.5-2: The project could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	LTS	None required.	LTS
3.6 Hydrology and Water Quality			
Impact 3.6-1: Implementation of the project could violate water quality standards or waste discharge requirements and degrade water quality.	LTS	None required.	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.6-2: Implementation of the project could substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	LTS	None required.	LTS
Impact 3.6-3: Implementation of the project could result in erosion, sedimentation, and flood flow impacts from changes in site drainage patterns.	LTS	None required.	LTS
Impact 3.6-4: Implementation of the project could conflict with or obstruct implementation of water quality control plans or sustainable groundwater management plans.	LTS	None required.	LTS
Impact 3.6-5: Implementation of the project, in combination with other development, would not violate water quality standards or waste discharge requirements and degrade water quality.	LTS	None required.	LTS
Impact 3.6-6: Implementation of the project, in combination with other development, could substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	LTS	None required.	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.6-7: Implementation of the Project, in combination with other development, could result in erosion and sedimentation impacts from changes in site drainage patterns.	LTS	None required.	LTS
Impact 3.6-8: Implementation of the Project, in combination with other development, could conflict with or obstruct implementation of water quality control plans or sustainable groundwater management plans.	LTS	None required.	LTS
3.7 Land Use and Planning			
Impact 3.7-1: Implementation of the project would not physically divide an established community.	LTS	None required.	LTS
Impact 3.7-2: Implementation of the project would not 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.	LTS	None required.	LTS
Impact 3.7-3: Implementation of the project, in combination with other development, would not contribute to cumulative impacts in relation to physically dividing an established community.	LTS	None required.	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.7-4: Implementation of the project, in combination with other development, would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the General Plan and zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	LTS	None required.	LTS
3.8 Noise and Vibration			
Impact 3.8-1: Construction of the project could generate noise that would conflict with City of Sacramento's noise standards.	SU	None available.	SU
Impact 3.8-2: Construction of the project would not result in a substantial temporary or periodic increase in ambient noise levels in the RBOC vicinity above levels existing without the RBOC.	LTS	None required.	LTS
Impact 3.8-3: Operation of project could increase local traffic that could result in a substantial permanent increase in ambient exterior noise levels in the project vicinity or conflict with the City of Sacramento noise standards.	LTS	None required.	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.8-4: Operation of the project could introduce new stationary noise sources that could conflict with the City of Sacramento noise standards.	LTS	None required.	LTS
Impact 3.8-5: The project could result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to RBOC operation.	LTS	None required.	LTS
Impact 3.8-6: Construction of the project could expose existing and/or planned buildings, and persons within, to vibration that could disturb people and damage buildings.	LTS	None required.	LTS
Impact 3.8-7: The project, in conjunction with other planned projects, could result in exposure of people to cumulative increases in construction noise levels.	LTS	None required.	LTS
Impact 3.8-8: The project, in conjunction with other planned projects, could contribute to cumulative construction that could expose existing and/or planned buildings, and persons within, to significant vibration.	LTS	None required.	LTS
Impact 3.8-9: The project, in conjunction with other planned projects, could contribute to cumulative increases in traffic noise levels.	LTS	None required.	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
3.9 Population and Housing			
Impact 3.9-1: Implementation of the project would not 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).	LTS	None required.	LTS
Impact 3.9-2: Development facilitated by the project, in conjunction with potential past, present, and future development in the surrounding region, would not result in substantial unplanned population, housing, or employment growth, or the displacement of existing residents or housing units on a regional level.	LTS	None required.	LTS
3.10 Public Services			
Impact 3.10-1: Implementation of the project could result in the provision of or need for increased demand for law enforcement resources.	LTS	None required.	LTS
Impact 3.10-2: Implementation of the project could result in the provision of or need for increased demand for fire protection resources.	LTS	None required.	LTS

**TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.10-3: Implementation of the project could result in the provision of or need for increased demand for public school services.	LTS	None required.	LTS
Impact 3.10-4: Implementation of the project could result in the provision of or need for increased demand for parks and recreational resources and facilities.	LTS	None required.	LTS
Impact 3.10-5: Implementation of the project, in conjunction with other development, could result in the provision of or need for increased demand for law enforcement resources.	LTS	None required.	LTS
Impact 3.10-6: Implementation of the project, in conjunction with other development, could result in the provision of or need for increased demand for fire protection resources.	LTS	None required.	LTS
Impact 3.10-7: Implementation of the project, in conjunction with other development, could result in the provision of or need for increased demand for public school services.	LTS	None required.	LTS
Impact 3.10-8: Implementation of the project, in conjunction with other development, could result in the provision of or need for increased demand for parks and recreational resources and facilities.	LTS	None required.	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
3.11 Transportation and Circulation			
<p>Impact 3.11-1: Implementation of the project could worsen conditions at intersections in the City of Sacramento.</p>	PS	<p>Mitigation Measure 3.11-1:</p> <ul style="list-style-type: none"> a) The project applicant/architect shall refine the project design to provide an optimal amount of parking that minimizes baseline vehicular trip generation. b) The project applicant shall investigate, and if feasible, implement strategies that increase employee telecommuting and workday start/end time flexibility. c) The project applicant shall consider the following site design modifications and Transportation Demand Management (TDM) strategies to: <ul style="list-style-type: none"> i. Increase the cost to drive alone and park onsite to at least \$150 per month. ii. Implement a fair value commuting program, where fees charged to SOV commuters (e.g., through parking pricing) are tied to DGS vehicle trip reduction targets and fee revenue is rebated to non-SOV commuters. iii. Incentivize use of carpool/vanpool modes through matching programs, preferred parking, and other incentives. iv. If feasible, increase monthly transit subsidy to \$100. d) Prior to building occupancy, the project applicant shall increase the capacity of the North 7th Street/North B Street intersection by widening and improving traffic signal phasing efficiency. e) The project applicant shall investigate, and if feasible, construct a new driveway prior to occupancy on North B Street that permits outbound right-turns only. f) The project applicant/architect shall refine the project design to widen the west side of North 7th Street and south side of Richards Boulevard along the project's frontage to create a new curb lane. g) Prior to building occupancy, the project applicant shall install traffic signals, if feasible, at the project driveways on North 7th Street and Richards Boulevard, with location/design to the satisfaction of the City of Sacramento who will own/operate the signals. 	SU
<p>Impact 3.11-2: Implementation of the Project could worsen conditions on freeway facilities maintained by Caltrans.</p>	PS	<p>Mitigation Measure 3.11-2: Implement Mitigation Measure 3.11-1.</p>	SU
<p>Impact 3.11-3: Implementation of the Project could substantially increase VMT per service population (total residents and employees) within the Sacramento Core Area.</p>	LTS	None required.	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
<p>Impact 3.11-4: Implementation of the project could adversely affect public transit operations or fail to adequately provide access to transit.</p>	PS	<p>Mitigation Measure 3.11-4:</p> <ul style="list-style-type: none"> a) Implement Mitigation Measure 3.11-1. b) Prior to building occupancy, the project applicant shall coordinate with SacRT to expand Green Line service (i.e., more cars, more frequent headways, extended hours of operation). c) Prior to building occupancy, the project applicant shall coordinate with SacRT to investigate the potential for modifying existing bus routes to improve service to the project site. d) Prior to building occupancy, the project applicant shall coordinate with other transit service providers to provide commute bus service to the project site. e) Prior to building occupancy, the project applicant shall develop and implement a shuttle service plan that transports employees between the project site and the planned new Blue Line Dos Rios station near 12th Street and Richards Boulevard. 	SU
<p>Impact 3.11-5: Implementation of the project could adversely affect existing or planned bicycle facilities or fail to provide for access by bicycle.</p>	PS	<p>Mitigation Measure 3.11-5:</p> <ul style="list-style-type: none"> a) Prior to building occupancy, the project applicant shall coordinate with the City of Sacramento to identify and implement a mutually acceptable set of bicycle network improvements along the project frontage. This may include the system described above, or could take the form of a series of one-way or two-way 'protected bike lanes' similar to what has recently been constructed in downtown. Other considerations involve bicycle/light rail, and bicycle/bus stop, and bicycle/signalized driveway interactions and design treatments. b) The project applicant/architect shall refine the project design to provide, if feasible from a design perspective, a bicycle facility along Bannon Street through the project site. 	SU
<p>Impact 3.11-6: Implementation of the project could adversely affect existing or planned pedestrian facilities or fail to provide for access for pedestrians.</p>	PS	<p>Mitigation Measure 3.11-6:</p> <p>The project applicant/architect shall refine the project design to provide, if feasible from a design perspective, a pedestrian connection along Bannon Street through the project site.</p>	SU
<p>Impact 3.11-7: The project could cause construction-related traffic impacts.</p>	PS	<p>Mitigation Measure 3.11-7:</p> <p>Before start of construction activities on the project site, the project applicant shall prepare a detailed Construction Traffic Management Plan that will be subject to review and approval by the City Department of Public Works, in consultation with affected transit providers, and local emergency service providers including the City of Sacramento Fire and Police departments. The plan shall ensure that acceptable operating conditions on local roadways are maintained. At a minimum, the plan shall include:</p> <ul style="list-style-type: none"> • The number of truck trips, time, and day of street closures • Time of day of arrival and departure of trucks • Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting • Provision of a truck circulation pattern 	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.11-7 (cont.)		<ul style="list-style-type: none"> • Identification of detour routes and signing plan for street/lane closures • Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas) • Maintain safe and efficient access routes for emergency vehicles and transit • Manual traffic control when necessary • Proper advance warning and posted signage concerning street closures • Provisions for pedestrian and bicycle safety <p>A copy of the construction traffic management plan shall be submitted to local emergency response agencies and transit providers, and these agencies shall be notified at least 30 days before the commencement of construction that would affect roadways.</p>	
<p>Impact 3.11-8: Implementation of the project, in combination with other development, could contribute to cumulatively worsened conditions at intersections in the City of Sacramento.</p>	PS	<p>Mitigation Measure 3.11-8:</p> <p>a) Implement Mitigation Measure 3.11-1 (portions thereof that are applicable under cumulative conditions).</p> <p>b) The project applicant/architect shall refine the project design to provide, if feasible from a design perspective, a vehicular connection of Bannon Street through the project site.</p>	SU
<p>Impact 3.11-9: Implementation of the project, in combination with other development, could contribute to cumulatively worsened conditions on freeway facilities maintained by Caltrans.</p>	PS	<p>Mitigation Measure 3.11-9:</p> <p>a) Implement Mitigation Measure 3.11-1 (portions thereof that are applicable under cumulative conditions).</p> <p>b) The ongoing I-5/Richards Boulevard Interchange Project Approval/Environmental Document studies (being led by the City of Sacramento, and in partnership with Caltrans) for an upgraded interchange should consider the travel demands of the project when analyzing traffic forecasts and preferred geometric improvements for the reconstructed interchange.</p>	SU
<p>Impact 3.11-10: Implementation of the project could substantially increase VMT per service population (total residents and employees) within the Sacramento Core Area under cumulative conditions.</p>	LTS	None required.	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.11-11: Implementation of the Project, in combination with other development, could adversely affect public transit operations or fail to adequately provide access to transit under cumulative conditions.	PS	Mitigation Measure 3.11-11: Implement Mitigation Measure 3.11-1 (portions thereof that are applicable under cumulative conditions).	SU
Impact 3.11-12: Implementation of the project could adversely affect existing or planned bicycle facilities or fail to provide for access by bicycle under cumulative conditions.	PS	Mitigation Measure 3.11-12: The project applicant/architect shall refine the project design to provide, if feasible from a design perspective, a bicycle facility along Bannon Street through the project site.	SU
Impact 3.11-13: Implementation of the project could adversely affect existing or planned pedestrian facilities or fail to provide for access for pedestrians under cumulative conditions.	PS	Mitigation Measure 3.11-13: The project applicant/architect shall refine the project design to provide, if feasible from a design perspective, a pedestrian connection along Bannon Street through the project site.	SU
Impact 3.11-14: The project, in combination with other development, could contribute to cumulatively considerable construction-related traffic impacts.	PS	Mitigation Measure 3.11-14: Implement Mitigation Measure 3.11-7 (Develop and Implement Construction Traffic Management Plan), and consider other planned construction activities in the area when developing the plan.	LTS
3.12 Utilities and Infrastructure			
Impact 3.12-1: Implementation of the project would have sufficient water supplies available to serve the project and reasonably foresee future development during normal, dry, and multiple dry years.	LTS	None required.	LTS

**TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
<p>Impact 3.12-2: Implementation of the project could require or result in the interruption of existing infrastructure, or in the relocation or construction of new or expanded infrastructure, the interruption, construction, or relocation of which could cause significant environmental effects.</p>	LTS	None required.	LTS
<p>Impact 3.12-3: Implementation of the project could require or result in the relocation or construction of new or expanded water conveyance infrastructure.</p>	PS	<p>Mitigation Measure 3.12-3: The water supply infrastructure must be able to accommodate an estimated water demand of 240 AFY and a fire flow requirement of up to 8,000 gallons per minute (gpm) for a four-hour duration, with an automatic fire sprinkler system flow demand of 300-500 gpm and associated standpipe system demand of 1,000 gpm.</p> <ul style="list-style-type: none"> a) Prior to approval for connection to the City of Sacramento’s water supply infrastructure, DGS shall conduct a water study to be submitted to the Department of Utilities, to ensure the condition and capacity of the City of Sacramento’s water supply infrastructure relative to the project site and ensure that infrastructure is sufficient to serve the needs to of the project. However, relative construction information pertaining to the two existing water mains at the project site should be discussed with the Department of Utilities prior to implementation of this study. b) Prior to the issuance of a building occupancy permit, the California State Fire Marshall shall test fire flow to ensure that the water supply infrastructure serving the RBOC meets fire flow standards. c) If water infrastructure is found insufficient to meet the needs of the project, the water study shall identify improvements necessary to meet the project’s demands and fire flow requirements. 	LTS
<p>Impact 3.12-4: Implementation of the project could result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.</p>	LTS	None required.	LTS

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.12-5: Implementation of the project could require or result in the construction of new or expanded storm water drainage facilities.	LTS	None required.	LTS
Impact 3.12-6: Implementation of the project could require or result in the construction of new or expanded energy transmission or distribution facilities that could result in significant environmental effects.	LTS	None required.	LTS
Impact 3.12-7: Implementation of the project could require or result in the construction of new or expanded telecommunications facilities.	LTS	None required.	LTS
Impact 3.12-8: Implementation of the project could generate solid waste in excess of State or local standards or the capacity of local infrastructure, or could otherwise impair the attainment of solid waste reduction goals.	LTS	None required.	LTS
Impact 3.12-9: Implementation of the project, in combination with other development, could contribute to cumulative impacts to water supplies available to the City's service area during normal, dry, and multiple dry years.	PS	<p>Mitigation Measure 3.12-9:</p> <p>In order to ensure that the City has adequate water supply available to meet cumulative demands under buildout of the 2035 General Plan, the City shall implement, to the extent required to secure adequate supply, one or more of the following measures:</p> <p>a) In order to comply with the Green Building Initiative under Executive Order B-18-12, which, among other things, requires urban water agencies to reduce statewide per capita water consumption 20 percent by 2020, Chapter 9 of the City of Sacramento 2015 UWMP suggests implementation of key water conservation measures, or Demand Management Measures (DMMs). Six of these DMMs, which may also be considered Best Management Practices (BMPs) pertain to retail agencies, while three measures apply to wholesale agencies, including:</p>	SU

**TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.12-9 (cont.)		<ul style="list-style-type: none"> i. Water Waste Prevention Ordinances; ii. Metering; iii. Conservation Pricing; iv. Public Education and Outreach; v. Programs to Assess and Manage Distribution System Real Loss; vi. Water Conservation Program Coordination and Staffing Support; vii. Residential High Efficiency Toilet Rebate; viii. Residential High Efficiency Washing Machine Rebate; ix. Residential River-Friendly Landscape Rebate; x. Residential Water Wise House Calls; xi. Commercial Water Wise Business Calls; xii. Commercial Rebates. <p>b) Implement Additional Groundwater Pumping</p> <p>As discussed above, additional groundwater pumping facilities could be constructed to increase groundwater production capacity when American River diversions to FWTP when river flows fall below Hodge flow levels. Under Hodge flow conditions, even full capacity pumping of current groundwater facilities would not provide sufficient water supply to accommodate full buildout under the 2035 General Plan. However, the City could construct additional wells to provide additional groundwater production capacity.</p> <p>Implementation of this mitigation measure would require environmental analysis to determine the potential for substantial adverse environmental impacts resulting from the construction or operation of these new wells. These impacts could include:</p> <ul style="list-style-type: none"> i. Construction-related impacts to soil, such as topsoil erosion; ii. Construction-related air emissions; iii. Disturbance of sub-surface cultural artifacts; iv. Impacts to hydrology and natural drainage; v. Noise impacts resulting from construction and operation of the wells; vi. Visual impacts and effects of light trespass; vii. Conversion of existing agricultural lands or resources; viii. Drawdown of groundwater in the North American Subbasin; ix. Exposure to hazardous materials resulting from construction and operational activities. <p>In addition to these significant environmental impacts, groundwater pumping activities could also contribute to drawdown of groundwater resources and the violation of groundwater management practices, and could adversely affect other regional groundwater pumping activities.</p>	

TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
Impact 3.12-9 (cont.)		Mitigation measures would need to be specifically tailored to reduce any potentially significant impacts resulting from construction and operation of increased groundwater production facilities to less-than-significant levels. The lead agency would be required to identify and implement mitigation measures for each specific mitigation project.	
Impact 3.12-10: Implementation of the project, in combination with other development, could contribute to cumulative increases to discharge flows or water conveyance demand, such that the relocation or construction of new or expanded water conveyance infrastructure or facilities could cause significant environmental effects.	LTS	None required.	LTS
Impact 3.12-11: Implementation of the project, in combination with other development, could result in a determination by the wastewater treatment provider which serves or may serve the development area that it does not have adequate capacity to serve the development's cumulative project demand in addition to the provider's existing commitments.	LTS	None required.	LTS
Impact 3.12-12: Implementation of the project, in combination with other development, could contribute to cumulative increases to surface runoff flows, such that the relocation or construction of new or expanded stormwater drainage infrastructure or facilities could cause significant environmental effects.	LTS	None required.	LTS

**TABLE ES-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Significance Before Mitigation	Mitigation Measure	Significance After Mitigation
<p>Impact 3.12-13: Implementation of the project, in combination with other development, could contribute to cumulative increases to energy demand, such that the relocation or construction of new or expanded electrical transmission and distribution infrastructure or facilities could cause significant environmental effects.</p>	LTS	None required.	LTS
<p>Impact 3.12-14: Implementation of the project, in combination with other development, could contribute to cumulative increases to telecommunications demand, such that the relocation or construction of new or expanded telecommunications infrastructure or facilities could cause significant environmental effects.</p>	LTS	None required.	LTS
<p>Impact 3.12-15: Implementation of the project, in combination with other development, could contribute to cumulative increases in solid waste generation in excess of State or local standards or in excess of the capacity of local infrastructure, or could otherwise impair the attainment of solid waste reduction goals.</p>	LTS	None required.	LTS

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CHAPTER 1

Introduction

The California State Department of General Services (DGS) proposes to construct a new office building complex, the Richards Boulevard Office Complex (RBOC) project (or project), as part of an effort to consolidate State office space, and address State office space deficiencies in downtown Sacramento. The proposed new office building complex would be constructed on a site currently occupied by the State printing plant, located on North 7th Street and Richards Boulevard in the River District of Sacramento.

This Environmental Impact Report (EIR) has been prepared pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines in order to disclose the potential environmental consequences of implementing the project. As required under CEQA, the EIR evaluates and describes potentially significant environmental impacts, identifies mitigation measures to avoid or reduce the significance of potential impacts, and evaluates the comparative effects of potentially feasible alternatives to the project.

1.1 Project Requiring Environmental Analysis

The following is a synopsis of the project characteristics. For further information on the project, see Chapter 2, Project Description.

The construction of a new office complex on the project site was anticipated in DGS's Ten Year Sequencing Plan. While the exact design would be developed through a design-build process, DGS anticipates that the project would include approximately 1.4 million gross square feet of office and related used across three mid-rise office buildings and one high-rise office building. Project amenities would include a cafeteria, auditorium, fitness center, and a childcare center. Other project elements could include a parking garage and surface parking spaces, open space, and pedestrian walkways. Buildings would be designed to meet or exceed leadership in energy and environmental design (LEED) Silver level, including Zero Net Energy.

1.2 Purpose and Use of this EIR

According to CEQA, preparation of an EIR is required whenever it can be fairly argued, based on substantial evidence, that a project may result in a significant environmental impact. An EIR is an informational document used to inform public-agency decision makers and the general public of the significant environmental impacts of a project, identify possible ways to minimize the significant impacts, and describe reasonable alternatives to the project that could feasibly attain

most of the basic objectives of the project while substantially lessening or avoiding any of the significant environmental impacts. Public agencies are required to consider the information presented in the EIR when determining whether to approve a project. This Draft EIR has been prepared to meet the requirements of a project EIR as defined by Section 15161 of the State CEQA Guidelines. A project EIR focuses on the changes in the physical environment that would result from the implementation of a project, including its planning, construction, and operation. The State's intention in preparing a project EIR is that no further environmental analysis would be required following DGS approval of the project, absent conditions requiring a subsequent EIR, a supplement to the EIR, or an addendum. (See State CEQA Guidelines Sections 15162–15164.)

1.3 Scope of this Draft EIR

Pursuant to CEQA and the State CEQA Guidelines, a lead agency shall focus the EIR's discussion on significant environmental effects (PRC Section 21002.1, State CEQA Guidelines Section 15143). Furthermore, the EIR must also discuss the manner in which significant impacts can be feasibly mitigated or avoided. The purpose of an EIR is not to recommend approval or denial of a project, but to provide decision makers, public agencies, and the general public with information about the project. A determination of which impacts would be potentially significant was made for this project based on review of the information presented in the NOP (**Appendix A**), comments received as part of the public review process for the project (**Appendix B**), and additional research and analysis of relevant project data during preparation of this Draft EIR.

This EIR addresses the following technical issue areas:

- Air Quality,
- Biological Resources,
- Cultural Resources
- Energy,
- Greenhouse Gas Emissions and Climate Change,
- Hydrology and Water Quality,
- Land Use and Planning,
- Noise and Vibration,
- Population and Housing,
- Public Services,
- Transportation and Circulation, and
- Utilities and Infrastructure.

1.3.1 Issues Previously Determined to be Less Than Significant

CEQA requires that the discussion of any significant effect on the environment address substantial, or potentially substantial, adverse changes in the physical conditions that exist within the affected area. A lead agency is not required to provide a detailed discussion of the environmental effects that would not be significant, and may instead provide a brief statement of dismissal (PRC Section 21100, State CEQA Guidelines Sections 15126.2[a] and 15128). Upon review of the project, DGS determined that due to the physical characteristics of the project site and the project as proposed, several environmental issues would involve impacts that would be less than significant and need not be further considered in the Draft EIR. The discussions below provide brief statements of reasons for DGS's determination that these issues do not warrant further consideration in the EIR, as the project would not result in significant environmental effects on the following resources.

As described in Chapter 2, Project Description, of this Draft EIR, demolition of buildings and preparation of the project site was already considered and approved through a separate environmental process for the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project). Therefore, a baseline condition was used to determine the proposed project's potential impacts. The same analytical methodology was used, as appropriate, to analyze the issues previously determined to be less than significant, as described below.

1.3.2 Agriculture and Forestry Resources

The project site is located in a disturbed environment surrounded by urban uses. There are no forested lands or lands being used for agriculture or forestry production on the project site or in the project's vicinity. For these reasons, there is no potential for the proposed project to cause loss to agriculture or forestry resources and this topic is not considered further in this EIR.

1.3.3 Aesthetics, Light, and Glare

Public Resources Code Section 21099, subd. [d] establishes that—not including impacts on historical or cultural resources—the aesthetic impacts of residential, mixed-use residential, or employment center projects on infill sites within transit priority areas are not considered significant impacts on the environment. The project meets these parameters and qualifies for CEQA streamlining benefits for the reasons explained below.

Type of Development

To qualify for CEQA streamlining benefits, the project must be a residential, mixed-use residential, or employment center project (PRC Section 21099, sub. [d]). PRC Section 21099, subd. [a][1] defines the phrase “employment center project” as “a project located on property zoned for commercial uses with a floor area ratio [FAR] of no less than 0.75 and that is located within a transit priority area.”

The project site is zoned by the City of Sacramento as an Office Business (OB), Residential Mixed-Use Zone (RMX) and a High-rise Residential Zone (R-5) in the River District Special Planning District (SPD).¹ OB, RMX, and R-5 land use designations allow the following types of development, respectively: business, office, institutional, or professional uses; multifamily residential, office, and commercial uses; multifamily residential, institutional, office, and limited commercial uses.²

As a final project design has not yet been determined, it is not possible to know the exact FAR for the proposed RBOC. However, assuming construction of 1.375 million gross square feet (GSF) of office and related uses between multiple office buildings and associated facilities, the estimated FAR for the proposed FAR would be approximately 2.0, which exceeds the minimum FAR requirement to qualify as “employment center project.”

Pursuant to PRC Section 21099, subd. [a][7], a “transit priority area” means “an area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program adopted pursuant to Section 450.216 or 450.322 of Title 23 of the Code of Federal Regulations. Under PRC Section 21064.4, Division 13, Chapter 2.5, a “major transit stop” is defined as “a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of [fifteen] minutes or less during the morning and afternoon peak commute periods.”

The entirety of the project site is located within one-half mile of an existing major transit stop. The 7th & Richards/Township 9 Light Rail Station is located directly opposite of the project site across Richards Boulevard, and represents the northern terminus of the Sacramento Regional Transit Light Rail System Green Line.³ Stops for Sacramento Regional Transit (SacRT) bus services are also located within one-half mile of the project site. Thus, the project site falls within a transit priority area.

For these reasons, the project qualifies as an “employment center project.”

Infill Applicability

To qualify for CEQA streamlining benefits, the project must be located on an infill site as defined by PRC Section 21099, subd. [a][4]. Under this subdivision, “infill site” means “a lot located within an urban area that has been previously developed, or on a vacant site where at least

¹ City of Sacramento, 2019. *City of Sacramento Planning and Development Code*. Available: www.cityofsacramento.org/-/media/Corporate/Files/CDD/Resources/Planning/ZoningMapbook_Sept14.pdf?la=en. Accessed January 11, 2019. Page 129.

² City of Sacramento, 2019. *City of Sacramento Planning and Development Code Map Book*. Available: www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/Maps/ZoningDefinitions.pdf?la=en. Accessed January 11, 2019. Pages 5-6.

³ Sacramento Regional Transit, 2019. *Light Rail System Map*. Available: www.sacrt.com/schedules/maps/R519.gif. Accessed January 11, 2019.

[seventy-five] percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.”

The project site is currently developed, designated with a land use of Urban Center High,⁴ serving as the location of the State Printing Plant and Textbook Warehouse. Under existing conditions, therefore, the project is located on an infill site, as the site is a lot within an urban area that has been previously developed. (PRC Section 21099, subd. [a][4]).

The relocation of the plant and demolition of the site is anticipated through implementation of the Demolition Project, which was approved in May 2018. Under the Demolition Project, baseline conditions for the project site would be a vacant lot devoid of buildings or structures, vegetation, above-ground utilities infrastructure, and asphalt. All parcels immediately adjacent to the project site are designated as Urban Center High and Central Business District;⁵ land uses on these parcels are mainly commercial and industrial, although some existing residences and institutional and office buildings are also in the vicinity. These parcels are developed such that at least seventy-five percent of the project site’s perimeter adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses⁶ (PRC Section 21099, subd. [a][4]). As a result, the project qualifies as an infill site under the second potential definition delineated in PRC Section 21099, subd. [a][4].

The project site satisfies the requirements PRC Section 21099 under either existing or baseline conditions, depending on which are used to establish the Environmental Setting; therefore, the project is considered an “infill site.” The Environmental Setting and existing and baseline conditions are all addressed in greater detail in Chapter 2, Project Description.

Transit Priority Area Applicability

To qualify for CEQA streamlining benefits, the project must be located within a transit priority area (PRC Section 21099, sub. [d]). As was established above in discussion of the type of development the project represents, the proposed RBOC is located within a transit priority area as defined by PRC Section 21099, subd. [a][7].

The entirety of the project site is located within one-half mile of an existing major transit stop. The 7th & Richards/Township 9 Light Rail Station is located directly opposite of the project site across Richards Boulevard, and represents the northern terminus of the Sacramento Regional

⁴ City of Sacramento, 2017. *2035 General Plan Land Use & Urban Form Diagram*. Available: www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/General-Plan/2035-GP/2035-SacGPU_LUD.pdf?la=en. Available January 11, 2019.

⁵ City of Sacramento, 2017. *2035 General Plan Land Use & Urban Form Diagram*. Available: www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/General-Plan/2035-GP/2035-SacGPU_LUD.pdf?la=en. Available January 11, 2019.

⁶ Sacramento County, 2018. Assessor Parcel Viewer. Available: <http://assessorparcelviewer.saccounty.net/JSViewer/assessor.html#>. Accessed January 12, 2019.

Transit Light Rail System Green Line.⁷ Stops for bus services are also located within one-half mile of the project site. Thus, the project site falls within a transit priority area.

Thus, the project is located within a transit priority area, and this qualification is satisfied.

CEQA Streamlining Benefits

As an employment center project located on an infill site within a transit priority area and subsequently satisfying all requirements of PRC Section 21099, subd. [d][1], aesthetic impacts resulting from the project shall not be considered significant impacts on the environment, and these impacts will not be discussed further in this EIR.

1.3.4 Geology, Soils, and Seismicity

Seismic Ground Shaking

No Alquist-Priolo Earthquake Fault Zones are present in the city of Sacramento. Therefore, no evidence exists to suggest that there is a reasonable chance of fault rupture within the project site. However, the design of buildings must conform to the analysis and implementation criteria described in the California Building Code (CBC), Chapters 16, 18, 33, and the appendix to Chapter 33. Furthermore, the project site is not located in a designated liquefaction zone. While there is some indication that the existing buildings on the site were developed on fill, the existing buildings have not experienced significant geological hazards over their history.⁸ For these reasons, there would be no adverse effects from the project related to seismic ground shaking and these impacts will not be discussed further in this EIR.

Soil Erosion

The project site is in an urban area with generally flat topography. Due to the conditions at the project site, the project would not generate the potential for substantial soil erosion or loss of topsoil. Construction activities that could temporarily expose soil to erosive forces such as wind and stormwater are addressed in Section 3.6, Hydrology and Water Quality.

Unstable Geological Units and Expansive Soils

Due to the relatively flat topography of the city, landslides and lateral spreading are not considered to be major threats to any areas within the city, including the project site.

The project site overlies sandy loam complex soils. Accordingly, the project site is not located on soils susceptible to subsidence, such as soft clay soils. Additionally, sandy loam soils are not noted as having highly expansive properties and the project site is not located within an area

⁷ Sacramento Regional Transit, 2019. *Light Rail System Map*. Available: www.sacrt.com/schedules/maps/R519.gif. Accessed January 11, 2019.

⁸ Department of General Services, 2018. *State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration*. March 2018. Available: <http://www.dgs.ca.gov/resd/Programs/EnvironmentalServicesSection/CaliforniaEnvironmentalQualityAct.aspx>. Accessed December 17, 2018. pp. 3-58.

mapped as having a high potential for expansive soils.⁹ Therefore, the project would not locate facilities on expansive soil, creating substantial risks to property.

Subsidence or settlement may also occur over smaller areas near dewatering activities. Because of the shallow water table, dewatering may be necessary during excavation and foundation support construction activities within the project site. Often, groundwater provides partial support for the near-surface soil materials and, when withdrawn, allows the soils to slough into the excavation. If the dewatering system draws down the water table adjacent to the excavation, there is the possibility of undermining foundations on the adjacent site, causing cracking or collapse. To avoid these conditions, dewatering system design would be designed appropriate to the soil conditions (as described in Section 3.6, Hydrology and Water Quality).

For the above reasons, the project would not adversely affect the local geology or soil, or contribute to subsidence that could adversely affect nearby structures and will not be discussed further in this EIR.

Mineral Resources

The project site is located with a mapped MRZ and is designed as MRZ-3, areas containing mineral deposits, the significance of which cannot be evaluated.¹⁰ However, the project site is in an urban, developed area where extraction of mineral resources is not viable and no aggregate quarries are located within the project site.¹¹ For these reasons, potential effects on mineral resources are not discussed further in this EIR.

Paleontological Resources

In regards to paleontological resources, the Demolition Project analysis determined that the project site is underlain by Holocene soils that are not known to contain fossils; therefore, there is little potential for the project site to yield fossils during demolition activities. Furthermore, there are no unique geological features at the project site. It was determined that there would be no impact on paleontological resources or unique geological features from the Demolition Project. For these reasons, potential effects on paleontological resources are not discussed further in this EIR.

1.3.5 Hazards and Hazardous Materials

A Phase I Environmental Site Assessment (ESA) was prepared for the project site as part of the environmental review of the Demolition Project.¹² The Phase I ESA identified known hazardous

⁹ Department of General Services, 2018. *State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration*. March 2018. Available: <http://www.dgs.ca.gov/resd/Programs/EnvironmentalServicesSection/CaliforniaEnvironmentalQualityAct.aspx>. Accessed December 17, 2018. pp. 3-58.

¹⁰ Dupras, D., 1999. Mineral Land Classification Map of PCC-Grade Aggregate Resources in Sacramento County, Plate 3.

¹¹ U.S. Geological Survey, 2016. Mineral Resources Data System, 2016. Mineral Resources On-Line Spatial Data. Available: <http://mrddata.usgs.gov/general/map.html>. Accessed December 18, 2018.

¹² URS, 2017. Phase I Environmental Site Assessment: Office of State Publishing, 244 North 7th Street, Sacramento, Sacramento County, California. Prepared for State of California Department of General Services.

materials or sources of potential hazards on the project site and vicinity, including former underground storage tanks (USTs), former leaking underground storage tanks (LUSTs), off-site groundwater plume migration beneath the project site, floor drains on the project site affected by historical hazardous discharging practices, and multiple adjacent sites containing current or historical USTs. In addition to the sites noted above, the Phase I ESA identified several items of concern on the existing site, including hazardous materials/waste storage areas, potential for lead in building materials, and presence of asbestos-containing building materials.

A Phase II ESA was prepared subsequently to evaluate the potential for vapor intrusion into the Office of State Printing building near one of the identified USTs and to evaluate potential impacts from a suspected former solid waste disposal site in the southern portion of the project site.¹³ Further evaluations confirmed the elevated lead concentrations at the southern end of the Facilities Management Division portion of the existing project site.¹⁴

The Demolition Project Initial Study/Mitigated Negative Declaration (IS/MND) determined that demolition activities would be required to comply with extensive regulations which would minimize potential for significant adverse impacts related to hazards and hazardous materials.¹⁵ Universal wastes or other hazardous materials (e.g., fluorescent light fixtures, household chemicals, automotive batteries, etc.) would be removed, recycled, and/or disposed of at an appropriate waste facility by a contractor(s) licensed to handle, transport, and/or dispose of universal wastes and hazardous wastes.

The IS/MND determined that demolition activities associated with the Demolition Project could encounter contaminated soil and/or groundwater, and a certain amount of contaminated soils would need to be disposed of at a hazardous waste site. A Soil and Groundwater Management Plan would also be prepared by DGS and approved by the Sacramento County Environmental Management Department. Implementation of a stormwater pollution prevention plan (SWPPP) that would be required for the Demolition Project would include best management practices (BMPs) for hazardous materials spill prevention and response/clean-up, as well as good site housekeeping measures for proper storage of hazardous materials to prevent potential for spills.

In summary, the IS/MND determined that compliance with existing laws and regulations, implementation of identified mitigation, and preparation of appropriate compliance documentation, and cleanup of the site would ensure that impacts related the exposure of human beings and the community to hazards or hazardous materials as a result of the Demolition Project would be less than significant.

¹³ URS, 2017. Limited Phase II Environmental Site Assessment: Office of State Publishing, 344 North 7th Street, Sacramento, California.

¹⁴ URS, 2018. Additional Soil and Groundwater Assessment Report: Office of State Publishing, 344 North 7th Street, Sacramento, California.

¹⁵ Department of General Services, 2018 (March). State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration. Available: <http://www.dgs.ca.gov/resd/Programs/EnvironmentalServicesSection/CaliforniaEnvironmentalQualityAct.aspx>. Accessed January 2, 2019.

Construction activities on the cleaned project site would involve the transport and use of fuels, lubricants, paint, solvents, and other potentially hazardous materials to the project site during construction. Relatively small amounts of these commonly used hazardous substances would be used onsite for construction and equipment maintenance. As described above, an array of federal, state, and local laws regulate the transport, management, storage, and use of hazardous materials, which would encompass all anticipated construction-oriented uses of such materials during project construction. These laws are enforced by various city, county, and state departments. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or environment.

Following construction, the transport, storage, use, and/or disposal of hazardous materials associated with operation of the project would be limited to common hazardous materials typical of any place of employment (e.g., cleaning agents, paints and thinners, fuels, insecticides, herbicides, etc.). Although limited quantities of hazardous materials can be found in most buildings, the use of such substances during operation of the project would not occur in quantities that would present a significant hazard to the environment or the public. Accidents or spills involving small quantities of the materials typical of any residences or place of employment (cleaning agents, paints, etc.) would not create a significant hazard to the public or the environment, and the impact would be less than significant.

No schools are located within 0.25 mile of the project site. The nearest schools to the project site include the Smythe Academy (0.5 mile to the east), Mustard Seed School (0.5 mile to the east/southeast), West Ed (0.6 mile to the south), and Washington Elementary School (1 mile to the southeast). Consequently, construction and operation of the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, and this impact would be less than significant.

No existing or proposed airports are located within 2 miles of the project site, and construction and operation of the project would result in no impacts related a safety hazard or excessive noise for people residing or working within the vicinity of an airport or airstrip.

It is anticipated that up to 6,000 staff would occupy the new buildings that would be developed on the project site. At least two points of primary vehicular access to the site would be available. One would be located at the northwest corner of the site along Richards Boulevard and the other would be mid-block along North 7th Street. Secondary and/or emergency vehicle access could be provided at additional locations along Richards Boulevard or North 7th Street or at North B Street. The project site is located directly across from the Sacramento Regional Transit Township 9 light rail station, and there are also several bus stops for several different routes on the same block as the project site. Public roadways would not be blocked or vacated, and construction and operation of the project would not substantially affect emergency vehicle access or evacuation, and the impact would be less than significant with mitigation.

The project site is located within the densely developed city of Sacramento and is not within or adjacent to a designated wildland. Construction and operation of the project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires, and this impact would be less than significant.

For the reasons discussed above, potential exposure of humans or the environment to hazards or hazardous materials as a result of the project is not further considered in this EIR.

1.4 Public Review Process

The Draft EIR will be available for public review and comment as set forth in the Notice of Availability. During the review and comment period written comments (including email) regarding the Draft EIR may be submitted to DGS at the address below:

Stephanie Coleman, Senior Environmental Planner
Department of General Services, Environmental Services Section
707 3rd Street, 4th Floor
West Sacramento, CA 95605
Email: Stephanie.Coleman@dgs.ca.gov
Telephone: (916) 376-1602

The Draft EIR, Notice of Availability and other supporting documents, such as technical studies prepared by DGS as part of the EIR process, are available for public review at the offices of the Department of General Services, Environmental Services Section between 8:00 a.m. and 4:30 p.m.; at the Sacramento Central Library at 828 I Street during library hours; by requesting a copy by email at environmental@dgs.ca.gov; and on the DGS website at <http://www.dgs.ca.gov/resd/Programs/EnvironmentalServicesSection/CaliforniaEnvironmentalQualityAct.aspx>.

1.4.1 Final EIR and EIR Certification

Following the public review and comment period for the Draft EIR, DGS will prepare responses that address all substantive written and oral comments on environmental issues addressed in the Draft EIR that are received within the specified review period. The responses and any other revisions to the Draft EIR will be provided as a Final EIR. The Draft EIR and its Appendices, together with the Final EIR, will collectively constitute the EIR for the project.

1.5 Document Organization

This Draft EIR document is organized as follows:

Executive Summary – This section summarizes the projects and the conclusions of the Draft EIR. A summary table is included and organized to allow the reader to easily identify potentially significant effects, proposed mitigation measures, and any residual environmental impacts after implementation of mitigation measures. A summary of the alternatives to the projects and the

environmentally superior alternatives are also provided. The Summary also describes areas of controversy regarding the projects that are known to DGS as of publication of this Draft EIR.

Chapter 1, Introduction – This chapter describes the purpose and organization of the EIR.

Chapter 2, Project Description – This chapter describes the project. The description includes, with text and graphics, the location and boundaries of the project, statements of objectives from the project applicant and the City, and a description of the project’s components and characteristics.

Chapter 3, Environmental Setting, Impacts, and Mitigation Measures – For each environmental issue, this chapter discusses the environmental and regulatory setting, the methodology used, the detailed analysis of potential impacts (including direct, indirect, and cumulative impacts), and, if necessary, a discussion of potentially feasible mitigation measures.

Chapter 4, Other CEQA Considerations – This chapter discusses several issues required to be included in an EIR, including effects not found to be significant, significant and unavoidable impacts, significant irreversible environmental changes, cumulative impacts, the potential for the project to cause urban decay, and the potential for the projects to induce urban growth and development.

Chapter 5, Project Alternatives – This chapter describes potentially feasible alternatives to the project that may avoid or substantially reduce one or more significant impacts while attaining most of the basic objectives of the project, and evaluates the comparative environmental effects of the alternatives.

Chapter 6, List of Preparers and Persons Consulted – This chapter identifies the agency staff and consultants who prepared the EIR, and agencies or individuals consulted during preparation of the EIR.

Chapter 7, Acronyms and Abbreviations – This chapter lists the acronyms used in this Draft EIR in alphabetical order.

Chapter 8, References – This chapter lists all citations used throughout the Draft EIR.

Appendices – The appendices include environmental scoping information and technical reports and data used in the preparation of the Draft EIR. These documents are included on CD at the back of the Draft EIR.

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CHAPTER 2

Project Description

2.1 Project Background and Need

The California State Department of General Services (DGS) proposes to construct a new office building complex on the site currently occupied by the State printing plant located on North 7th Street in the River District of the city of Sacramento (**Figure 2-1**).

As part of the 2014-15 State budget, the Governor proposed and the legislature approved funding for a study of State office buildings in the Sacramento area, which included assessing the condition of State facilities, preparing a plan for sequencing the renovation or replacement of State office buildings in Sacramento (Ten Year Sequencing Plan), and preparing a plan for funding these activities. The State Facility Long-Range Planning Study¹ found that nine State buildings in the Sacramento region were in poor condition and were nearing the end of their serviceable lives. In order to address these deficiencies, DGS completed the Ten Year Sequencing Plan in March 2016 and made some minor revisions to it in 2018.²

The Ten Year Sequencing Plan includes building three new State office building projects and renovating eight existing State office buildings within approximately ten years. The new buildings proposed were (1) the 1215 O Street Office Building (also known as the Clifford B. Allenby building), (2) a New Natural Resources Headquarters Building (also known as the P Street Building), and (3) a new office building complex at the State printing plant site on Richards Boulevard (referred to as the Richards Boulevard Office Complex [RBOC] project [or project]).³

The demolition and relocation of the printing plant was considered and approved in May 2018. An initial study/mitigated negative declaration (IS/MND) evaluated the environmental effects of the State's demolition of the existing structures, site cleanup, and activities related to relocation of the State printing plant and Facilities Maintenance Division (FMD) operations.

The purpose of the RBOC project is to consolidate State office space and address State office space deficiencies in downtown Sacramento and to provide a modern, efficient, and safe environment for State employees and the public they serve.

¹ Department of General Services, 2015 (July). *State Facility Long-Range Planning Study*. Available: <https://www.documents.dgs.ca.gov/dgs/pio/building/executivesummary.pdf>. Accessed December 4, 2018.

² Department of General Services, 2018 (April). *Ten Year Sequencing Plan*. Available: <https://www.documents.dgs.ca.gov/dgs/pio/sequencingplan.pdf>. Accessed December 4, 2018.

³ Legislative Analyst's Office, 2018 (February 20). *The 2018-19 Budget. Department of General Services*. Available: <https://lao.ca.gov/Publications/Report/3758>. Accessed December 4, 2018.



SOURCE: Esri, 2015; ESA, 2018

Richards Boulevard Office Complex

Figure 2-1
Regional Location



While the exact design would be developed through a design-build process, DGS anticipates that the project would include approximately 1.4 million gross square feet of office and related use across three mid-rise office buildings and one high-rise office building. Project amenities would include a cafeteria, auditorium, fitness center, and a childcare center. Other project elements could include a parking garage and surface parking spaces, open space, and pedestrian walkways. Buildings would be designed to meet or exceed U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver level, including Zero Net Energy.

2.2 Project Objectives

Consistent with, and in furtherance of the Ten Year Sequencing Plan⁴ and the 2018 Five-Year Infrastructure Plan,⁵ the objectives of the project are to:

- consolidate State office space and address State office space deficiencies in downtown Sacramento, prioritizing building on underutilized State property;
- accommodate staff from State-owned office buildings targeted for renovation or replacement in such a way as to facilitate the vacation, eventual renovation, and re-occupation of these structures while minimizing disruption to State agencies;
- provide a modern, efficient, and safe environment for State employees and the public they serve;
- integrate the new State development with the existing neighborhood;
- develop a sustainable and energy-efficient building;
- encourage and support the use of alternative commute modes by designing the project to have easy access to multiple transit modes;
- maximize the effectiveness of the design-build project delivery method by maintaining sufficient flexibility in the performance criteria to support innovation in the design competition.

2.3 Design-Build Method

The project would be delivered via the design-build method of project delivery. In design-build, a Criteria Architect (or Master Architect) team develops performance criteria to establish the building's design characteristics, such as:

- maximum square footage;
- design mandates such as Zero Net Energy and LEED certification;

⁴ Department of General Services, 2018 (April). *Ten Year Sequencing Plan*. Available: <https://www.documents.dgs.ca.gov/dgs/pio/sequencingplan.pdf>. Accessed December 4, 2018.

⁵ Department of Finance, 2018 (June 27). *2018-19 State Budget. 2018 Five-Year Infrastructure Plan*. Available: <http://www.ebudget.ca.gov/2018-19/pdf/BudgetSummary/Infrastructure.pdf>. Accessed December 4, 2018.

- facilities required by anticipated building tenants such as sufficient office space and features; and
- minimum parameters to meet maintenance and functionality requirements.

The analysis in this EIR is based on the performance criteria prepared by the Criteria Architect team. If the design-build team ultimately designs an office complex outside of the parameters set in this EIR, DGS will need to consider whether the EIR adequately addresses the environmental effects that might result from this difference in a project feature, and determine whether the proposal from the design-build team is sufficiently different from what is analyzed in this EIR to warrant preparation of an EIR Addendum, Supplement to the EIR, or a Subsequent EIR consistent with Section 15162 of the CEQA Guidelines. As the selected design-build team completes the project design, DGS will need to consider whether any project elements differ sufficiently from the project scenario analyzed in the EIR to warrant additional CEQA review. If additional CEQA review is required, all elements of the review, including public notices and public involvement, would be implemented consistent with applicable elements of the CEQA Statute and Guidelines.

2.4 Project Location

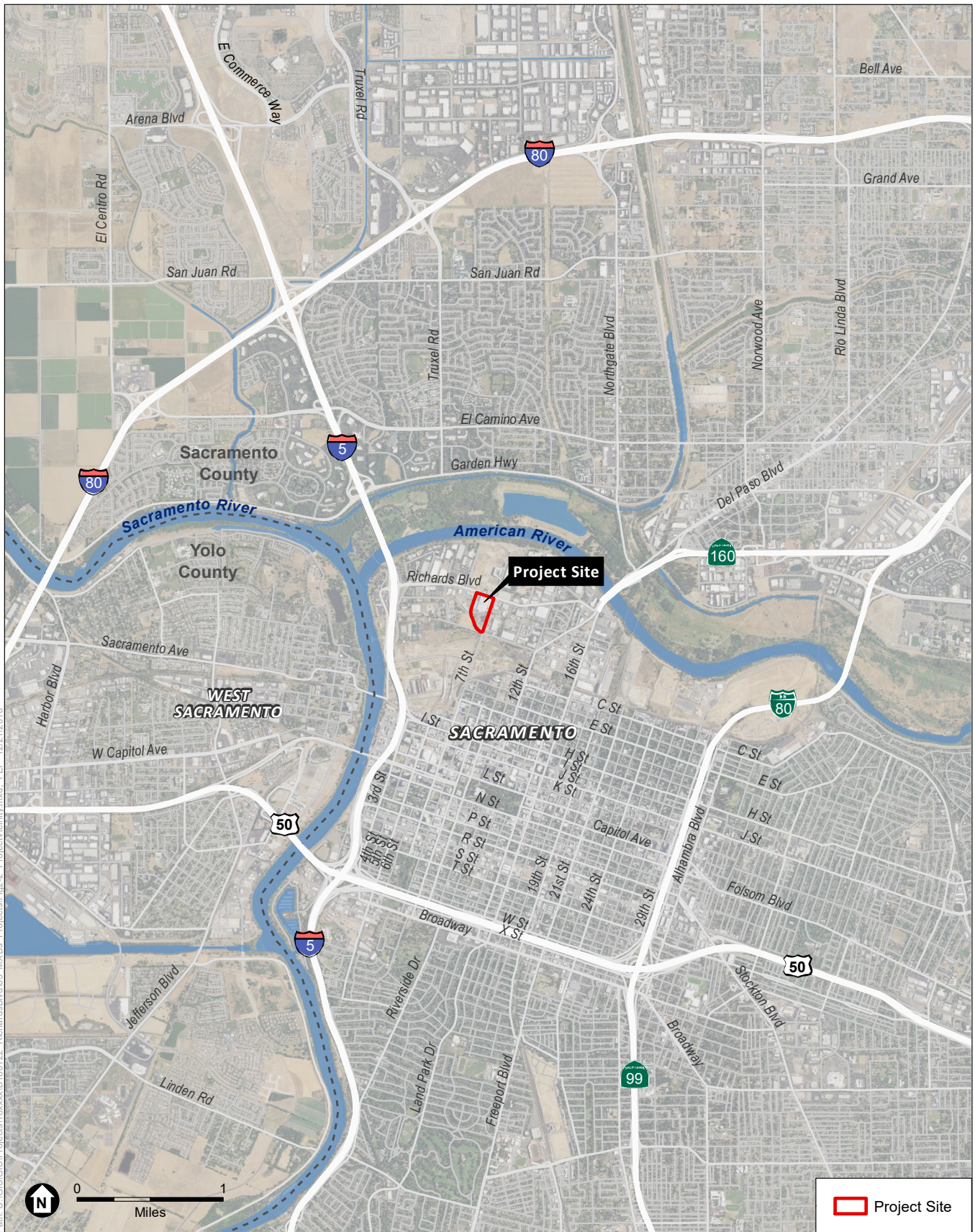
The project site is located on a site in the River District of the City of Sacramento (**Figure 2-2**) which currently houses the State Printing Plant. The site is bounded by Richards Boulevard on the north, North 7th Street on the east, and North B Street on the south, and is immediately east of the Coastline Equipment Crane Division Building and the Capital Investments & Loans Building (**Figure 2-3**).

2.5 Characteristics

2.5.1 Existing Land Uses and Land Use Designations

The existing site is located in a largely commercial/industrial area at 344 North 7th Street in Sacramento, Sacramento County, California (**Figure 2-4**). The property is located approximately 1.25 miles north of the State Capitol building and directly north of the Sacramento Railyards redevelopment area. Interstate 5 (I-5) is less than a mile (0.65 mile) west of the site and is directly accessible on Richards Boulevard. State Route 160 (SR 160) is similarly situated to the east (**Figure 2-1**). The location is also near the confluence of the American and Sacramento rivers, which are approximately 0.4 and 0.6 miles to the north and west of the existing site's perimeter, respectively.

The existing site covers approximately 17.3 acres on two parcels: APN No. 001-0210-010-0000 (17.3 acres) and APN No. 001-0210-054-0000 (0.05 acre). The parcels occupy the entire block between Richards Boulevard on the north, North B Street to the south, North 7th Street on the east, and commercial and vacant uses on the west.



SOURCE: Esri, 2012; USDA, 2016; ESA, 2018

Richards Boulevard Office Complex

Figure 2-2
Project Vicinity





Path: U:\GIS\GIS\Projects\18xxxx\180722_RichardsBlvd\03_MXD.s Project\Fig2-3_ProjectSite.mxd_FEP_12/27/2018

SOURCE: USDA, 2016; HGA, 2018; ESA, 2018

Richards Boulevard Office Complex

Figure 2-3
Project Site



SOURCE: USDA, 2016; Sacramento County, 2008; HGA, 2018; ESA, 2018

Richards Boulevard Office Complex

Figure 2-4
Existing Land Uses



As of December 2018, the site continues to be in use for the State Printing Plant. Land uses surrounding the existing site are primarily commercial or industrial, although some existing residences, and State and local offices are located nearby (Figure 2-4). A Sacramento Regional Transit (SacRT) Light Rail Station lies directly across from the printing plant to the north on the opposite side of Richards Boulevard. The station was opened in 2012 and currently links Richards Boulevard to the city center via tracks that run down North 7th Street.

The California Office of State Publishing (OSP) portion of the existing site includes the State Printing Plant, a textbook warehouse, associated parking and loading areas, a railroad spur, and a water pump. Access is available from both Richards Boulevard and North 7th Street. An approximately 6-foot latticed chain link fence, topped with barbed wire, separates the OSP and FMD facilities.

The project site is designated as Urban Center High within the City of Sacramento General Plan (Figure 2-5) and zoned by the City of Sacramento as Office Building (OB), Residential Mixed Use (RMX), and Multi-Family (R-5) (Figure 2-6).

2.5.2 Environmental Baseline

The following section addresses the environmental setting, or “baseline,” against which DGS has analyzed the project’s impacts.

The “normal” rule is to describe the environmental setting as it exists at the time the lead agency issues a notice of preparation (NOP) for the project, and to use that setting as the baseline condition for purposes of identifying the project’s impacts. (CEQA Guidelines Sections 15125[a], 15126.2[a]) The lead agency has discretion, however, to use a different approach where the agency determines that the “normal” approach would be misleading.

In this case, demolition of buildings and preparation of the project site was already considered and approved through a separate environmental process for the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project). The Demolition Project addressed the State’s actions to relocate the OSP printing operations to more suitable facilities and prepare the site for future construction. Implementation of the Demolition Project will have substantial implications for the environmental setting in the very near term. For this reason, DGS has considered whether the “baseline” condition should be updated to reflect changes to the environmental setting that are likely to occur in the near term.

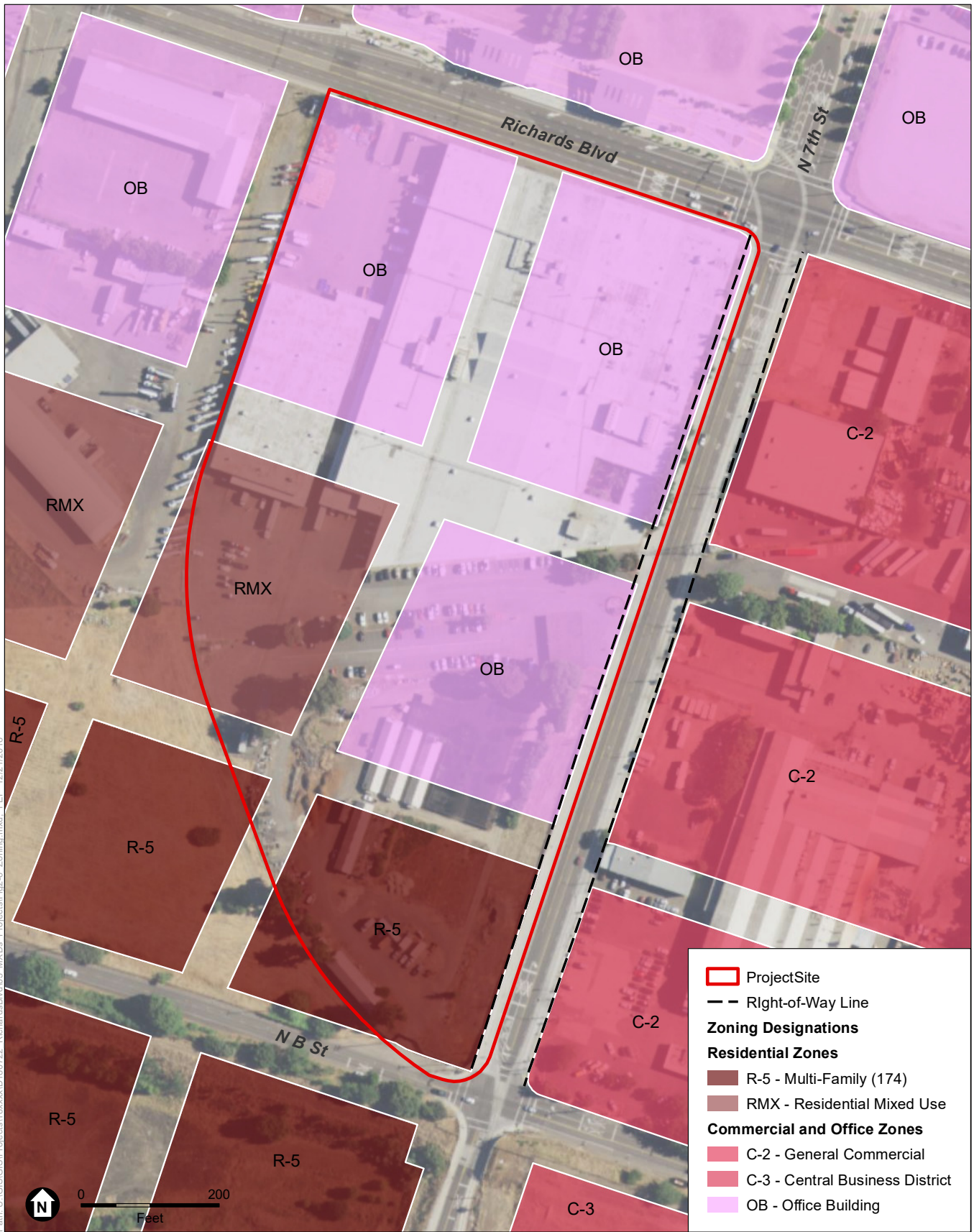
The following discussion addresses (1) the law governing the EIR’s description of the environmental setting, (2) the status of the Demolition Project, and (3) the extent to which DGS has decided to update the environmental setting to reflect the status of the Demolition Project.



SOURCE: USDA, 2016; City of Sacramento, 2017; HGA, 2018; ESA, 2018

Richards Boulevard Office Complex

Figure 2-5
General Plan Land Use



SOURCE: USDA, 2016; City of Sacramento, 2017; HGA, 2018; ESA, 2018

Richards Boulevard Office Complex

Figure 2-6
Zoning

Description of Environmental Setting in an EIR

The recently adopted revised CEQA Guidelines (2018) update section 15125 to provide clarification about the potential for a lead agency to establish a baseline condition:

(a) An EIR must include a description of the physical environmental conditions in the vicinity of the project. This environmental setting will normally constitute the baseline physical conditions by which a lead agency determines whether an impact is significant. The description of the environmental setting shall be no longer than is necessary to provide an understanding of the significant effects of the proposed project and its alternatives. The purpose of this requirement is to give the public and decision makers the most accurate and understandable picture practically possible of the project's likely near-term and long-term impacts.

(1) Generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record.

(2) A lead agency may use projected future conditions (beyond the date of project operations) baseline as the sole baseline for analysis only if it demonstrates with substantial evidence that use of existing conditions would be either misleading or without informative value to decision-makers and the public. Use of projected future conditions as the only baseline must be supported by reliable projections based on substantial evidence in the record.

(3) An existing conditions baseline shall not include hypothetical conditions, such as those that might be allowed, but have never actually occurred, under existing permits or plans, as the baseline.

Thus, the baseline condition “‘normally’ consists of the ‘physical environmental conditions in the vicinity of the project, as they exist at the time ... the environmental analysis is commenced.’”⁶ The purpose of describing the baseline condition is to provide an accurate reflection of the conditions under which a project will operate so as not to mislead the public or decision-makers regarding the project's potential impacts.⁷ The Supreme Court has recognized, however, that “[t]he date for establishing baseline cannot be a rigid one”⁸ and the CEQA Guidelines have recently been updated to reflect this guidance.

⁶ *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 315, quoting CEQA Guidelines Section 15125(a).

⁷ *Communities for a Better Environment v. South Coast Air Quality Management Dist.* (2010) 48 Cal.4th 310, 315 and *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 449–452.

⁸ *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013) 57 Cal.4th 439, 449–452.

State Printing Plant and Textbook Warehouse Relocation and Demolition Project

The Demolition Project includes relocating the State printing plant and FMD operations, and demolishing the State printing plant and its warehouse, several greenhouse buildings, and other miscellaneous structures and related foundations. Additional Demolition Project activities include abatement of asbestos and lead containing materials; removing asphalt paving and landscaping, exterior lighting poles, and utility lines within property boundaries; installing a chain link fence around the perimeter of the site; and removing and/or remediating contaminated soil.

The existing facilities have been in constant service for over 60 years. Changes in ground moisture have caused the floor to tilt and lower by up to two inches. In addition, due to the building's age, the building's infrastructure and utilities have deteriorated and required frequent maintenance, replacements, or repairs. As a result, OSP is relocating the State printing operations to alternative locations that are more space and energy efficient, that would not require the substantial ongoing maintenance and utility costs as at the existing printing plant building on North 7th Street. In order to avoid having a vacant and deteriorating building to manage, DGS is demolishing all of the buildings on the existing site, including the printing plant and other buildings (greenhouses, etc.) used by FMD.

When the Demolition Project is complete, the site will be completely clear of vegetation. Most overhead utility lines as well as underground utilities would be removed. The printing plant foundations would be removed; however, existing concrete foundations would be cut off at 6 feet below ground level and would remain. The existing site utilities include water, sewer, electricity, storm drainage, and natural gas infrastructure would be demolished. Water supply and wastewater pipelines and underground utilities within 6 feet of the surface would be removed. Any utility deeper than 6 feet will be capped and abandoned per City of Sacramento standards.

Onsite decommissioned monitoring and supply wells would not be affected by the Demolition Project. A septic system currently used for wastewater from the FMD-operated building would be safely removed from the project site.

The surface of the site would be largely dirt. The only remaining structure would be a small pump house on the northwest corner of the site. It would continue to be electrified as it helps manage the stormwater onsite. Most, if not all, of the surface parking and other asphalt surfaces would be removed. The site would not be graded or filled, except in order to meet post-construction stormwater management requirements issued by the Central Valley Regional Water Quality Control Board (CVRWQCB). Some portions of the existing storm drains along the west perimeter would be left in place to collect runoff from the site (with appropriate sediment/erosion control measures). The system discharges into the pump house which ensures that the water is moved into the storm drain leading to the American River (described below under "Drainage").

Site restoration would generally involve installing temporary erosion controls, as necessary, and installing a security fence around the perimeter of the site. Site runoff would be managed and

discharged according to post-construction stormwater management requirements issued by SWRCB. It is anticipated that the existing building would be completely demolished, the site cleared, utilities infrastructure removed, and the site prepared for future construction as of Spring 2020.⁹

Baseline Conditions for Purposes of Evaluating Impacts of the RBOC Project

DGS has identified two potential approaches to describing the existing environmental setting for the RBOC project, in light of the status of the Demolition Project. Both of these approaches are consistent with guidance set forth in the CEQA Guidelines, and in case law addressing this issue.

First, DGS could adhere to the “normal” approach, as set forth in CEQA Guidelines, section 15125(a). Under this approach, the environmental setting would consist of conditions as they existed in December 2018, when DGS issued a notice of preparation for the RBOC project. As of December 2018, the printing plant is still in operation and the site has not yet been cleared. Under this approach, with respect to the RBOC project, the existing condition would consist of continued operation of the printing plant with the buildings onsite and all vegetation and other conditions.

Second, DGS could adjust the baseline to reflect those conditions that are expected to physically exist as of Spring 2020, when the Demolition Project is scheduled to be complete. This approach reflects the fact that the Demolition Project is an approved and funded project and will proceed ahead no matter what happens with the RBOC project. Under this approach, the environmental setting would be revised to reflect the fact that, by the Spring 2020, the project site would be cleared of all structures and vegetation, the utilities would be removed, and the site would be cleaned of hazardous materials.

As noted above, the Supreme Court has endorsed this approach; in *Neighbors for Smart Rail*, supra, the Court stated that, “in an EIR for a new office building, the analysis of impacts on sunlight and views in the surrounding neighborhood might reasonably take account of a large tower already under construction on an adjacent site at the time of EIR preparation.” (57 Cal.4th at p. 453.)

The EIR discloses both existing, physical conditions, and those physical conditions that are expected to exist in 2020, after the Demolition Project is implemented and prior to the start of the RBOC project. For purposes of evaluating the project’s impacts, the “baseline” condition includes the demolition and clearing of the project site. DGS believes this approach will provide the public and decision-makers with the most accurate understanding of the project’s impacts and this approach is consistent with the Supreme Court’s example of a permissible approach.

⁹ Department of General Services, 2018. *State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration*. March 2018. Available: <http://www.dgs.ca.gov/resd/Programs/EnvironmentalServicesSection/CaliforniaEnvironmentalQualityAct.aspx>. Accessed December 17, 2018.

2.5.3 Office Building Elements

This project will include the design and construction of a new office complex on the 17-acre State-owned site located between Richards Blvd and North 7th Street. As described above in Section 2.1, Project Background and Need, demolition of the existing structures was addressed in a separate environmental document. The project includes up to 1.375 million gross square feet (GSF) of office space. The complex would provide up to 1.225 million GSF of workspace (approximately 920,000 net usable square feet) and up to 150,000 GSF of amenity space. Amenities could include lobbies, cafeteria(s), fitness center, an auditorium, up to 15,000 sf of retail space, training and conference rooms, daycare (up to 15,000 sf of space), and up to 5,000 sf of bike storage (for approximately 500 bikes). The work station and office sizes would be based on DGS' Recommended State Administrative Manual standards for workstations and offices by job category.

This is a conceptual development scenario to give an indication of building elements. As identified discussed in Section 2.3, the design-build team that is ultimately selected may provide a project design that varies from this conceptual scenario, while still fulfilling the design criteria included in a request for qualifications.

2.5.4 Height and Massing

DGS anticipates that the office complex would include multiple office buildings, including three mid-rise buildings and one high-rise building. Heights may vary but the tallest structure would be up to 29 stories and no more than 418 feet tall. A parking garage may also be constructed onsite.

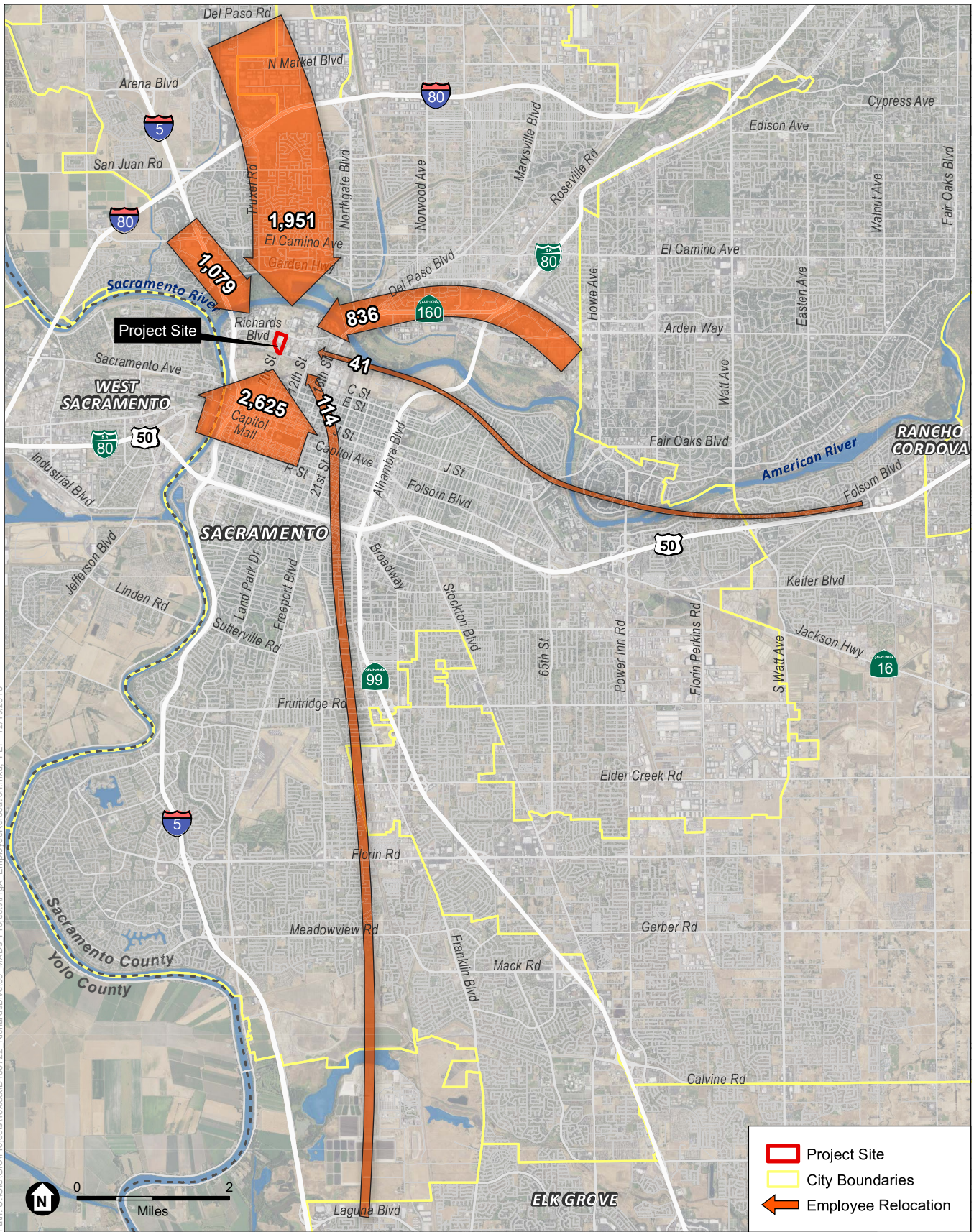
2.5.5 Staff Relocation

It is anticipated that the up to 6,000 staff occupying the new buildings would be relocated from 28 different locations throughout Sacramento and include staff from the California Business, Consumer Services, and Housing Agency and Government Operations Agency. **Table 2-1** (and **Figure 2-7**) shows the current estimate of employees with the locations from which these departments and boards would move.

2.5.6 Landscaping and Lighting

The project would construct sidewalk, curb, and gutters along Richards Boulevard and North 7th Street during project construction within the boundaries of the project site. Street trees may also be planted along the project's frontage, as appropriate.

The landscape design would minimize life-cycle costs (i.e., costs beyond the initial capital outlay such as costs for maintenance and repairs), while deterring potential vandalism. The project would include replacing frontage sidewalks around the new office building, consistent with City of Sacramento standards, allowing for peak pedestrian circulation. The pedestrian hardscape would be finished to meet minimum American with Disabilities Act requirements.



SOURCE: USDA, 2016; Esri, 2015; ESA, 2018

Richards Boulevard Office Complex

Figure 2-7
Employee Relocation



**TABLE 2-1
POTENTIAL TENANTS FOR RICHARDS BOULEVARD OFFICE COMPLEX**

Agency	Department/Board	Est. Staff	Current Locations
BCSHA	Housing and Community Development (HCD)	637	2 locations
		596	2020 W El Camino Avenue (HQ)
		41	9342 Tech Center Drive (District Office)
BCSHA	Business Oversight (DBO)	221	1515 K Street
BCSHA	Department of Consumer Affairs (DCA)	2,546	13 locations
	Board of Accountancy (CBA)	114	2450 Venture Oaks Way
	BRN, SOLID, Acentral plant, DOI	298	1747 N Market Blvd
	Veterinary Medical Board (VMB)	25	1747 N Market Blvd
	Naturo & OMBC	15	1300 National Drive
	Respiratory Care Board (RCB)	36	3750 Rosin Court
	BPELSG	74	2535 Capitol Oaks Drive
	BVNPT	89	2535 Capitol Oaks Drive
	Court Reporters Board (CRB)	9	2535 Capitol Oaks Drive
	BPPE	77	2535 Capitol Oaks Drive
	BBC, OPES, BSIS, & CAB	199	2420 Del Paso Road
	Board of Optometry (OPT)	23	2450 Del Paso Road
	MBC, BPM, PAB, PTB, DBC, SLP AHADB, SPCB, CSAC, DHCC, & CBOT	444	2005 Evergreen Street
	OAS-BSO, OAS-FO, CD-OPA, CD-PDE, CD-DPS, Legal Affairs, Leg/Reg, OIS, BBS, PSYCH, EEO, CIC, Internal Audits	940	1625 N Market Street
	Board of Chiropractic Examiners (BCE)	21	901 P Street (State-owned)
	Board of Pharmacy	107	1625 N Market Street/2720 Gateway Oaks Drive
	Bureau of Real Estate Appraisers (BREA)	44	1102 Q Street
Board of Occupational Therapy (CBOT)	18	2005 Evergreen Street/1610 Arden Way	
Speech Pathology (SLPAHADB)	15	2005 Evergreen Street/New address	
BCSHA	Department of Real Estate (DRE)	314	1651 Exposition Blvd
BCSHA	Department of Fair Employment and Housing (DFEH)	115	2 locations
		90	2218 Kausen Drive
		24	3137 Dwight Road
BCSHA	Alcoholic Beverage Control (ABC)	164	2 locations
		160	3927 Lennane Drive (HQ)
		4	3901 Lennane Drive (Storage)
BCSHA	ABC Appeals	10	1325 J Street (Appeals)
BCSHA	California Horse Racing Board (CHRB)	45	1010 Hurley Way
BCSHA	Seismic Safety Commission (SSC)	13	1755 Creekside Oaks Drive

**TABLE 2-1
POTENTIAL TENANTS FOR RICHARDS BOULEVARD OFFICE COMPLEX**

Agency	Department/Board	Est. Staff	Current Locations
GOVOPS	California Department of Tax and Fee Administration (CDTFA)	2,395	3 locations
		1,970	450 N Street (State-owned - HQ)
		340	621 Capitol Mall (Legal)
		85	Natomas (Call Center)
Total estimated net square feet			
Total estimated gross square feet (75 percent net to gross)			
Total estimated staff		6,459*	

NOTES:

* The list of departments and boards may shift slightly as the State decides which groups can be accommodated in the new office complex. Total relocated staff would not exceed 6,000.

BCSHA = California Business, Consumer Services, and Housing Agency
GOVOPS = Government Operations Agency

SOURCE: Department of General Services. *Richard Blvd Office Complex - Programming Information Matrix*, email communication, December 12, 2018.

Safety lighting would be installed on and around the project site, particularly along pedestrian walkways. Any street lights that need to be removed for construction would be replaced. Exterior lighting would use the lowest possible wattage and energy-efficient luminaire for each application. In addition, exterior light fixtures would be shielded and directed down to preserve the night sky, and directed away from adjacent residential buildings. The new office complex would achieve at least LEED Silver certification (see **Appendix C** for the LEED checklist). Implementing a lighting plan that reduces both the generation of exterior light and the potential for light trespass to affect off-site areas would support meeting or exceeding the LEED Silver rating.

2.5.7 Utilities

As described above, utility connections within 6 feet of the surface would have been removed as part of the Demolition Project. New utility connections would be constructed for the new office buildings, as described below.

Water

Water service is provided by the City of Sacramento. Separate water and fire water infrastructure shall be constructed to serve the new office buildings.

There is an existing 12-inch PVC water main in North 7th Street and a 12-inch cast iron water main in Richards Blvd that are connected to one another. These mains currently provide domestic water and firewater service to the printing plant facility (with the primary connections from the PVC main in North 7th Street, under the existing rail line) and supply fire hydrants within the public right-of-way on both streets. The capacity of these existing mains is likely to be sufficient to service the DGS project.

The new office buildings would be provided with at least two metered connections from the existing water mains for redundancy (for both fire suppression and domestic water) with the primary connections from North 7th Street and the redundant connections from Richards Blvd. Sub-meters would also be provided at each building point of connection to monitor water usage.

California Executive Order B-18-12 requires that DGS reduce overall water use by 20 percent by 2020, as measured against a 2010 baseline. The project would be water efficient to comply with this executive order as well as to meet the LEED credit requirements to reduce indoor potable water consumption by 40 percent from the LEED baseline, and outdoor potable water consumption by 50 percent from the LEED baseline. All plumbing fixtures in the building would be low-flow/high-efficiency fixtures. Landscape irrigation would use alternative sources of water if possible (e.g., grey water, collected rain water), and all landscaping would be selected based on suitability for the local climate, site conditions, and reduced water needs and maintenance requirements.

Fire protection systems and facilities would comply with the California Code. Discussion with the State Fire Marshal's office will be required with regard to the extent that the City of Sacramento High-Rise Ordinance applies to portions of the project.

Total fire water flow to the site will be in accordance with California Fire Code Section 507 and Appendix B of Part 9 of the California Fire Code. For Type I and Type II construction buildings, the fire flow is based upon the total floor area of the three largest successive floors. As specific building design information is not yet available, it is assumed that the total fire flow to the site would be no greater than 6,000 gpm for a four-hour duration.

All buildings would be provided with automatic fire sprinklers systems in compliance with California Building Code Section 903 and NFPA 13, Standard for the Installation of Sprinkler Systems. Standpipes will also be installed in compliance with NFPA 14, Standard for the Installation of Standpipe and Hose Systems; in many cases the sprinkler and standpipe risers would be combined. The design of the fire sprinklers systems will be based upon the following NFPA 13 hazard classifications:

- Assembly – Light Hazard
- Office – Light Hazard
- Mercantile (Retail) – Ordinary Hazard Group 2
- Utilities – Ordinary Hazard Group 1
- Low-Hazard Storage – Ordinary Hazard Group 1
- Kitchen (Commercial) – Ordinary Hazard Group 1
- Restaurant Seating – Light Hazard
- Parking – Ordinary Hazard Group 1

Based upon water flow estimates used the most onerous hazard classification likely to be applicable to the project, the sprinkler water flow demand will be 300-500 gpm with the standpipe systems needing to deliver 1,000 gpm. Required water pressures will greatly depend upon the final building heights.

A minimum of one fire pump is required for all building with a height from the lowest level of building access to the highest occupied floor of greater than 75 feet (high-rise buildings). Redundant fire pumps are required for buildings with an occupied floor greater than 200 feet above the lowest level of building access.

Each building with a height from the lowest level of building access to the highest occupied floor of 120 feet or less will be provided with a single fire water connection from the municipal supply. Required fire pumps in buildings having an occupied floor greater than 120 feet above the lowest level of building access will be supplied by connections to new no fewer than two water mains located in different streets. Separate supply piping will be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps will be sized to supply the flow and pressure required for the pumps to operate. Two connections to the same main will be permitted provided the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through no fewer than one of the connections.

A secondary fire water supply is required for all building having an occupied floor greater than 75 feet above the lowest level of building access. This secondary supply is required to be sized based upon the most onerous hydraulically calculated sprinkler demand, including the 100 gpm inside hose stream allowance, for a duration of the greater of 30 minutes or as determined by the occupancy hazard classification per NFPA 13. While specific sizing will be confirmed during design, it is likely that the secondary water storage tanks for each high-rise building will be between 30,000 to 45,000 gallons of usable water storage.

Wastewater

The project site is served by the City's sanitary sewer system for conveyance of wastewater. An 8-inch sanitary sewer, dedicated to collecting discharge from the existing printing plant, and located in the Richards Blvd right-of-way provides the wastewater drainage from part of the existing site. Although the lateral legs that connect to this sewer will be abandoned by the Demolition Project, the 8-inch sanitary sewer in Richards Blvd will remain. A second 8-inch sanitary sewer is aligned in the North 7th Street right-of way and connects laterals from the existing printing plant facility, which will be abandoned by the Demolition Project. This leg is almost dedicated to the printing plant facility but there is one connection on the east side of North 7th Street that connects to the 8-inch sanitary sewer in the public right-of-way. The 8-inch sanitary sewer will be retained. Both systems combine at the intersection of Richards Blvd and North 7th Street, together with a second 24-inch sanitary sewer in Richards Blvd, and discharge to the existing 33-inch sanitary sewer in Richards Blvd east of North 7th Street.

The existing 8-inch sanitary sewer material is not known but most of the existing laterals that connect to it are cast iron and it is assumed that the 8-inch sanitary sewer is constructed of that same material.

New sanitary sewer connections would be constructed to discharge wastewater from the new office buildings by gravity and connect to the two existing 8-inch sanitary sewer systems in Richards Blvd and North 7th Street. The sanitary sewer system drains to the Sacramento Regional Wastewater Treatment Plant (SRWWTP) located in Elk Grove, operated by the Sacramento Regional County Sanitation District, where it is treated and released back to local rivers.¹⁰

Given that the existing 8-inch sanitary sewer systems are almost entirely dedicated to the existing printing plant, it is likely that they have sufficient capacity to receive discharges from the new DGS development (subject to pipe gradient). Given the need to comply with a 40 percent reduction in indoor water consumption from the LEED Baseline, and opportunities to reuse greywater onsite, overall wastewater discharges could be lower than existing discharges from the site.

Drainage

Storm drainage is provided through the City's storm drain system. New drainage lines will be created onsite to connect by gravity to the City's 60-inch storm drain pipe in the Richards Blvd right-of-way.

Currently, there is a 21-inch force main that drains the site via the existing pump house located at the northwest corner of the site. This pipe runs within the Richards Boulevard right-of-way to North 5th Street and up North 5th Street to the levee. The pipe extends through the levee and exits on the other side where it is protected by a metal grate and is surrounded by rip-rap. The pipe egress location is close to several other pipes. This project would include capping the stormwater pipe at the project site and abandoning the pipe in place. The pump house and force main will not be utilized in the DGS project and will be decommissioned.

In accordance with the Stormwater Quality Design Manual for the Sacramento and South Placer Regions (July 2018), the project would incorporate control measures in accordance with Table 3-2 of the manual to manage stormwater discharge and improve water quality. Source control and treatment control measures are required for this type of development (commercial with an impervious area greater than 1-acre) while runoff reduction measures, such as interceptor trees, are optional. While infiltration best management practices (BMPs) is unlikely to be acceptable due to possible underlying contamination (this will be confirmed through the proposed site investigation), there are various BMPs that can be integrated into the project's landscaping that will be assessed as part of the criteria design for the project.

¹⁰ City of Sacramento, 2018. *Wastewater Services and Rates*. Available: <https://www.cityofsacramento.org/Utilities/Services/Wastewater-Service>. Accessed December 14, 2018.

The project will integrate stormwater BMPs into the project to comply with the low impact development (LID) requirements.

Heating and Cooling

The new buildings are likely to connect to a State-owned and operated central plant (approximately 30,000 sf) located onsite for heating hot water (heating) and chilled water (cooling). Heating hot water will be generated at the central plant from electric-powered boilers, and chilled water is generated by a system of chillers and cooling towers. Both the heating hot water and chilled water will be conveyed to the buildings through a system of underground pipes. The food services area will have an independent HVAC and grease exhaust system.

The chilled water system is anticipated to consist of (3) three 1,300 ton chillers and a single 650-ton chiller for base loading with matching pumps. This configuration accounts for a 1,300-ton chiller with matching pump to support continuous chilled water system operation in the event of chiller failure or maintenance. A total of (4) cooling towers and condenser water pumps shall be provided to match with the chillers and N+1 redundancy.

The boiler system is anticipated to consist of (4) four 6,500 MBH electric boilers with matching circulating pumps. This configuration accounts for a 6,500 MBH condensing boiler with matching pump to support continuous heating hot water system operation in the event of a boiler failure or maintenance.

Energy Use

California Executive Order B-18-12 also requires that State agencies take measures toward achieving Zero Net Energy for 50 percent of the square footage of existing State-owned building area by 2025. New State buildings must be designed and constructed to exceed the applicable version of CCR Title 24, Part 6, by 15 percent or more.¹¹

The project's energy goal is to achieve Zero Net Energy (ZNE). For the purposes of this project, ZNE means that the project will be designed as energy efficiently as feasible and, on a source energy basis, the actual annual delivered energy (i.e. energy consumed onsite) is less than or equal to the onsite renewable exported energy and any renewable energy purchased.¹² The project would be designed to exceed the 2019 Building Energy Efficiency Standards, to meet or exceed U.S. Green Building Council's LEED Silver certification, to meet the high performance Energy Use Index (EUI) design criteria, and to participate in Sacramento Municipal Utility District's (SMUD) renewable energy resource program. The project is targeted to have a low EUI. EUI is a measure of the total energy consumed by building in a period, expressed as British thermal unit (Btu) per gross square foot (calculated by dividing the total energy consumed by a building in one year by the total gross floor area of the building). Energy Star office equipment, energy efficient

¹¹ State of California, 2018. *Green Building Action Plan – For Implementation of Executive Order B-18-12*.

Available: https://www.gov.ca.gov/wp-content/uploads/2017/09/Green_Building_Action_Plan_B.18.12.pdf.

¹² ZNE is defined using Department of Energy (DOE) Renewable Energy Certificate – Zero Energy Building (REC-ZEB) definition. *Source energy is the site energy including the generation and distribution inefficiency factors.

computer monitors, and LED (light-emitting diode) lighting would need to be used throughout the building to achieve the energy goals. Electrical metering and control systems would be installed to control and monitor electrical loads on a per system basis (e.g., lighting, mechanical) and on a per floor basis.

Gas service is provided by Pacific Gas and Electric. There is an existing 4-inch natural gas main located within the Richards Boulevard right-of-way. The project does not include any natural gas uses.

Electrical Service and Backup Power

Electrical service to the site is provided from SMUD. There will be no onsite solar or renewable generation. However, 100 percent of the project's energy will be provided through renewable sources through the participation in SMUD's Greenergy program.

There is an existing SMUD vault along Richards Boulevard that served the current printing plant to be demolished but SMUD has noted this vault does not have the capacity to serve the new buildings. SMUD has a project underway that will install new 21kV feeders on North 7th Street. The existing SMUD vault will be demolished and this project will extend the electric infrastructure from a new SMUD vault with new onsite underground electric utility service distribution to serve various buildings. It is anticipated each building as well as each commercial retail tenant on complex will be individually metered by SMUD.

The service voltage for the midrise offices will be 480/277V, pad mounted and/or alcove will be provided for the utility service transformer. For the high-rise office and the central plant building, medium voltage service will likely be required as the loading will exceed the maximum capacity of 480/277V service allowed by SMUD.

Onsite diesel generators will be provided for emergency power and to backup critical equipment or operation in complex in the event of a utility power outage. It is anticipated the generators will be located in the central plant building and the central plant emergency power system will serve as a central backup power source for all the buildings in complex via onsite underground concrete encased conduits. Each building will be provided with its own transfer switches and emergency distribution based on its programmed needs (life-safety, legally-required standby and optional standby).

The central backup power system in central plant is anticipated to consist of two (2) 1000kW diesel generator sets plus space and infrastructure provided for a portable generator connection. The generators will be operated in parallel and connected to a central paralleling and distribution switchboard. Dedicated circuit/feeder will be provided for each transfer switch in various buildings. A 500kW resistive load bank will be provided for periodical testing. The generators will be tested monthly for at least 30 minutes per NFPA 110. The entire backup power system will also be tested yearly for an approximately 2 hours.

Telecommunications

Robust telecommunications infrastructure will be provided to the site, serving the State, the facility and its agencies for the ever-changing technology requirements.

It is anticipated that diverse and redundant pathways, physically separated and resilient, are provided to the site to provide telecommunications service private third-party commercial providers and the State's private fiber optic network. It is anticipated these diverse pathways shall enter the site from both Richards Boulevard and North 7th Street or North B Street, and terminate to a common demarcation point, or Minimum Point of Entry, on the site.

2.5.8 Transportation, Transit, and Parking

Transportation/Access

At least two points of primary vehicular access to the site will be available—one would be located at the northwest corner of the site along Richards Boulevard and the other would be mid-block along North 7th Street. Secondary and/or emergency vehicle access could be provided at additional locations along Richards Boulevard or North 7th Street or at North B Street.

The project site may include a pedestrian/bicycle path traversing west to east through the center of the site. DGS does not intend to provide a public motor vehicle right-of-way through the site.

Transit

Transit availability at State office buildings is required by Government Code Sections 15808.1 and 14660, and Health and Safety Code Section 50093.5, which mandate that State office facilities with more than 200 employees or which directly serve the public be located within a "public transit corridor." This is defined in Health and Safety Code Section 50093.5 as the area:

within one-quarter mile of a route on which the level of service is at or above the average for the transit system as a whole, according to the transit operator serving the area, and on which regularly scheduled public mass transit service stops are located, or within one-quarter mile of an existing or planned public mass transit guideway or busway station, or within one-quarter mile of a multimodal transportation terminal serving public mass transit operations. Level of service, unless otherwise defined by the transit operator, means the frequency of headways and the number of vehicles per day.

The project site is located directly across from the Sacramento Regional Transit Township 9 light rail station and there are also several bus stops for several different routes on the same block as the project site.

Parking

The project would include up to 1,420 parking spaces, which is approximately one parking space for every 1,000 square feet. Approximately 1,000 parking spaces would be provided within a

garage. The remaining parking spaces would be located in a surface parking lot. Electric vehicle charging stations will be available.

2.5.9 Construction Schedule

Project construction is anticipated to begin as early as March 2020. Completion of construction and tenant occupancy is anticipated sometime in 2024. The proposed phasing of site preparation and construction is as follows:

- site preparation,
- grading,
- excavation/shoring,
- utilities installation,
- building construction,
- architectural coating, and
- paving and landscaping.

The construction labor force would fluctuate depending on the phase of work. Building construction would range from approximately 20 workers during initial phases and up to approximately 700 workers during the peak of construction.

2.5.10 Construction Methods/Equipment

Construction equipment anticipated to be used throughout the various phases of demolition, excavation, and construction includes the following:

- rubber tired or track dozer,
- tractors/loaders/backhoes,
- excavators,
- graders,
- scrapers
- cranes,
- forklifts,
- pile drivers,
- generator sets,
- welders,
- pavers,
- paving equipment,
- rollers, and
- and air compressors.

Where feasible and available, diesel construction equipment will be powered by Tier 3 or Tier 4 engines as designated by the California Air Resources Board and the U.S. Environmental Protection Agency. In addition, if available for onsite delivery, diesel construction equipment will be powered with renewable diesel fuel that is compliant with California's Low Carbon Fuel Standards and certified as renewable by the California Air Resources Board Executive Officer. The design-build team will be encouraged to use electric forklifts inside the building to minimize use of building system ventilation and lighting outside of work hours and to promote to construction staff the use of public transit and carpooling.

Project construction would require approximately 4,782 total haul trips for all phases of construction and would generate approximately 110,000 cubic yards of solid waste. Construction activities would result in temporary intrusions into the adjacent roadways, including temporary lane closures. Temporary traffic controls would be coordinated with the City. Any affected traffic lights, roadway signs, and striping would be rebuilt or replaced in coordination with the City.

Deep piles may be part of the building foundations. The performance criteria would not prescribe a particular method for pile installation (e.g., driven piles vs. auger-cast piles). Therefore, to ensure a comprehensive evaluation of potential environmental effects, this EIR evaluates the potential for pile driving to be used as a construction method. During excavation, it is anticipated that dewatering will be necessary. The treatment and disposal of any water removed from the excavation would meet CVRWQCB requirements.

Although not anticipated, it is possible that periods of nighttime construction may be needed. A distinction is made between nighttime construction indoors, within the building after walls and windows are in place, and outdoor construction activities that are not enclosed by the partially completed building. Indoor construction activities, such as installing wiring, drywall, and carpet, would be permitted during nighttime hours. However, the selected design-build team would only be permitted to conduct outdoor construction during the nighttime hours if there are no other reasonable options. For example, some foundation designs require that once the pouring of concrete begins, the pour must continue without pauses until complete. In some instances, such a concrete pour may take 20 or more hours, requiring work to occur during the nighttime hours. It is unknown at this time if the final building design will have any elements that require outdoor nighttime construction. Therefore, to ensure a comprehensive evaluation of potential environmental effects, this EIR assumes the potential for limited outdoor nighttime construction activity.

2.6 Responsible and Trustee Agencies

DGS is the lead agency responsible for approving and carrying out the project and for ensuring that the requirements of CEQA have been met. After the EIR public-review process is complete, the Director of DGS will determine whether to certify the EIR (see State CEQA Guidelines Section 15090) and approve the project.

A trustee agency is a State agency that has jurisdiction by law over natural resources that are held in trust for the people of the State of California. The only trustee agency that has jurisdiction over resources potentially affected by the project is the California Department of Fish and Wildlife (CDFW).

Responsible agencies are public agencies, other than the lead agency, that have discretionary authority for reviewing, carrying out, or approving elements of a project. Responsible agencies should participate in the lead agency's CEQA process, review the lead agency's CEQA document, and use the document when making a decision on project elements. For example, the City of Sacramento will use this EIR for discretionary actions such as sidewalk, roadway, or alley encroachment permits and permits for connections to City-operated utilities. Agencies that may have responsibility for, or jurisdiction over, the implementation of elements of the project include the following:

2.6.1 State Agencies

- California Air Resources Board (CARB)
- California Highway Patrol, Capitol Protection Section (CPS)
- California Department of Fish and Wildlife (CDFW)
- California State Parks, Office of Historic Preservation (OHP)
- Central Valley Regional Water Quality Control Board (CVRWQCB) (Region 5)

2.6.2 Regional and Local Agencies

- City of Sacramento
- Sacramento Metropolitan Air Quality Management District (SMAQMD)

2.7 Project Approvals and Entitlements

The following list identifies permits and other approval actions likely to be required before implementation of individual elements of the project.

2.7.1 State Actions/Permits

CVRWQCB (Region 5): National Pollutant Discharge Elimination System construction stormwater permit (Notice of Intent to proceed under General Construction Permit), discharge permit for stormwater, general order for dewatering, recycled water permit.

2.7.2 Regional and Local Actions/Permits

- City of Sacramento: Sidewalk, roadway, and alley encroachment permits, permits for connections to City-operated utilities.
- SMAQMD: Permit to construct and permit to operate.

CHAPTER 3

Environmental Setting, Impacts, and Mitigation Measures

3.0 Introduction to the Analysis

This draft environmental impact report (Draft EIR) evaluates and discloses the environmental impacts associated with the Richards Boulevard Office Complex (RBOC) project (or project), in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000, et seq.) and the State CEQA Guidelines (California Code of Regulation, Title 14, Chapter 3, Section 1500, et seq.). Sections 3.1 through 3.12 present a discussion of regulatory background, existing and baseline conditions, environmental impacts associated with construction and operation of the project, mitigation measures to reduce the level of impact (including cumulative impacts), and residual level of significance (i.e., after application of mitigation, including impacts that would remain significant and unavoidable after application of all feasible mitigation measures). Issues evaluated in these sections consist of the environmental topics identified for review in the notice of preparation (NOP) prepared for the project (see **Appendix A** of this EIR).

This EIR evaluates the physical environmental effects that would be potentially affected by the implementation of the project. Some environmental effects that are typically considered under CEQA would not be affected by the project and, pursuant to CEQA, are not further analyzed in this EIR. A discussion of those issues that were not further analyzed in the EIR can be found in Chapter 1, Introduction.

3.0.1 Definitions of Terms Used in the EIR

This EIR uses a number of terms that have specific meaning under CEQA. Among the most important of the terms used in the EIR are those that refer to the significance of environmental impacts. The following terms are used to describe environmental effects of the project:

- **Baseline:** The environmental setting by which a lead agency determines whether an impact is significant, as described in CEQA Guidelines Section 15125, Environmental Setting. For the RBOC project, the baseline condition is established as implementation of the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project), resulting in a project site that is devoid of structures. Similarly, mitigation measures, if any, required by the Demolition Project would have been fulfilled.

- **Significance Criteria:** A set of criteria used by the lead agency to determine at what level or threshold an impact would be considered significant. Standards of Significance used in this EIR include those standards provided by the City of Sacramento. In determining the level of significance, the analysis assumes that the projects would comply with relevant federal, State, and local regulations and ordinances.
- **Significant Impact:** A project impact is considered significant if the projects would result in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project-related physical change compared to specified significance criteria. A significant impact is defined as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.”¹
- **Potentially Significant Impact:** A potentially significant impact is identified where the projects may cause a substantial adverse change in the environment, depending on certain unknown conditions related to the project or the affected environment. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.
- **Less-than-Significant Impact:** A project impact is considered less than significant when the physical change caused by the projects would not exceed the applicable significance criterion.
- **Significant and Unavoidable Impact:** A project impact is considered significant and unavoidable if it would result in a substantial adverse physical change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level.
- **Cumulative Impact:** Under CEQA, a cumulative impact refers to “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Like any other significant impact, a significant cumulative impact is one in which the cumulative adverse physical change would exceed the applicable significance criterion and the projects’ contribution is “cumulatively considerable.”
- **Mitigation Measure:** A mitigation measure is an action that could be taken that would avoid or reduce the magnitude of a significant impact. Section 15370 of the State CEQA Guidelines defines mitigation as:
 - a. Avoiding the impact altogether by not taking a certain action or parts of an action;
 - b. Minimizing impacts by limiting the degree of magnitude of the action and its implementation;
 - c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
 - d. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
 - e. Compensating for the impact by replacing or providing substitute resources or environments.

¹ State CEQA Guidelines, section 15382.

3.0.2 Section Format

Chapter 3 is divided into technical sections (e.g., Section 3.1, Air Quality) that present for each environmental resource issue area the physical environmental setting, regulatory setting, significance criteria, methodology and assumptions, and impacts on the environment. Where required, potentially feasible mitigation measures are identified to lessen or avoid significant impacts. Each section includes an analysis of project-specific and cumulative impacts for each issue area.

The technical environmental sections each begin with a description of the project's **environmental setting** and the **regulatory setting** as it pertains to a particular issue. The environmental setting provides a point of reference for assessing the environmental impacts of the project and alternatives. The environmental setting discussion addresses the existing conditions that exist at the time of the NOP as well as addressing the baseline conditions prior to implementation of the project. This setting establishes the baseline by which the project and alternatives are measured for environmental impacts. The regulatory setting presents relevant information about federal, state, regional, and/or local laws, regulations, plans or policies that pertain to the environmental resources addressed in each section.

Next, each section presents **significance criteria**, which identify the standards used by the City of Sacramento to determine the significance of effects of the project. The significance criteria used for this analysis were derived from the City of Sacramento's established significance standards, which, in turn, reflect policies of the 2035 General Plan, as well as other criteria applicable under CEQA, including thresholds established by trustee and responsible agencies.

A **methods and assumptions** description in each section presents the analytical methods and key assumptions used in the evaluation of effects of the project, and is followed by an **impacts and mitigation** discussion. The impact and mitigation portion of each section includes impact statements, prefaced by a number in bold-faced type. An explanation of each impact is followed by an analysis of its significance. The subsection concludes with a statement that the impact, following implementation of the mitigation measure(s) and/or the continuation of existing policies and regulations, would be reduced to a **less-than-significant** level or would remain **significant and unavoidable**.

The analysis of environmental impacts considers both the construction and operational phases associated with implementation of the project. As required by section 15126.2(a) of the State CEQA Guidelines, direct, indirect, short-term, long-term, onsite, and/or off-site impacts are addressed, as appropriate, for the environmental issue area being analyzed. Under CEQA, economic or social changes by themselves are not considered to be significant impacts, but may be considered in linking the implementation of a project to a physical environmental change, or in determining whether an impact is significant.

Where enforcement exists and compliance can be reasonably anticipated, this EIR assumes that the project would meet the requirements of applicable laws and other regulations.

Mitigation measures pertinent to each individual impact, if available, appear after the impact discussion section. The magnitude of reduction of an impact and the potential effect of that reduction in magnitude on the significance of the impact is also disclosed. An example of the format is shown below.

Impacts and Mitigation Measures

Impact 3.X-1: Impact Statement.

A discussion of the potential impact of the project on the resource is provided in paragraph form. To identify impacts that may be site- or project element-specific, where appropriate, the discussion differentiates between construction effects and operational effects. A statement of the level of significance before application of any mitigation measures is provided in **bold**.

Mitigation Measure 3.X-1:

Recommended mitigation measure numbered in consecutive order.

OR

Mitigation Measure

None required.

Where appropriate, one or more potentially feasible mitigation measures are described. If necessary, a statement of the degree to which the available mitigation measure(s) would reduce the significance of the impact is included in **bold**.

Cumulative Impacts

An analysis of cumulative impacts follows the project-specific impacts and mitigation measures evaluation in each section. As defined in State CEQA Guidelines section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project(s) evaluated in the EIR together with other past, present and reasonably foreseeable projects causing related impacts.²

An introductory explanation that defines the cumulative analysis methodology and the cumulative context being analyzed for respective sections (e.g., the City of Sacramento, SACOG projections, River District Design Review Area, the Sacramento Valley Air Basin, etc.) is included at the beginning of the cumulative impact analysis in each technical section. In some instances, a project-specific impact may be considered less than significant, but when considered in conjunction with other cumulative projects or in combination with regional growth projections, may be considered significant or potentially significant.

² State CEQA Guidelines section 15355.

As noted above, where a cumulative impact is significant when compared to existing or baseline conditions, the analysis must address whether the project's contribution to the significant cumulative impact is "considerable." If the contribution of the project is considerable, then the EIR must identify potentially feasible measures that could avoid or reduce the magnitude of the project's contribution to a less-than-considerable level. If the project's contribution is not considerable, it is considered less than significant and no mitigation of the project contribution is required.³ The cumulative impacts analysis is formatted the same as the project-specific impacts, as shown above.

³ State CEQA Guidelines section 15130(a)(3).

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3.1 Air Quality

This section assesses the potential effects on air quality as a result of constructing the Richards Boulevard Office Complex (RBOC) project (or project). The section includes a description of the regional and local air quality; relevant baseline information, including anticipated future conditions after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete; and the federal, state, and regional regulations that protect air quality and the regulatory agencies that enforce these standards. A description of the potential impacts resulting from the project is also provided, as well as the identification of feasible mitigation (where applicable) to avoid or lessen the impacts.

No comments were received on the notice of preparation related to air quality.

The primary sources of data referenced for this section include:

- the City of Sacramento 2035 General Plan,¹
- the City of Sacramento 2035 General Plan Master Environmental Impact Report,²
- information provided by the traffic consultant (see Appendix G of this Draft EIR), and
- the Sacramento Metropolitan Air Quality Management District (SMAQMD) CEQA Guide to Air Quality Assessment in Sacramento County.³

3.1.1 Environmental Setting

Air quality is affected by the emissions rate, type, and location of pollutant emissions and the associated meteorological conditions that influence pollutant movement and dispersal. Wind speed, wind direction, barometric pressure and air temperature combined with geographic features such as mountains and valleys determine how air pollutant emissions affect local air quality.

Climate and Topography

Sacramento lies within the Sacramento Valley Air Basin (SVAB). The topographic features giving shape to the SVAB are the Coast Range to the west, the Sierra Nevada to the east, and the Cascade Range to the north. These mountain ranges both channel winds through the SVAB, and also act as barriers that inhibit the dispersion of pollutant emissions. The SVAB, including Sacramento, is characterized by a Mediterranean climate that includes mild, rainy winter weather from November through March and warm to hot, dry weather from May through September. During the summer, Sacramento Valley has an average high temperature of 92 degrees Fahrenheit (°F)

¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

² City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report* (SCH No. 2012122006). Certified March 3, 2015.

³ Sacramento Metropolitan Air Quality Management District, 2009. *Guide to Air Quality Assessment in Sacramento County*. December 2009. Available: www.airquality.org/businesses/ceqa-land-use-planning/ceqa-guidance-tools. Accessed January 4, 2019.

and an average low temperature of 58°F. In the winter, the average high temperature is 58°F, and the average low is 40°F. The average annual rainfall is approximately 20 inches.

The prevailing wind pattern in the Sacramento Valley is the full sea breeze, commonly referred to as Delta breezes. These cool winds originate from the Pacific Ocean and flow through the Carquinez Straits, a sea-level gap in the Coast Range that channels the winds out of the west into the SVAB. In the winter (December to February), northerly winds predominate. Wind directions in the Sacramento Valley are influenced by the predominant wind flow pattern associated with each season. During about half the days from July through September, however, a phenomenon called the “Schultz Eddy,” a large isotropic vertical-axis eddy on the north side of the Carquinez Straits, prevents the Delta breezes from transporting pollutants north and out of the Sacramento Valley and causes a circling effect back to the south, all of which can trap air pollutants in the Sacramento Valley. This phenomenon’s effect exacerbates the pollution levels in the area, and increases the likelihood of violations of State and federal air quality standards.

The vertical and horizontal movement of air is an important atmospheric component involved in the dispersion and subsequent dilution of air pollutants. Without movement, air pollutants can collect and concentrate in a single area, increasing the associated health hazards. For instance, in the winter, persistent inversions occur frequently in the SVAB, a phenomenon in which air temperature increases with height and a layer of cool air becomes trapped beneath warmer air, thus restricting the vertical dispersion of pollutants released near ground level. This is especially common during autumn and early winter.

Air Pollutants of Concern

Air pollutants of concern within the SVAB include criteria air pollutants and toxic air contaminants (TACs).

Criteria Air Pollutants

Criteria air pollutants are a group of six common air pollutants for which the U.S. Environmental Protection Agency (US EPA) has set ambient air quality standards (see Section 3.1.2, Regulatory Setting). These pollutants include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM) in size fractions of 10 microns or less in diameter (PM₁₀) and 2.5 microns or less in diameter (PM_{2.5}), and lead. Most of the criteria pollutants are emitted as primary pollutants. Ozone, however, is a secondary pollutant that is formed in the atmosphere by chemical reactions between nitrogen oxides (NO_x), reactive organic gases (ROG) in sunlight. In addition to the criteria air pollutants identified by the US EPA, California adds four state criteria air pollutants (visibility reducing particulates, sulfates, hydrogen sulfide, and vinyl chloride).

Criteria air pollutants of concern in the SVAB include O₃, CO, PM₁₀, and PM_{2.5}, as concentrations of these pollutants are above state and/or national ambient air quality standards (see Section 3.1.2). Sulfur dioxide, lead, visibility reducing particulates, sulfates, hydrogen sulfide, and vinyl chloride concentrations are well below state and/or national ambient air quality standards and are

not air pollutants of concern in the SVAB. **Table 3.1-1** lists the health effects associated with the criteria air pollutants of concern.

TABLE 3.1-1
HEALTH AND ENVIRONMENTAL EFFECTS OF CRITERIA AIR POLLUTANTS OF CONCERN

Pollutant	Adverse Effects
Ozone	<ul style="list-style-type: none"> • People most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers. In addition, people with certain genetic characteristics, and people with reduced intake of certain nutrients, such as vitamins C and E, are at greater risk from ozone exposure. • Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and airway inflammation. It also can reduce lung function and harm lung tissue. Ozone can worsen bronchitis, emphysema, and asthma, leading to increased medical care. • Ozone affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges and wilderness areas. In particular, ozone harms sensitive vegetation during the growing season.
Carbon Monoxide	<ul style="list-style-type: none"> • Breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the blood stream to critical organs like the heart and brain. • At very high levels, which are possible indoors or in other enclosed environments, CO can cause dizziness, confusion, unconsciousness and death. • Very high levels of CO are not likely to occur outdoors. However, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability for getting oxygenated blood to their hearts in situations where the heart needs more oxygen than usual. They are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as angina.
Particulate Matter	<ul style="list-style-type: none"> • Particulate matter contains microscopic solids or liquid droplets that are so small that they can be inhaled and cause serious health problems. Particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into your lungs, and some may even enter the bloodstream. Of these, particles less than 2.5 micrometers in diameter, also known as fine particles or PM_{2.5}, pose the greatest risk to health. • Fine particles (PM_{2.5}) are the main cause of reduced visibility (haze) in parts of the United States, including many national parks and wilderness areas.
Nitrogen Dioxide	<ul style="list-style-type: none"> • Breathing air with a high concentration of NO₂ can irritate airways in the human respiratory system. Such exposures over short periods can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms. Longer exposures to elevated concentrations of NO₂ may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly are generally at greater risk for the health effects of NO₂. • NO₂, along with other oxides of nitrogen (NO_x), reacts with other chemicals in the air to form both particulate matter and ozone. Both of these are also harmful when inhaled due to effects on the respiratory system.

SOURCES: U.S. Environmental Protection Agency (US EPA), 2018. Ozone Basics. Available: <https://www.epa.gov/ozone-pollution/ozone-basics#effects>. Accessed January 4, 2019.
 US EPA, 2016. Basic Information about Carbon Monoxide (CO) Outdoor Air Pollution. Available: <https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution#Effects>. Accessed January 4, 2019.
 US EPA, 2018. Particulate Matter (PM) Basics. Available: <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#effects>. Accessed January 4, 2019.
 US EPA, 2016. Basic Information about NO₂. Available: <https://www.epa.gov/no2-pollution/basic-information-about-no2#Effects>. Accessed January 4, 2019.

Ground-Level Ozone

As discussed above, ground-level O₃ is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving the O₃ precursors ROG, also referred to as volatile organic compounds (VOC) by some regulating agencies, oxides of nitrogen

(NO_x) and sunlight. The main sources of ROG within the SVAB are the evaporation of solvents, paints, and fuels; the main sources of NO_x are combustion processes (including motor vehicle engines). Ozone is referred to as a regional air pollutant because its precursors are transported and diffused over a large region. Ozone causes eye irritation, airway constriction, and shortness of breath, and can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

Carbon Monoxide

Carbon monoxide (CO) is an odorless, colorless gas usually formed as the result of the incomplete combustion of fuels. The single largest source of CO is motor vehicle engines; the highest emissions occur during low travel speeds, stop-and-go driving, cold starts, and hard acceleration. Exposure of humans to high concentrations of CO reduces the oxygen-carrying capacity of the blood and can cause headaches, nausea, dizziness, and fatigue, impaired central nervous system function, and angina (chest pain) in persons with serious heart disease. Very high concentrations of CO can be fatal.

Particulate Matter

Particulate matter (PM) is classified by particle size, where PM₁₀ consists of PM that is 10 microns or less in diameter and PM_{2.5} consists of the subset of PM₁₀ that is 2.5 microns or less in diameter (a micron is one-millionth of a meter). PM₁₀ and PM_{2.5} represent fractions of particulate matter that can be inhaled into air passages and the lungs and can cause adverse health effects. Some sources of particulate matter, such as wood burning in fireplaces, demolition, and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates also can damage materials and reduce visibility.

Large dust particles (diameter greater than 10 microns) settle out rapidly and are easily filtered by human breathing passages. This large dust is of more concern as a soiling nuisance rather than a health hazard. The remaining fine particulate matter, PM₁₀ and PM_{2.5}, are a health concern particularly at levels above the federal and state ambient air quality standards. PM_{2.5} (including diesel exhaust particles) has greater effects on health because these particles are small enough to be able to penetrate to the deepest parts of the lungs and will adversely impact lung tissue.

Nitrogen Dioxide

Nitrogen dioxide (NO₂) is a reddish brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO₂. Aside from its contribution to ozone formation, NO₂ can increase the risk of acute and chronic respiratory disease and reduce visibility. NO₂ may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels.

Other Criteria Air Pollutants

Other criteria air pollutants include SO₂ and lead, which are not air pollutants of concern in the SVAB. SO₂ is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. SO₂ is also a precursor to the formation of particulate matter, atmospheric sulfate, and atmospheric sulfuric acid formation that could precipitate downwind as acid rain. The maximum SO₂ concentrations recorded in the project vicinity are well below federal and state standards.

Leaded gasoline (phased out in the United States beginning in 1973), lead based paint (on older houses and cars), smelters (metal refineries), and manufacture of lead storage batteries have been the primary sources of lead released into the atmosphere. Lead has a range of adverse neurotoxic health effects, which puts children at higher risk. Some lead-containing chemicals cause cancer in animals. Lead levels in the air have decreased substantially since leaded gasoline was eliminated. Due to the decrease in sources, ambient lead concentrations are only monitored on an as-warranted, site-specific basis in California.

Toxic Air Contaminants

Toxic air contaminants (TACs) are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances and may be emitted from a variety of common sources including gasoline stations, automobiles, diesel engines, dry cleaners, industrial operations, and painting operations. The State of California Office of Environmental and Human Health Hazard Assessment (OEHHA) performs epidemiological research related to TACs of concern including diesel particulate matter (DPM) and asbestos (<https://oehha.ca.gov/air/general-info/toxic-air-contaminant-list-staff-reportsexecutive-summaries>).

Diesel Particulate Matter

The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Mobile sources such as trucks and buses are among the primary sources of diesel emissions, and concentrations of DPM are higher near heavily traveled highways and rail lines with diesel locomotive operations.

CARB identified DPM as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans. There are over 40 known carcinogens typically present in DPM. It is estimated that about 70 percent of total known cancer risk related to air toxics in California is attributable to DPM. More than 90 percent of DPM is less than 1 µm in diameter, and thus is a subset of PM_{2.5}; DPM also contributes to the same non-cancer health effects as PM_{2.5} exposure (see Table 3.1-1).

Regulation of diesel engines and fuels have decreased DPM emissions levels by 68 percent since 1990. Furthermore, CARB estimates that emissions of DPM in 2035 will be less than half those in 2010, even with increasing vehicle miles traveled (VMT).⁴ Nonetheless, based on 2012

⁴ California Air Resources Board, 2016. Overview: Diesel Exhaust and Health. Available: <https://www.arb.ca.gov/research/diesel/diesel-health.htm>. Accessed January 15, 2019.

estimates of statewide exposure, DPM is estimated to increase statewide cancer risk by 520 cancers per million residents exposed over a lifetime.

Asbestos

Asbestos is a fibrous mineral and used as a processed component of building materials. Because asbestos has been proven to cause serious adverse health effects, including asbestosis and lung cancer, it is strictly regulated based on its natural widespread occurrence and its use as a building material. When building materials containing asbestos are disturbed, asbestos fibers may be released. Asbestos is also naturally occurring in ultramafic rock (a rock type commonly found in California); its occurrence at the project site has a low probability.⁵

Existing Conditions

The project site covers approximately 17.3 acres on two parcels. The parcels occupy the entire block between Richards Boulevard on the north, North B Street to the south, North 7th Street on the east, and commercial and vacant uses on the west. The lot currently houses the Office of State Publishing (OSP) which consist of the State printing plant, a textbook warehouse, associated parking and loading areas, a railroad spur, and a water pump. Access is available from both Richards Boulevard and North 7th Street. An approximately 6-foot latticed chain-link fence, topped with barbed wire, separates the OSP and Facilities Management Division (FMD) facilities. The FMD portion of the existing site contains four greenhouses, a large shade structure, the workshop building, unpaved and paved material storage laydown areas, and a small parking area that is accessed from North B Street.

Existing Ambient Air Quality

Nearby ambient air quality monitoring stations that are representative of the air quality at the project site are located in Sacramento at 1309 T Street and at a monitor located on Bercut Drive. The Bercut Drive monitor provides the nearest representative measurement of NO₂ and CO, approximately 0.6 miles west of the project site. The T Street monitor measures and records concentrations of O₃, PM₁₀, and PM_{2.5}, and is located approximately 1.8 miles south of the project site. **Table 3.1-2** presents a three-year summary of air pollutant concentration data collected at these monitoring stations for O₃, PM₁₀, PM_{2.5}, NO₂, and CO, as well as the number of days the applicable standards were exceeded during the given year.

As described in Table 3.1-2, O₃ levels in the project vicinity have resulted in numerous violations of ambient air quality standards between 2015 and 2017. Concentrations of O₃ in the project vicinity did not exceed the 1-hour state standard, but exceeded the 8-hour state and national standards 11 times and 10 times, respectively, during the 3-year study period.

⁵ California Department of Conservation, 2000. A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos. August, 2000. Available: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/ofr_2000-019.pdf. Accessed January 15, 2019.

**TABLE 3.1-2
SUMMARY OF AIR QUALITY MONITORING DATA (2015–2017)**

Pollutant	National/State Standard	2015	2016	2017
Ozone				
Maximum 1-hour concentration, ppm	0.09 ^a	0.092	0.094	0.107
Number of days above State 1-Hour standard		0	0	0
Maximum 8-hour concentration, ppm	0.070 / 0.070	0.076	0.074	0.077
Number of days above National 8-Hour standard		4	3	3
Number of days above State 8-Hour standard		4	3	3
Nitrogen Dioxide (NO₂)				
Annual average concentration, ppm	0.053 / 0.030	0.018	0.013	0.013
Maximum 1-Hour concentration, ppm	0.100 / 0.18	0.053	0.052	0.061
Number of days above National 1-Hour standard		0	0	0
Number of days above State 1-Hour standard		0	0	0
Respirable Particulate Matter (PM₁₀)				
Annual average concentration, µg/m ³	20 ^a	22.6	19.1	23.8
Maximum 24-Hour concentration (national/state), µg/m ³	150 / 50	57.8/ 59.1	50.3/ 51.4	149.9/ 150.3
Estimated number of days above National 24-Hour standard ^c		0	0	0
Estimated number of days above State 24-Hour standard ^c		NA	1.1	NA
Fine Particulate Matter (PM_{2.5})				
Annual average concentration, µg/m ³	12.0 / 12	9.5	7.6	9.1
Maximum 24-Hour concentration, µg/m ³	35 ^b	36.3	24.4	44.5
Estimated number of days above National 24-Hour standard ^c		3	0	6.1
Carbon Monoxide (CO)				
Maximum 8-Hour concentration, ppm	9 / 9.0	0.9	1.3	1.2
Number of days above National or State 8-hour standard		0	0	0
Maximum 1-Hour concentration, ppm	35 / 20	1.3	1.6	1.9
Number of days above National or State 1-hour standard		0	0	0

NOTES:

Number of days exceeded is for all days in a given year, except for particulate matter. PM₁₀ and PM_{2.5} are monitored every six days. Ozone, NO₂, PM₁₀, and PM_{2.5} monitoring data from T Street Station (CARB 2017). Carbon monoxide monitoring data from Sacramento-Del Manor Station (US EPA 2017). The CARB and US EPA use different methods to calculate the emissions for certain criteria air pollutants for comparisons to the state and national standards.

Bold values are in excess of applicable standard.

ppm = parts per million; µg/m³ = micrograms per cubic meter; NA = No data or insufficient data.

a. State standard, not to be exceeded.

b. National standard, not to be exceeded.

c. Particulate matter sampling schedule of one out of every six days, for a total of approximately 60 samples per year. Estimated days exceeded mathematically estimates of how many days concentrations would have been greater than the level of the standard had each day been monitored.

SOURCES: California Air Resources Board (CARB), 2017. *Summaries of Air Quality Data, 2015-2017*. Available:

www.arb.ca.gov/adam/index.html. Accessed December 20, 2018;

U.S. Environmental Protection Agency (US EPA), 2017. AirData. Available: <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=5f239fd3e72f424f98ef3d5def547eb5>. Accessed December 20, 2018.

Ambient air quality monitoring data for PM₁₀ in the project area suggests that the 24-hour standard was exceeded at least once in 2014 and at least once in 2015; however, the number of exceedance days is not available for those years. Regarding PM_{2.5}, the study area was estimated to have exceeded the 24-hour national standard approximately three times in 2015. In 2016, both the PM₁₀ 24-hour standards and the PM_{2.5} 24-hour standard were not exceeded. There were no exceedances of the annual average standards for PM₁₀ or PM_{2.5} recorded during the 3-year study period.

There have been no recorded exceedances of the state and national 1-hour and annual NO₂ standards and the state and national 1-hour and 8-hour CO standards during the 3-year study period.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. The result of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The ability to detect odors varies considerably among the population and overall is subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. Known as odor fatigue, a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receptors.

Sensitive Receptors

Air quality affects individuals and groups within the population in different ways, and some groups are more sensitive to adverse health effects caused by exposure to air pollutants than others. Population subgroups sensitive to the health effects of air pollutants include the elderly and the young, due to variations in breathing rates and body mass. Other sensitive groups include those with higher rates of respiratory disease such as asthma and chronic obstructive pulmonary disease, and with other environmental or occupational health exposures (e.g., indoor air quality) that affect cardiovascular or respiratory diseases.

Land uses such as schools, children's day care centers, hospitals, and nursing and convalescent homes are considered to be the most sensitive to poor air quality because the population groups associated with these uses have increased sensitivity to air pollution. Parks and playgrounds are considered moderately sensitive to poor air quality because persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality due to increased breathing rates; however, exposure times are generally much shorter in parks and playgrounds than in residential locations and schools, which typically reduces exposure time and the overall health risk associated with air pollutants. Residential areas are considered more sensitive to air quality conditions compared to commercial and industrial areas because people generally spend longer periods of time at their residences, with associated greater exposure to ambient air quality

conditions. Workers are not considered sensitive receptors because all employers are required to follow regulations set forth by the Occupation Safety and Health Administration (OSHA) to ensure the health and well-being of their employees.

The nearest sensitive receptors from the RBOC project site are residents of the apartment complex on Cannery Avenue west of North 7th Street. Capitol Park is located approximately 825 feet north of the project site. There are several additional single family residences distanced approximately 1,280 feet west of the project site located on the 300th block of Bannon Street. The nearest school is Smythe Academy, approximately 2,250 feet northeast of the project site.

Baseline Conditions

The approved Demolition Project will result in relocation of State printing plant operations, and the demolition of all buildings and structures, aside from a small pump house located on the northwest corner of the site. Air emissions associated with building demolition, excavation and removal of infrastructure and soil, and grading and site preparation have already been analyzed as part of the Demolition Project and disclosed in the State Printing Plant and Textbook Warehouse Relocation and Demolition Project IS/MND. For this analysis, baseline conditions consist of a vacant project site, devoid of structures or facilities. While the pump house will continue to be electrified until the project construction begins, its effect on the baseline condition is negligible.

3.1.2 Regulatory Setting

Federal

Criteria Air Pollutants

US EPA is required by the federal Clean Air Act (CAA) to identify and establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The federal CAA identifies two types of NAAQS: primary and secondary. Primary standards provide public health protection, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

The US EPA has set NAAQS for six principal pollutants, called criteria air pollutants. These criteria air pollutants include O₃, NO₂, SO₂, CO, PM, and lead. The original indicator for PM was total suspended particulates; currently the standards are in terms of PM₁₀ and PM_{2.5}. **Table 3.1-3** presents the current NAAQS (and state ambient air quality standards), while Table 3.1-1 provides a brief discussion of the related health effects and principal sources for each pollutant.

**TABLE 3.1-3
 STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS AND MAJOR SOURCES**

Pollutant	Averaging Time	State Standard	National Standard	Major Pollutant Sources
Ozone	1 hour	0.09 ppm	---	Formed when reactive organic gases (ROG) and nitrogen oxides (NO _x) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial/ industrial mobile equipment.
	8 hour	0.070 ppm	0.070 ppm	
Carbon Monoxide	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hour ¹	9.0 ppm	9 ppm	
Nitrogen Dioxide	1 hour	0.18 ppm	100 ppb	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	Annual Avg.	0.030 ppm	0.053 ppm	
Sulfur Dioxide	1 hour	0.25 ppm	75 ppb	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	3 hour	---	0.5 ppm ²	
	24 hour	0.04 ppm	0.14 ppm	
	Annual Avg.	---	0.030 ppm	
Respirable Particulate Matter (PM ₁₀)	24 hour	50 ug/m ³	150 ug/m ³	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	Annual Avg.	20 ug/m ³	---	
Fine Particulate Matter (PM _{2.5})	24 hour	---	35 ug/m ³	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO _x , sulfur oxides, and organics.
	Annual Avg.	12 ug/m ³	12.0 ug/m ³	
Lead	Monthly Ave.	1.5 ug/m ³	---	Present source: lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	---	1.5 ug/m ³	
Hydrogen Sulfide	1 hour	0.03 ppm	No National Standard	Geothermal power plants, petroleum production and refining
Sulfates	24 hour	25 ug/m ³	No National Standard	Produced by the reaction in the air of SO ₂ .
Visibility Reducing Particles	8 hour	Extinction of 0.23/km; visibility of 10 miles or more	No National Standard	See PM _{2.5} .
Vinyl chloride	24 hour	0.01 ppm	No National Standard	Polyvinyl chloride and vinyl manufacturing.

NOTES:

- 1 A more stringent 8-hour carbon monoxide state standard exists around Lake Tahoe (6 ppm).
- 2 Secondary national standard.

ppb = parts per billion; ppm = parts per million; ug/m³ = micrograms per cubic meter.

SOURCES: California Air Resources Board, 2016. *Ambient Air Quality Standards*. Available: <https://www.arb.ca.gov/research/aaqs/aaqs2.pdf>. Standards last updated May 4, 2016; California Air Resources Board, 2009. *ARB Fact Sheet: Air Pollution Sources, Effects and Control*. Available: www.arb.ca.gov/research/health/fs/fs2/fs2.htm.

The US EPA classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant, based on whether or not the National Ambient Air Quality Standards (NAAQS) had been achieved. The classification is determined by comparing monitoring data with the standards. “Unclassified” is defined by the federal CAA as any area that cannot be classified, on the basis of available information, as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant. Also, an area may be designated attainment with a

maintenance plan (also known as a maintenance area), which means that an area was previously nonattainment for a criteria air pollutant but has since been redesignated as attainment. These areas have demonstrated through modeling they have sufficient controls in place to meet and maintain the NAAQS but still require a plan to ensure they maintain their attainment status. Maintenance Plan areas require an increased level of monitoring in contrast to areas that are designated as Attainment without maintenance requirements.

The Sacramento region’s attainment status for the criteria air pollutants are summarized in **Table 3.1-4** (state designations are also provided). The Sacramento region is considered a federal nonattainment area for O₃ and PM_{2.5} and as an attainment-maintenance area for the federal CO and PM₁₀ standards.

**TABLE 3.1-4
 SACRAMENTO COUNTY ATTAINMENT STATUS**

Pollutant and Averaging Time	Designation/Classification	
	State Standards	Federal Standards
Ozone (1-hour)	Nonattainment	No Federal Standard
Ozone (8-hour)	Nonattainment/Serious	Nonattainment/Severe
Carbon Monoxide	Attainment	Attainment/Maintenance
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Attainment
Respirable Particulate Matter (PM ₁₀)	Nonattainment	Attainment/Maintenance*
Fine Particulate Matter (PM _{2.5})	Attainment	Nonattainment/Moderate
Lead	Attainment	Unclassified/Attainment
Visibility Reducing Particles	Unclassified	No Federal Standard
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Vinyl Chloride	Unclassified	No Federal Standard

NOTES:

California Air Resources Board (CARB) makes area designations for ten criteria pollutants (O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, lead, visibility reducing particles, sulfates, and hydrogen sulfide. CARB does not designate areas according to the vinyl chloride standard.

* Effective October 28, 2013, the US EPA formally re-designated Sacramento County as attainment for the federal PM₁₀ standard.

SOURCE: CARB, 2016. *Area Designation Maps*. Available: www.arb.ca.gov/desig/adm/adm.htm. Accessed January 9, 2019.

The federal CAA requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The SIP is a dynamic document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The US EPA has responsibility to review all state SIPs to determine if they conform to the mandates of the federal CAA and will achieve air quality goals when implemented.

Hazardous Air Pollutants

Federal laws use the term “Hazardous Air Pollutants” (HAPs) to refer to generally the same types of compounds that are referred to as TACs under State law although the lists have differences. Currently, 187 substances are regulated as HAPs. The federal CAA requires the US EPA to identify National Emission Standards for Hazardous Air Pollutants (NESHAPs) to protect public health and welfare. These substances include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals.

State

Criteria Air Pollutants

At the state level, the California Air Resources Board (CARB) oversees California air quality policies and regulations. California had adopted its own air quality standards (California Ambient Air Quality Standards, or CAAQS) as shown in Table 3.1-2. By law the California ambient standards are required to be at least as protective as NAAQS and are often more stringent.

In 1988, California passed the California Clean Air Act (CCAA) (California Health and Safety Code Sections 39600 et seq.), which, like its federal counterpart, called for the designation of areas as attainment or nonattainment, but based on state ambient air quality standards rather than the federal standards. The CCAA requires each air district in which state air quality standards are exceeded to prepare a plan that documents reasonable progress towards attainment. If an air basin (or portion thereof) exceeds the CAAQS for a particular criteria air pollutant, it is considered to be nonattainment of that criteria air pollutant until the area can demonstrate compliance. As indicated in Table 3.1-4, Sacramento County is classified as nonattainment and serious nonattainment for the 8-hour and 1-hour state ozone standards, respectively, and is nonattainment for the 24-hour and annual state PM₁₀ standard and has plans to gain attainment status.

Toxic Air Contaminants

The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807. A total of 243 substances have been designated TACs under California law; they include the 187 (federal) HAPs adopted in accordance with AB 2728. The Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) seeks to identify, quantify, and evaluate risk from air toxics sources.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines. Further regulations of diesel emissions by the CARB include the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Offroad Diesel Vehicle Regulation, and the New Offroad Compression Ignition Diesel Engines and Equipment Program. All of these regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel powered equipment.

In 2004, CARB adopted a measure to limit idling of diesel-fueled commercial motor vehicles. Heavy-duty diesel vehicles with a Gross Vehicle Weight Rating (GVWR) of 10,000 lbs. or heavier are prohibited from idling for more than 5 minutes within California's borders. Exceptions to the rule apply for certain circumstances.

Local

The project is located on State-owned property and would be implemented by the California State Department of General Services (DGS). State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot conflict with these policies and ordinances. Because SMAQMD regulations and thresholds are reasonable for this project and they are described herein and used when appropriate. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

Sacramento Metropolitan Air Quality Management District

SMAQMD is the regional agency, delegated by CARB, responsible for air quality regulation within Sacramento County. SMAQMD regulates air quality through its planning and review activities and has permit authority over most types of stationary emission sources and can require operators of stationary sources to obtain permits, can impose emission limits, set fuel or material specifications, and establish operational limits to reduce air emissions. SMAQMD regulates new or modified stationary sources of Criteria Air Pollutants and TACs.

All areas designated as nonattainment are required to prepare plans showing how the area would meet the air quality standards by its attainment dates. The following are the most recent air quality plans applicable to the area of the project:

- Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan⁶
- SMAQMD's Triennial Report and Air Quality Plan Revision⁷
- PM₁₀ Implementation/Maintenance Plan and Redesignation Request for Sacramento County⁸
- PM_{2.5} Maintenance Plan and Redesignation Request⁹
- 2004 Revision to the California State Implementation Plan for CO¹⁰

⁶ Sacramento Metropolitan Air Quality Management District, 2013. Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions). September 26, 2013. Available: [www.airquality.org/ProgramCoordination/Documents/4\)%202013%20SIP%20Revision%20Report%201997%20Std.pdf](http://www.airquality.org/ProgramCoordination/Documents/4)%202013%20SIP%20Revision%20Report%201997%20Std.pdf). Accessed December 17, 2018.

⁷ Sacramento Metropolitan Air Quality Management District, 2015. Triennial Report and Air Quality Plan Revision. May 28, 2015. Available: [www.airquality.org/ProgramCoordination/Documents/11\)%202015TriennialReportandProgressRevision.pdf](http://www.airquality.org/ProgramCoordination/Documents/11)%202015TriennialReportandProgressRevision.pdf). Accessed December 17, 2018.

⁸ Sacramento Metropolitan Air Quality Management District, 2010. PM₁₀ Implementation/Maintenance Plan and Redesignation Request for Sacramento County. October 28, 2010. Available: [www.airquality.org/ProgramCoordination/Documents/10\)%20%20PM10%20Imp%20and%20MP%202010.pdf](http://www.airquality.org/ProgramCoordination/Documents/10)%20%20PM10%20Imp%20and%20MP%202010.pdf). Accessed December 17, 2018.

⁹ Sacramento Metropolitan Air Quality Management District, 2013. PM_{2.5} Implementation/Maintenance Plan and Redesignation Request for Sacramento PM_{2.5} Nonattainment Area. October 24, 2013. Available: [www.airquality.org/ProgramCoordination/Documents/9\)%20%20PM2.5%20Imp%20and%20MP%202013.pdf](http://www.airquality.org/ProgramCoordination/Documents/9)%20%20PM2.5%20Imp%20and%20MP%202013.pdf). Accessed December 17, 2018.

¹⁰ Sacramento Metropolitan Air Quality Management District, 2004. 2004 Revision to the California State Implementation Plan for Carbon Monoxide. July 22, 2004. Available: [www.airquality.org/ProgramCoordination/Documents/1\)%202004%20CO%20Maintenance%20Plan.pdf](http://www.airquality.org/ProgramCoordination/Documents/1)%202004%20CO%20Maintenance%20Plan.pdf). Accessed December 17, 2018.

The construction phase of the project would be subject to the applicable SMAQMD regulations with regards to construction and stationary equipment such as generators, particulate matter generation, architectural coatings, and paving materials. Equipment used during construction would be subject to the applicable requirements of SMAQMD Regulation 2 (Permits), Rule 201 (General Permit Requirements); and Regulation 4 (Prohibitory Rules), Rule 401 (Ringelmann Chart/Opacity), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 404 (Particulate Matter), Rule 405 (Dust and Condensed Fumes), Rule 420 (Sulfur Content of Fuels), Rule 442 (Architectural Coatings), Rule 453 (Cutback and Emulsified Asphalt Paving Materials).

The operational phase of the project would be subject to SMAQMD Rule 201, which requires any business or person to obtain an authority to construct and a permit to operate prior to installing or operating new equipment or processes that may release or control air pollutants to ensure that all SMAQMD rules and regulations are considered. Potentially applicable stationary pollutant sources during the operational phase of the project include a new boiler as part of the RBOC. A permit is required for all boilers, process heaters, and steam generators with a rated heat input capacity of 1 million British thermal units (Btu) per hour or greater, or boilers, process heaters, and steam generators of any size that are not fired exclusively on purchased quality natural gas, liquid petroleum gas, or any combination thereof. A permit is required if the aggregate rated heat input capacity of all boilers, process heaters, and steam generators used in the same process is 1 million Btu per hour or greater. SMAQMD Rule 414 applies to boilers rated less than 1 million Btu per hour.

City of Sacramento 2035 General Plan

The following goals and policies from the 2035 City General Plan are relevant to air quality.

Goal ER 6.1: Improved Air Quality. Improve the health and sustainability of the community through improved regional air quality and reduced greenhouse gas emissions that affect climate change.

Policy ER 6.1.1: Maintain Ambient Air Quality Standards. The City shall work with the California Air Resources Board and the Sacramento Metropolitan Air Quality Management District (SMAQMD) to meet State and Federal ambient air quality standards in order to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution.

Policy ER 6.1.2: New Development. The City shall review proposed development projects to ensure projects incorporate feasible measures that reduce construction and operational emissions for reactive organic gases, nitrogen oxides and particulate matter (PM₁₀ and PM_{2.5}) through project design.

Policy ER 6.1.3: Emissions Reduction. The City shall require development projects that exceed SMAQMD ROG and NO_x operational thresholds to incorporate design or operational features that reduce emissions equal to 15 percent from the level that would be produced by an unmitigated project.

Policy ER 6.1.4: Sensitive Uses. The City shall coordinate with SMAQMD in evaluating exposure of sensitive receptors to toxic air contaminants, and will impose appropriate conditions on projects to protect public health and safety.

Policy ER 6.1.10: Coordination with SMAQMD. The City shall coordinate with SMAQMD to ensure projects incorporate feasible mitigation measures if not already provided for through project design.

3.1.3 Analysis, Impacts and Mitigation

Significance Criteria

Impacts related to air quality are considered significant if the project would result in the following:

- Conflict with or obstruct implementation of an applicable air quality plan;
- Result in a project-specific or cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

SMAQMD has developed significance thresholds to help lead agencies determine whether a project may have a significant air quality impact. Projects whose emissions are expected to meet or exceed the recommended significance criteria will have a potentially significant adverse impact on air quality. SMAQMD, delegated by CARB to manage air quality in the region, thresholds are considered reasonable and appropriate for this project.

SMAQMD has established mass emissions thresholds for O₃ precursors, NO_x and ROG, PM₁₀, and PM_{2.5} because the Sacramento region does not meet the state and federal ozone and state particulate matter (PM₁₀ and PM_{2.5}) ambient air quality standards. Emissions of O₃ precursors or PM from an individual project could contribute to an existing exceedance of the ozone standards. Construction activities are not likely to generate substantial quantities of CO; however, increased traffic congestion could result in CO hotspots (exceedance of the CO ambient air quality standards). CO is a maintenance pollutant and is considered relevant to this analysis due to the large relocation of commuters to the new project and impact on local roadways and intersections. **Table 3.1-5** presents the applicable SMAQMD thresholds of significance.

**TABLE 3.1-5
 SMAQMD CRITERIA AIR POLLUTANT THRESHOLDS OF SIGNIFICANCE**

Pollutant	Construction Phase	Operational Phase
Oxides of nitrogen (NO _x)	85 lbs/day	65 lbs/day
ROG (VOC)	None	65 lbs/day
PM ₁₀	0 *	0 *
PM _{2.5}	0 *	0 *
CO	20 ppm (1-hour); 9 ppm (8-hour)	20 ppm (1-hour); 9 ppm (8-hour)

NOTE:

ppm = parts per million

* If all feasible Best Achievable Control Technology/Best Management Practices are applied, then the threshold of significance is 80 lbs/day and 14.6 tons/year for PM₁₀, and 82 lbs/day and 15 tons/year for PM_{2.5} for both construction and operational phases. Consequently, these thresholds are used to evaluate operational emissions.

SOURCE: Sacramento Metropolitan Air Quality Management District, 2015. Guide to Air Quality Assessment in Sacramento County. Chapter 2 Appendix (Updated May 2015). Available: www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable5-2015.pdf. Accessed December 28, 2018.

Specifically, the project would have a potentially significant adverse impact on air quality if emissions:

- Result in short-term (construction) emissions of NO_x above 85 pounds per day (ppd);
- Result in short-term (construction) emissions of PM₁₀ above 0 ppd without implementation of all best management practices (BMPs) and above 80 ppd or 14.6 tons per year (tpy) after implementation of all BMPs;
- Result in short-term (construction) emissions of PM_{2.5} above 0 ppd without implementation of all BMPs and above 82 ppd or 15.0 tpy after implementation of all BMPs;
- Result in long-term (operational) emissions of NO_x or ROG above 65 ppd;
- Result in long-term (operational) emissions of PM₁₀ above 0 ppd without implementation of all BMPs and above 80 ppd or 14.6 tpy after implementation of all BMPs;
- Result in long-term (operational) emissions of PM_{2.5} above 0 ppd without implementation of all BMPs and above 82 ppd or 15.0 tpy after implementation of all BMPs;
- Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm);
- Create objectionable odors affecting a substantial number of people; or
- Result in TAC exposures that cause a lifetime cancer risk exceeding 10 in 1 million for stationary sources, or substantially increase the lifetime cancer risk as a result of increased exposure to TACs from mobile sources.

It should also be noted that given that ground-level ozone formation occurs through a complex photo-chemical reaction between NO_x and VOCs in the atmosphere with the presence of sunlight, the impacts of ozone are typically considered on a basin-wide or regional basis instead of a localized basis. SMAQMD has not established a significance threshold for ozone. The

health-based ambient air quality standards for ozone are as concentrations of ozone and not as tonnages of their precursor pollutants (i.e., NO_x and VOCs). It is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting ozone or particulate matter. Because of the complexity of ozone formation and the non-linear relationship of ozone concentration with its precursor gases, and given the state of environmental science modeling in use at this time, it is infeasible to convert specific emissions levels of NO_x or VOCs emitted in a particular area to a particular concentration of ozone in that area. Meteorology, the presence of sunlight, seasonal impacts, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone.^{11,12} Nonetheless, since project emissions would potentially exceed the numeric indicator for NO_x emissions, it is possible that project NO_x emissions could result in an increase in ground-level ozone concentrations in proximity to the project site or elsewhere in the air basin and impacts would be potentially significant. Therefore, mitigation measures would be required and are further discussed below.

As expressed in the *amicus curiae* brief submitted for the *Sierra Club v. County of Fresno* case (*Friant Ranch Case*),^{13,14} the CEQA criteria pollutants significance thresholds from the air district were set at emission levels tied to the region's attainment status, they are emission levels at which stationary pollution sources permitted by the air district must offset their emissions and CEQA project must use feasible mitigations, and they are not intended to be indicative of any localized human health impact that a project may have. Therefore, the project's exceedance of the mass regional emissions threshold (i.e., ppd NO_x thresholds) from project-related activities does not necessarily indicate that the project will cause or contribute to the exposure of sensitive receptors to ground-level concentrations in excess of health-protective levels.

Furthermore, available models today are designed to determine regional, population-wide health impacts, and cannot accurately quantify ozone-related health impacts caused by NO_x or VOCs emissions from project level. Therefore, it is infeasible to connect the project level NO_x emissions to ozone-related health impacts at this time.

¹¹ South Coast Air Quality Management District, 2014, Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. *Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*.

¹² San Joaquin Valley Unified Air Pollution Control District, 2014. Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, *Friant Ranch, L.P.* In the Supreme Court of California. *Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*.

¹³ South Coast Air Quality Management District, 2014, Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. *Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*.

¹⁴ San Joaquin Valley Unified Air Pollution Control District, 2014. Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, *Friant Ranch, L.P.* In the Supreme Court of California. *Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*.

Methodology and Assumptions

The State has already approved the Demolition Project. Whether or not the project is approved, the State will relocate the printing plant and all employees and demolish the existing structures. The approved Demolition Project will result in relocation of State printing plant operations, and the demolition of all buildings and structures, aside from a small pump house located on the northwest corner of the site. As these actions will occur with or without the approval of this project, the most appropriate baseline from which to compare the true impacts of the project is the future condition of the site once the Demolition Project has been completed. Because of this reason, the impact discussions below compare the project against a vacant project site, devoid of structures or facilities. While the pump house will continue to be electrified until the project construction begins, its effect on the baseline condition is negligible.

Project-related air quality impacts fall into two categories: short-term impacts due to construction, and long-term impacts due to project operation. First, during project construction (short-term), the project would affect local particulate concentrations primarily due to fugitive dust sources and diesel exhaust. Under operations (long-term), the project would result in an increase in emissions primarily due to motor vehicle trips and on-site stationary sources (such as the boiler). Other emissions include minor area sources such as landscaping and use of consumer products.

Construction Impacts

Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. Inputs to the model include square footage of the new office building and the amount of parking in the lot and garage.

Reasonable assumptions and default CalEEMod settings were used to estimate criteria air pollutant and ozone precursor emissions, which can be found in **Appendix D1**. Construction-related emissions of criteria air pollutants are then compared to SMAQMD's applicable regional significance thresholds.

The emissions generated from construction activities include:

- Exhaust emissions from fuel combustion for mobile heavy-duty diesel and gasoline-powered equipment (including construction equipment and employee vehicles);
- Particulate matter from soil disturbance and site preparation and grading activity (also known as fugitive dust); and
- Evaporative emissions of ROG from paving activity and the application of architectural coatings.

The primary TACs during construction would be DPM from construction equipment exhaust. DPM exhaust is a complex mixture of thousands of gases and fine particles commonly known as soot. The health risk resulting from exposure to DPM emissions from construction equipment was evaluated using air emission and dispersion modeling software as described below.

Health Risk

A health risk assessment (HRA) evaluated the risks to nearby receptors from exposure to TACs associated with the project. The HRA focused on construction emissions at the project site, which is considered a new but temporary source. The HRA focused on cancer risks, chronic health hazards, and PM_{2.5} concentrations at residences located near the project site.

Consistent with SMAQMD Guidelines, the following analysis assesses potential health risk and hazard impacts at sensitive receptors located in the vicinity of the project site. Since the construction emissions associated with the project would represent a new emissions source, the potential health risk and hazard impacts are analyzed at the receptor that would be exposed to the maximum risk, hazard, and PM_{2.5} concentrations.

For construction activities, DPM exposure represents the primary health hazard. Again, DPM is a complex mixture of chemicals and particulate matter identified by the State as a TAC with potential cancer and chronic non-cancer effects. DPM emissions would be generated by the operation of off-road construction equipment (e.g., excavators, loaders, cranes, graders) and on-road diesel-fired heavy-duty vehicles. Although other exposure pathways exist (i.e., ingestion, dermal contact), the inhalation pathway is the dominant exposure pathway from DPM for both cancer risk and chronic non-cancer health effects. Consequently, this HRA only evaluates the inhalation cancer and chronic non-cancer effects of DPM inhalation.

A three-step process was used to estimate cancer risks and chronic health hazards of DPM exposure. The first step involved using the CalEEMod software program to estimate average annual diesel exhaust emissions during project construction. The second step involved using the AERSCREEN (version 16216) dispersion model to convert emissions to maximum annual DPM concentrations. The dispersion modeling used average annual DPM emissions, sensitive receptor distance from construction activities, construction emission sources, and meteorological data collected from U.S. Climate Data for Sacramento.¹⁵ For this project, one cumulative source was included in the dispersion modeling:

- A conservative representation of the on-site construction equipment within the project site modeled as a rectangular area source with an internal vertical dimension of 1.4 meters.¹⁶

The above source represents the worst case scenario from DPM emissions occurring at the project's nearest sensitive receptor. The annual total for each of the five project years was averaged as a mean to develop an emission rate for the above source to be simulated the model run to determine DPM concentrations for various distances from the construction site. The model produced estimates of "worst-case" 1-hour concentrations for the single source which requires application of the included conversion factors to estimate "worst-case" annual concentrations.

¹⁵ U.S. Climate Data, 2019. Climate Sacramento – California. Available: <https://www.usclimatedata.com/climate/sacramento/california/united-states/usca0967>. Accessed January 4, 2019.

¹⁶ Bay Area Air Quality Management District, San Francisco Department of Public Health, San Francisco Planning Department, 2012. The San Francisco Community Risk Reduction Plan: Technical Support Documentation December 2012.

The residences with the greatest exposure potential located in the vicinity of the project site, the Cannery Place Apartments, was assessed at the AESCREEN modeling output distance of 450 meters. Smythe Academy was not included in the dispersion modeling as it was located well over 2,000 feet from the main project area. The third step involved using CARB's Hotspots Analysis Reporting Program (HARP) 2 Risk Assessment Standalone Tool (RAST) model to convert maximum concentrations to cancer risks and chronic health hazard index.

Operational Impacts

Operation of the project would increase emissions of O₃ precursors (ROG and NO_x), PM₁₀, and PM_{2.5}, from vehicle trips and area sources (e.g., landscape maintenance and consumer products such as cleaning products). No natural gas combustion (e.g., space and water heating) would be required by the project. Operational emissions for project buildout were estimated using CalEEMod based on the proposed land uses (for area and stationary source emissions), trip generation rates, and VMT developed for the project. The land use designation selected in the model was commercial government office building along with enclosed parking with elevator and parking lot.

Localized CO Concentrations

CO concentration levels are highest near crowded or congested intersections where traffic is slow or idling. Projects that would increase traffic volumes on surrounding roadways and/or degrade the existing level of service (LOS) would potentially increase CO concentrations at nearby intersections. Because CO is in a maintenance plan and the RBOC would lead to a large increase in traffic in the project area, it was determined CO needed to be analyzed for the purposes of completing a robust analysis. SMAQMD has developed screening criteria to analyze potential CO impacts and identify when site-specific CO dispersion modeling is necessary. The screening criteria are divided into two tiers; if the first tier of screening criteria is not met, then the second tier of screening criteria shall be examined. According to SMAQMD, a project would not result in a significant CO impact if one of the following tiers is met:¹⁷

1. First Tier
 - a. Traffic generated by the project will not result in deterioration of intersection level of service (LOS) or LOS E or F; and
 - b. The project will not contribute to additional traffic to an intersection that already operates at LOS E or F.
2. Second Tier
 - a. The project would not result in an affected intersection experiencing more than 31,600 vehicles per day;

¹⁷ Sacramento Metropolitan Air Quality Management District, 2016. Guide to Air Quality Assessment in Sacramento County (Chapter 4). Available: www.airquality.org/LandUseTransportation/Documents/Ch4OperationalFINAL8-2016.pdf. Accessed January 16, 2019.

- b. The project would not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway; or other location where horizontal or vertical mixing of air will be substantially limited; and
- c. The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average (as identified by the EMFAC or CalEEMod models).

Because RBOC would exceed several of these criteria, screening-level modeling was completed to determine if they would violate either NAAQS or CAAQS. The CALINE4 dispersion model is the preferred method of estimating CO pollutant concentrations at sensitive land uses near congested roadways and intersections. For each intersection analyzed, CALINE4 uses traffic volumes, CO emission rates, and receptor locations to estimate peak hour CO concentrations. For this analysis, CO concentrations were calculated based on a simplified CALINE4 screening procedure and CO emissions rates for Sacramento County from the California Air Resources Board's Emissions Factors (EMFAC) 2014 model. The model is used to identify potential CO hotspots. The modeling methodology assumed worst-case conditions to provide a maximum, worst-case CO concentration. To ensure that an adequate margin of safety was used, the highest 1-hour and 8-hour CO readings from Sacramento County were used as the background concentration. The Baseline years 2024 and 2036 were selected for the baseline and cumulative analysis, respectively, in order to generate emission factors and emission estimates. Appendix D1 contains the CO modeling inputs and results.

Toxic Air Contaminants

Emissions of TAC during operation of the project would be primarily from idling diesel trucks at the loading dock. The RBOC project may add some new truck loading docks to serve the project. However, as discussed under Section 3.1.2 above, CARB's measure to limit idling of diesel-fueled commercial motor vehicles to a maximum of five minutes at any one location would limit impacts to air quality.

Air Quality Mitigation Plan

SMAQMD has developed guidance to mitigate operational emissions for projects subject to the California Environmental Quality Act. SMAQMD's guidance recommends that project applicants prepare an Air Quality Mitigation Plan (AQMP) for all projects that exceed SMAQMD's operational significance thresholds of 65 ppd for oxides of nitrogen (NO_x), 65 ppd for reactive organic gases (ROG), 80 ppd for particulate matter less than or equal to 10 microns (PM₁₀), and 82 ppd for PM_{2.5}. The AQMP is included in **Appendix D2**.

For projects that are operationally significant for particulates (PM₁₀ or PM_{2.5}) no specific reduction standard has been determined at this time to be considered feasible mitigation. The focus of an AQMP for particulates will be to implement all feasible mitigation for projects on a case-by-case basis using CalEEMod and off-model measures.

If a project exceeds these thresholds, mitigation must be identified to reduce on-road mobile source emissions by 15 percent if the project is within the current State Implementation Plan (SIP), or by 35 percent if not within the SIP. SMAQMD has determined that this reduction in

emissions will satisfy the “all feasible measures” mitigation requirement under CEQA. The project would be required to conform with the SIP. Therefore, the 15 percent reduction applies to the project.

The following steps were used to determine if the project would meet the 15 percent reduction goal. The first step involves estimating total unmitigated ROG and NO_x emissions using CalEEMod default values. After the traffic analysis, the second step involves estimating mitigated ROG and NO_x emissions using CalEEMod, but adjusted for the VMT estimates included in Section 3.11, Transportation and Circulation. Then, the decrease in ROG and NO_x mobile source emissions between unmitigated and mitigated is calculated, and the difference is converted to NO_x equivalents (NO_xe). NO_xe is the sum of NO_x reductions plus one-seventh of ROG reductions. If the project meets the 15 percent NO_xe reduction goal, it is considered consistent with the SIP and other recent SMAQMD air quality management plans. Appendix D2 includes additional information and modeling results.

Issues or Potential Impacts Not Discussed Further

An odor analysis typically evaluates the potential for a project to generate odors and for the project to be affected by odors from nearby sources of odors. General land uses to be developed under the project are not generally considered sources of odors. Consequently, because there are no new odor sources and no impact would occur, odors will not be addressed further in this EIR.

Impacts and Mitigation Measures

Impact 3.1-1: Implementation of the project could conflict with or obstruct implementation of an applicable air quality plan.

The *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions)*, which addresses attainment of the federal 8-hour ozone standard, and the *2014 Triennial Report and Plan Revision*, are the current plans required by US EPA and CARB and issued by SMAQMD to meet attainment. These plans need to demonstrate reasonable progress towards attainment as required by the SIP and CCAA. To demonstrate compliance in the project’s location there needs to be appropriate analysis. In this case the appropriate analysis incorporates land use assumptions and travel demand modeling from the Sacramento Area Council of Governments (SACOG). To determine compliance with the applicable air quality plan, SMAQMD recommends, as inferred by the SIP, comparing the project’s VMT and population growth rate to the SACOG growth projections included in the *Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)*.¹⁸

SACOG is required to consider adopted local land use plans in the formulation of the land use forecast and growth projections in the MTP/SCS. The RBOC project would be consistent with the

¹⁸ Sacramento Area Council of Governments, 2016. *Metropolitan Transportation Plan/Sustainable Communities Strategy*. Adopted February 18, 2016.

City of Sacramento’s 2035 General Plan; therefore, the RBOC project would be within the growth projections provided by SACOG and thereby consistent with the MTP/SCS.

Although the RBOC would be consistent with the SACOG 2016 MTP/SCS, as discussed below, the project’s unmitigated operational emissions would generate NO_x emissions that would exceed SMAQMD significance thresholds and would be considered significant for CEQA purposes, as shown in **Table 3.1-6**. If not mitigated, the pollutant emissions generated during future operations of the proposed RBOC could conflict with or obstruct implementation of applicable air quality plans.

**TABLE 3.1-6
PERCENT REDUCTION OF MOBILE EMISSIONS OF NO_xe AFTER IMPLEMENTATION OF ALL DESIGN FEATURES¹**

Project	Emissions Without Proposed Design Features (ppd)			Emissions With Proposed Design Features (ppd)			Percent Reduction	Exceed 15%?
	ROG	NO _x	NO _x e ²	ROG	NO _x	NO _x e ²		
RBOC project	107.67	453.60	468.98	15.92	78.85	81.12	82.7%	Yes

NOTE:
ppd = pounds per day
Operational emissions estimates made using CalEEMod 2016.3.2. See Appendix D2 for details. NO_xe (as defined by SMAQMD) is the reduction in ROG (divided by 7), plus the reduction in NO_x.

SOURCE: ESA, 2019.

Because the proposed RBOC would facilitate the development of higher-density, transit-oriented development, combined with the effects of regular updates to Title 24 and the California Building Codes (including CALGreen), much of the reduction would be achieved by project design. Most of the project design features included in development under the proposed RBOC would not require monitoring beyond completion of the project. As shown in Table 3.1-6, the proposed RBOC would result in a 82.7 percent reduction in NO_xe emissions by simply implementing the design features proposed by the RBOC project.¹⁹ The proposed RBOC AQMP achieved the required reduction through identification and commitment to a series of design measures, each of which is assigned a point value representing the approximate percentage reduction in emissions.

Since the proposed RBOC would be designed as a higher-density, transit-oriented development, much of the reduction would be achieved by project design and location within the Sacramento urban core with access to a variety of transportation options. Thus, the proposed RBOC would be consistent with the land use parameters established for the project area in the SACOG MTP/SCS, as well as the SIP by inference, and would incorporate provisions that would reduce unmitigated emissions by at least 15 percent.

¹⁹ NO_xe as defined by SMAQMD is the reduction in ROG divided by 7 plus the reduction in NO_x.

Summary

For the RBOC project to meet the federally-enforceable SIP, the CCAA and local attainment plans, the project must demonstrate consistency with requirements related to ground-level ozone precursors and PM. The proposed RBOC would generate unmitigated operational emissions of ROG and NO_x that would exceed SMAQMD's significance thresholds and would be considered operationally significant for CEQA purposes and potentially exceed SIP and SMAQMD attainment plans. This impact would be **potentially significant**.

Mitigation Measure 3.1-1

The project applicant shall implement the emission reduction strategies contained in the RBOC project AQMP (see Appendix D2), or other strategies which achieve equivalent reductions, as approved by SMAQMD, in order to achieve a minimum 82.7 percent reduction in NO_xe. Endorsement of the AQMP by SMAQMD shall be obtained prior to issuance of building permits. Documentation confirming implementation of the AQMP shall be provided to SMAQMD prior to issuance of occupancy permits.

Level of Significance After Mitigation: The proposed RBOC would be consistent with the growth projections for the project area included in the City's 2035 General Plan and the SACOG MTP/SCS. Because the proposed RBOC project area would require future projects to incorporate emission reduction measures, on an overall basis it would exceed the minimum 15 percent reduction in operational mobile source emissions. Since the proposed RBOC would facilitate higher-density, transit-oriented development, much of the reduction would be achieved by project design and location within the Sacramento urban core with access to a variety of transportation options. Thus, the proposed RBOC would be consistent with the land use parameters established for the RBOC area in the SACOG MTP/SCS and would incorporate provisions that would reduce unmitigated emissions by at least 15 percent. SMAQMD recommends that lead agencies require projects exceeding their significance thresholds of ROG and/or NO_x reduce their ozone precursor emissions by 15 percent. SMAQMD calculates this 15 percent using NO_xe, which is calculated by adding the mitigated ROG emissions (divided by 7) to mitigated NO_x emissions. Using SMAQMD's *Recommended Guidance for Land Use Emission Reduction*,²⁰ an AQMP was prepared demonstrating that the RBOC project could achieve the requisite percent reduction of NO_xe after all proposed design features have been implemented; the AQMP can be found in Appendix D2.

With the implementation of **Mitigation Measure 3.1-1** and as shown in Table 3.1-6, the RBOC project would result in an 82.7 percent reduction in NO_xe emissions after mitigation. Therefore, because the RBOC project would be consistent with the land use parameters established in the SACOG MTP/SCS and would incorporate provisions that would reduce unmitigated emissions by at least 15 percent, this impact is considered **less than significant**.

²⁰ Sacramento Metropolitan Air Quality Management District, 2016. Recommended Guidance for Land Use Emission Reductions, Version 3.3. Available: www.airquality.org/LandUseTransportation/Documents/SMAQMD%20Land-Use-Emission-Reductions-FINALv3-3.pdf. Accessed January 16, 2019.

Impact 3.1-2: Implementation of the project would result in a net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

This impact analysis takes into consideration both short-term construction and long-term operational impacts in terms of baseline and project increases for criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard. The focus of this analysis is related to ground-level ozone precursors (NO_x and ROG) and particulate matter for which the SVAB is in non-attainment. While CO is in currently in attainment/maintenance status, it was also analyzed in terms of ensuring there would be no future exceedances of the both the NAAQS and CAAQS that would violate the maintenance plan and move the region into non-attainment.

Short-Term Construction Impacts

Construction-related emissions are considered short-term in duration, but nevertheless can represent a significant, adverse impact on air quality. Construction-related emissions arise from a variety of activities, including operation of heavy equipment and employee vehicles, excavation for infrastructure and building foundations, architectural coatings, and paving.

The construction would begin with site preparation consisting of a geotechnical investigation, foundation investigation, soil sampling, and pot holing for utilities which would start March 2020. Construction is anticipated to be completed in four years by March 2024.

Emissions of ozone precursors (ROG and NO_x) are generated primarily by mobile sources and largely vary as a function of vehicle trips per day and the type, quantity, intensity, and frequency of heavy-duty, off-road equipment used. Typically, a large portion of construction-related ROG emissions also results from the application of asphalt and architectural coatings.

Construction-related fugitive dust emissions of particulate matter would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. In the absence of mitigation, construction activities could result in significant and adverse quantities of dust, and, as a result, local visibility and PM₁₀ concentrations may be adversely affected on a temporary and intermittent basis during construction of the RBOC project.

Construction emissions were estimated for the RBOC project using the methods contained in SMAQMD's *Guide to Air Quality Assessment in Sacramento County*.²¹ The CalEEMod model was used to quantify construction emissions from off-road equipment, haul trucks associated with imported soils, on-road worker vehicle emissions, and vendor delivery trips. The unmitigated and mitigated construction emissions for the worst-case day for each construction year can be found in **Tables 3.1-7** and **Table 3.1-8**, respectively. Those tables compare emissions from the phased

²¹ Sacramento Metropolitan Air Quality Management District, 2009. *Guide to Air Quality Assessment*. Adopted December 2009 and last updated September 2016.

construction schedule to SMAQMD’s NO_x, PM₁₀, and PM_{2.5} construction thresholds which are appropriate for this analysis.

**TABLE 3.1-7
 UNMITIGATED PROJECT CONSTRUCTION EMISSIONS^{1,2}**

Construction Year	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2020	9	1	1	<1	<1
2021	130	23	11	2	1
2022	75	17	6	2	1
2023	68	17	6	2	1
2024	64	17	6	<1	<1
SMAQMD Thresholds ³	85	0	0	0	0
Maximum Emissions	130	18	11	2	1
Significant (Yes or No)?	Yes	Yes	Yes	Yes	Yes

NOTES:

ppd = pounds per day; tpy = tons per year

1 Project construction emissions estimates were made using CalEEMod version 2016.3.2. See Appendix D1 for model outputs and more detailed assumptions.

2 Values in **bold** are in excess of the applicable SMAQMD significance threshold.

3 SMAQMD has established a zero emissions threshold for PM₁₀ and PM_{2.5} when projects do not implement SMAQMD’s Best Available Practices (BMP).

SOURCE: ESA, 2019.

**TABLE 3.1-8
 MITIGATED PROJECT CONSTRUCTION EMISSIONS^{1,2}**

Construction Year	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2020	6	<1	<1	<1	<1
2021	90	20	9	2	1
2022	58	15	4	2	1
2023	55	15	4	2	1
2024	54	15	4	<1	<1
SMAQMD Thresholds	85	80	82	14.6	15
Maximum Emissions	104	20	9	2	1
Significant (Yes or No)?	Yes	No	No	No	No

NOTES:

ppd = pounds per day; tpy = tons per year

1 Project construction emissions estimates were made using CalEEMod version 2016.3.2. See Appendix D1 for model outputs and more detailed assumptions. Mitigated construction NO_x and PM emissions account for a 20 and 45 percent reduction in off-road equipment emissions, respectively, as a result of the implementation of Mitigation Measures 3.1-2(a) through Mitigation Measures 3.1-2(d).

2 Values in **bold** are in excess of the applicable SMAQMD significance threshold.

SOURCE: ESA, 2019.

As shown in Table 3.1-7, maximum daily construction NO_x emissions would exceed the SMAQMD significance thresholds in 2021, and maximum daily and annual construction PM₁₀

and PM_{2.5} emissions would exceed the SMAQMD significance thresholds for each year of construction. The predominant construction activity associated with these emissions would be off-road diesel equipment and on-road haul trucks during construction of the proposed RBOC project. Overall, the project would have a significant impact related to construction emissions.

Exceedances of NO_x thresholds are not an uncommon occurrence during the construction phase of projects. There are SMAQMD-approved mitigation measures related to construction that are described in the mitigation summary below.

CO is a localized pollutant of concern. CO is of less concern during construction because construction activities are not likely to generate substantial quantities of CO. Due to the temporary operation of equipment in any one area, construction of individual development or infrastructure projects pursuant to the project would not emit CO in quantities that could pose health concerns.

Long Term Operational Impacts

The RBOC project would increase long-term operational emissions due to motor vehicle trips and onsite area and energy sources. Since the significance thresholds are a daily measure, the operational pollutant emissions during an event day were modeled to represent worst-case emissions. The CalEEMod computer model was used to estimate operational emissions of ROG, NO_x, PM₁₀ and PM_{2.5} in the Baseline year (2024) and results are summarized on **Table 3.1-9**. Estimated emissions are compared to the SMAQMD significance thresholds. As shown in Table 3.1-9, emissions of ROG, NO_x, PM₁₀, and PM_{2.5} would not exceed SMAQMD’s significance thresholds after the implementation of operational BMPs required by applicable regulations.

**TABLE 3.1-9
 RBOC PROJECT OPERATIONAL EMISSIONS**

Source	ROG (ppd)	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
Area	34	< 1	< 1	< 1	< 0.01	< 0.01
Energy	< 1	4	< 1	< 1	0.05	0.05
Mobile	16	79	91	25	6.72	1.84
Stationary	<1	<1	<1	<1	<0.01	<0.01
Total Emissions	51	82	91	25	6.77	1.89
SMAQMD Thresholds ³	65	65	80	82	14.6	15
Significant (Yes or No)?	No	Yes	Yes	No	No	No

NOTES:

ppd = pounds per day; tpy = tons per year

1 Project operational emissions estimates were made using CalEEMod version 2016.3.2. See Appendix D1 for model outputs and more detailed assumptions.

2 Values in **bold** are in excess of the applicable SMAQMD significance threshold.

3 SMAQMD has established a zero emissions threshold for PM₁₀ and PM_{2.5} when projects do not implement their Best Available Practices.

SOURCE: ESA, 2019.

As is described in Impact 3.1-1, SMAQMD recommends that lead agencies require projects creating emissions that would exceed the District's daily thresholds of ROG and/or NO_x reduce their ozone precursor emissions from transportation sources by at least 15 percent. This percentage reduction is based on the project location within the urban core of the City of Sacramento, which is part of the Sacramento Area Ozone Implementation Plan. SMAQMD calculates this 15 percent using NO_xe, which is calculated by adding 14.3 percent of the mitigated ROG emissions to mitigated NO_x emissions. As described under Impact 3.1-1, using SMAQMD's *Recommended Guidance for Land Use Emission Reduction*,²² the percent reduction of NO_xe after implementation of the proposed RBOC is presented in Table 3.1-6.

As shown in Table 3.1-6, an 82.7 percent reduction in NO_xe emissions would be achieved by simply implementing the design features proposed under the proposed RBOC. However, according to SMAQMD's *CEQA Guidance*, projects that exceed the air district's criteria pollutant emission thresholds, even after demonstrating a 15 percent reduction in ozone precursor emissions from transportation sources, are still considered a significant under CEQA.²³

For operation of the RBOC project, traffic was analyzed to determine its potential effect on CO concentrations near surface streets and intersections in and around the area of the RBOC project site. The analysis presented in Section 3.11, Transportation and Circulation, shows that fifteen intersections would operate at LOS E or worse during the AM and/or PM peak hours. CO modeling was conducted for these intersections using CALINE4.

Conservative assumptions were used to estimate CO concentrations. Those assumptions included the use of worst-case meteorology, the inclusion of the highest 1-hour and 8-hour background CO concentrations recorded in Sacramento during the past five years, the use of Existing Plus Project Conditions traffic volumes, and the use of conservative 2024 CO emission rates.

As shown in **Table 3.1-10**, the analysis finds that no exceedances of the CO 1-hour or 8-hour standard would occur at the intersections. Therefore, the operation of the project would have a less-than-significant impact on local CO concentrations.

Even with the considerable increase in traffic and associated emissions there are no modeled exceedances of the NAAQS or CAAQS for operational CO emissions.

Summary

Short-Term Impacts

SMAQMD has established a zero emissions threshold for PM₁₀ and PM_{2.5}, requiring all construction projects to implement SMAQMD's *Basic Construction Emission Control Practices* to control PM₁₀ and PM_{2.5}. With implementation of SMAQMD's Best Management Practices (BMPs), SMAQMD's peak daily and annual thresholds increase to 80 ppd or 14.6 tpy of PM₁₀

²² NO_xe as defined by SMAQMD is the reduction in ROG divided by 7 plus the reduction in NO_x.

²³ Sacramento Metropolitan Air Quality Management District, 2009. CEQA Guidance. Available: www.airquality.org/businesses/ceqa-land-use-planning/ceqa-guidance-tools. December 2009.

and 82 ppd or 15 tpy of PM_{2.5}. Assuming implementation of such required practices, construction of the project would result in emissions of PM₁₀ and PM_{2.5} below the SMAQMD significance

**TABLE 3.1-10
RBOC PROJECT CARBON MONOXIDE CONCENTRATIONS AT AFFECTED INTERSECTIONS**

Intersection	CO Concentrations	
	1-hour (ppm)	8-hour (ppm)
I-5 NB Ramps/Richards Boulevard	2.94	2.08
N 3rd Street/Richards Boulevard	3.34	2.36
Sequoia Pacific Boulevard/Richards Boulevard	3.24	2.29
N 5th Street/Richards Boulevard	3.14	2.22
N 7th Street/Richards Boulevard	3.24	2.29
N 10th Street/Richards Boulevard	3.14	2.22
N 12th St-N 16th St/Richard Boulevard	4.24	2.99
N 7th Street/Project Driveway	2.84	2.01
N 7th Street/N B Street	3.94	2.78
N 7th Street/Railyards Boulevard	3.34	2.36
North Project Driveway/Richards Boulevard	3.14	2.22
Threshold	20	9
Exceed Threshold?	No	No

NOTES:

ppm = parts per million

CO concentrations include the second high of the two most recent years (2017 and 2018) per SMAQMD Carbon Monoxide Dispersion Modeling Guidance (2009, rev 2014). The 1-hour CO and an 8-hour CO background concentration are 1.539 ppm and 1.1, respectively. The modeled 1-hour concentrations were converted to 8-hour concentrations using a persistence factor of 0.70. CALINE4 modeling results and additional assumptions are included in Appendix D1.

thresholds. However, construction of the RBOC project would generate unmitigated NO_x emissions that would exceed SMAQMD’s thresholds. Consequently, construction of the project would result in a **potentially-significant** impact due to short-term NO_x emissions.

Mitigation Measure 3.1-2(a)

DGS shall require all construction plans to include the following required SMAQMD Basic Construction Emission Control Practices:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways shall be covered.
- Use wet power vacuum street sweepers to remove any visible track-out mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).

- Pave all roadways, driveways, sidewalks, parking lots as soon as possible. In addition, building pads shall be laid immediately after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (as required by the state airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment shall be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Mitigation Measure 3.1-2(b)

DGS shall require all construction plans to include the following SMAQMD Enhanced Exhaust Control Practices:

- Provide a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the project to DGS and SMAQMD. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The construction contractor shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. This information shall be submitted at least four business days prior to the use of subject heavy-duty off-road equipment. The inventory shall be updated and submitted monthly throughout the duration of construction, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.
- Provide a plan in conjunction with the equipment inventory, approved by SMAQMD, demonstrating that the heavy-duty (50 horsepower or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.
- Emissions from all off-road diesel powered equipment used on the project site shall not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and DGS and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. SMAQMD and/or other officials may conduct periodic site inspections to determine

compliance. Nothing in this measure shall supersede other SMAQMD or state rules or regulations.

- If at the time of granting of each building permit, SMAQMD has adopted a more restrictive regulation applicable to construction emissions, DGS may completely or partially replace this mitigation with compliance with the new regulation. Consultation with SMAQMD prior to construction will be necessary to make this determination.

Mitigation Measure 3.1-2(c)

DGS shall require grading or improvement plans to include the following SMAQMD Fugitive Dust Control Practices:

- Water exposed soil with adequate frequency for continued moist soil.
- Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 mph.
- Install wind breaks (e.g., solid fencing) on windward side(s) of construction areas.
- Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.
- Treat site accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads.
- Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The phone number of the District shall also be visible to ensure compliance.

Mitigation Measure 3.1-2(d)

Prior to the issuance of a building permit, developers shall quantify the construction emissions of NO_x. DGS shall require all construction plans to include the following SMAQMD off-site fee mitigation:

- The project applicant shall pay into SMAQMD's construction mitigation fund to offset construction-generated emissions of NO_x that exceed SMAQMD's daily emission threshold of 85 ppd. The project applicants shall coordinate with SMAQMD for payment of fees into the Heavy-Duty Low-Emission Vehicle Program designed to reduce construction related emissions within the region. Fees shall be paid based upon the applicable current SMAQMD Fee. The applicants shall keep track of actual equipment use and their NO_x emissions so that mitigation fees can be adjusted accordingly for payment to SMAQMD.

Level of Significance After Mitigation: With implementation of **Mitigation Measures 3.1-2(a), (b), (c), and (d)**, fugitive dust would be controlled, exhaust emissions would be reduced on-site, and mitigation fees would be provided to SMAQMD for project NO_x emissions that exceed the SMAQMD significance threshold. SMAQMD uses the fees to fund off-site projects and programs that would offset the project's NO_x emissions.

Implementation of Mitigation Measures 3.1-2(a), (b), (c), and (d) would reduce construction emissions from the project to levels shown in Table 3.1-8. Emissions of NO_x, PM₁₀, and PM_{2.5} emissions would be reduced to levels below the respective thresholds. These measures would reduce project-related construction emissions of NO_x, PM₁₀, and PM_{2.5} to **less than significant**.

Long Term Impacts

There are no potential violations of the NAAQS or CAAQS from operational CO emissions thus this will be considered less than significant.

However, the development of government office complex pursuant to the proposed RBOC would result in peak mobile source daily emissions of NO_x, that would exceed the significance thresholds specified by SMAQMD and be cumulatively considerable. This is considered a **significant** impact.

Mitigation Measure

None feasible.

Level of Significance after Mitigation: An AQMP (see Appendix D2) has already been prepared demonstrating that the RBOC, through project design, can achieve SMAQMD's required 15 percent reduction of ozone precursor emissions from transportation sources. Consistent with the direction of SMAQMD's *CEQA Guidance*, no further mitigation is required.²⁴ As shown in Table 3.1-6, a 82.7 percent reduction in NO_xe emissions would be achieved by implementing the design features proposed as part of the RBOC. There are no approved mitigation measures for PM₁₀ so that remains significant with the implementation of the AQMP. In terms of NO_xe, even with achievement of SMAQMD-required 15 percent reduction in operational mobile source NO_x emissions associated with the proposed RBOC, it would exceed SMAQMD threshold of 65 ppd. Thus, this impact would remain **significant and unavoidable**.

Impact 3.1-3: The project could expose sensitive receptors to substantial pollutant concentrations.

Construction

The key drivers to exposure sensitivity are concentration of pollutants and duration of exposure. DPM represents the primary TAC of concern from construction activities. Construction of development under the proposed RBOC would generate DPM emissions due to operation of internal combustion engines in equipment such as loaders, backhoes, and cranes, as well as haul trucks.

Exposure of sensitive receptors—from both existing residences and future proposed residences within the RBOC area—is the primary factor used to determine health risk. Exposure is a function of the concentration of a substance or substances in the environment and the extent of

²⁴ Sacramento Metropolitan Air Quality Management District, 2009. CEQA Guidance. Available: www.airquality.org/businesses/ceqa-land-use-planning/ceqa-guidance-tools. December 2009.

exposure. A longer exposure period would result in a higher exposure level. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments should be based on a 30-year exposure period.²⁵ However, such assessments should be limited to the period/duration of activities associated with the project. Modeling of health risk due to DPM exposure was completed and it was determined that exposure would exceed significance thresholds, in terms of Million Increase in Cancer Risk (MICR), when using the default Heavy-Duty construction fleet engine characteristics.

Operation

As discussed previously, the project would result in only very limited operation period activities, including landscaping maintenance operations and emergency generators when required. Neither of these activities would result in the production of TAC emissions, or associated health risks from the project's operation.

Summary

Construction

Although construction activities of the proposed RBOC would constitute a small percentage of the total 30-year exposure period used for health risk evaluations, the health risk impact is above the 10 in one million risk threshold and is **potentially significant**.

Mitigation Measure 3.1-3(a)

Implement Mitigation Measure 3.1-2(b).

Mitigation Measure 3.1-3(b)

The contractor shall utilize one of the following strategies to reduce the cancer risk related to TAC construction emissions to no greater than 10 people in one million.

- Use Tier 4 engines on all construction equipment; or
- Use Tier 3 engines equipped with Level 3 Diesel Particulate Filters (DPF) on all construction equipment; or
- Use a combination of Tier 4 engines and Tier 3 engines equipped with Level 3 Diesel Particulate Filters (DPF) on all construction equipment; or
- Use a combination of technological solutions to ensure that construction-related emissions do not exceed a cancer risk of 10 people in one million.

Level of Significance after Mitigation: Mitigation Measure 3.1-3(a) and Mitigation Measure 3.1-3(b) would reduce the exposure of existing residents to TAC emissions for the construction duration of the proposed project.

²⁵ Office of Environmental Health Hazard Assessment, 2015. *Guidance Manual for Preparation of Health Risk Assessments*. February 2015.

US EPA Certified Tier 4 engines are now widely available for diesel-fired Heavy Duty construction equipment. Tier 4 engines are designed to have much improved fuel efficiency and reduce emissions of both NOx and DPM to very low levels. Construction equipment shall have Tier 4 engines. A construction equipment plan will be provided in conjunction with the equipment inventory, approved by SMAQMD, demonstrating that the heavy-duty (50 horsepower or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

DPM emissions will be reduced by 45 percent by the development and implementation of the construction plan for particulate reduction. However, this still isn't enough to reduce emissions to below significance thresholds due to the proximity of sensitive receptors thus requiring further mitigation as described below.

Tier 4 engines that greatly reduce DPM emissions through fuel efficiency and emissions controls are now widely available and used throughout California. If Tier 4 engines are utilized during construction DPM emissions, the associated health risks will be greatly reduced and are below the MICR and will be less than significant. Modeled health risks associated with construction of development under the RBOC are presented in **Table 3.1-11**.

**TABLE 3.1-11
 RBOC PROJECT CONSTRUCTION HEALTH RISK**

Source	Unmitigated Risk (people per million)	Mitigation 3.1-2(b) (people per million)	Mitigation Tier 4 Engines (people per million)
Construction Risk	42.19	23.24	4.87
SMAQMD Thresholds	10	10	10
Significant (Yes or No)?	Yes	Yes	No

NOTES:

- 1 Project construction emissions estimates were made using CalEEMod version 2016.3.2, AERSCREEN version 16216, and HARP RAST version 18159. See Appendix D1 for model outputs and more detailed assumptions.
- 2 Values in bold are in excess of the applicable SMAQMD significance threshold.

SOURCE: ESA, 2019.

With implementation of these mitigation measures, residences would have reduced exposure to TAC emissions during the construction period and fall below the significance thresholds resulting in a **less-than-significant** impact.

Operation

The project would result in only very limited operation period activities, including landscaping maintenance operations and emergency generators when required. Neither of these activities would result in the production of TAC emissions, or associated health risks from the project's

operation. As a result, impacts associated with exposure of sensitive receptors to substantial toxic air emissions from stationary source operations would be **less than significant**.

Mitigation Measure

None required.

Cumulative Impacts

The geographic context for changes in the air quality environment due to development of the proposed project would be both regional and local. Ozone, PM₁₀, and PM_{2.5} would be the primary pollutants of regional concern, which means that the cumulative context would be comprised to evaluating impacts within the SVAB from a cumulative perspective for the year 2036. CO is a concern in terms of cumulative local impacts as CO is a SMAQMD maintenance pollutant with additional consideration given to ensure ambient concentrations stay within attainment levels.

Particulates (fugitive dust and fine particulate matter, including DPM) and TACs could result in localized impacts in close proximity to pollutant sources. In addition to the RBOC project, the other active cumulative construction projects in the immediate vicinity are development related to the Central City Specific Plan, Railyards Specific Plan, and the River District Specific Plan, the I Street Bridge Replacement project, the Powerhouse Science Center, development in the Bridge District of West Sacramento, potential future development in Downtown Commons, and the Downtown Riverfront Streetcar project.

As described above in Impact 3.1-1, the project would not conflict with or obstruct implementation of applicable air quality plans based on SACOG's future growth projections for the region, and thus, this impact is not discussed further in the cumulative analysis. The cumulative analysis will focus on CO, Ozone precursor NO_x and PM₁₀.

Impact 3.1-4: The project, in conjunction with other planned projects, could cumulatively impact a net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Short-Term Cumulative Impacts

NO_x, PM₁₀, and PM_{2.5} are the pollutants that SMAQMD has identified as the primary concerns from construction. Development of the RBOC and other construction activities elsewhere in the SVAB could also contribute construction-related NO_x, PM₁₀ and PM_{2.5} emissions. However, all construction activities and related emissions would be a short term impacts that would not be present in cumulative year 2036. Thus this impact would be less than significant.

Long-Term Cumulative Impacts

Cumulative traffic was analyzed to determine its potential to affect CO concentrations along surface streets near sensitive receptors in the vicinity of the project. A review of the traffic data shows that two intersections would operate at LOS E or worse during the AM or PM peak hours

during cumulative year 2036. **Table 3.1-12** shows the results of the cumulative CO modeling for the RBOC project. As shown in Table 3.1-12, there would be no exceedances of the CO 1-hour or 8-hour standard at any of the intersections. Thus, the project would rest in a less-than-significant cumulative impact on local CO concentrations.

**TABLE 3.1-12
 CUMULATIVE RBOC PROJECT CARBON MONOXIDE CONCENTRATIONS AT AFFECTED INTERSECTIONS**

Intersection	CO Concentrations	
	1-hour (ppm)	8-hour (ppm)
I-5 SB Ramps/Richards Boulevard	3.24	2.29
I-5 NB Ramps/Richards Boulevard	3.44	2.43
N 3rd Street/Richards Boulevard	3.34	2.36
Sequoia Pacific Boulevard/Richards Boulevard	3.14	2.22
N 5th Street/Richards Boulevard	3.04	2.15
N 7th Street/Richards Boulevard	3.24	2.29
N 10th Street/Richards Boulevard	3.34	2.36
Dos Rios Street/Richards Boulevard	3.54	2.5
N 7th Street/N B Street	3.54	2.5
N 7th Street/Railyards Boulevard	3.44	2.43
N 16th Street/Richards Boulevard	4.84	3.41
N 12th St/Vine St	4.34	3.06
Threshold	20	9
Exceed Threshold?	No	No

NOTES:

ppm = parts per million
 CO concentrations include the second high of the two most recent years (2017 and 2018) per SMAQMD Carbon Monoxide Dispersion Modeling Guidance (2009, rev 2014). The 1-hour CO and an 8-hour CO background concentration are 1.539 ppm and 1.1, respectively. The modeled 1-hour concentrations were converted to 8-hour concentrations using a persistence factor of 0.70. CALINE4 modeling results and additional assumptions are included in Appendix D1

The SVAB currently has a non-attainment status for ground-level Ozone precursors (NO_x and ROG) and PM₁₀. Thus, all other mobile, area, and energy sources in the SVAB that would operate concurrently with the proposed projects would contribute to cumulative operational-related ROG, NO_x and PM₁₀ emissions. As described in Impact 3.1-3, the RBOC would result in substantial long-term emissions of NO_x and PM₁₀, which would combine with emissions generated by other existing and future development within the SVAB to contribute to and exacerbate the non-attainment status in the region. NO_x emissions are anticipated to be reduced by 47 percent in cumulative year 2036 due to CARB mandated fuel efficiency regulations that are phased in over time. Table 3.1-13 demonstrates that mobile NO_x emissions would be reduced to below the SMAQMD significance threshold by 2036 and would thus be considered cumulatively less than significant.

PM₁₀ emissions however, would remain above the significance threshold as projected to 2036 and its contribution to the non-attainment status would be considerable. Consequently, the proposed

projects' contribution to PM₁₀ emissions would be cumulatively considerable, resulting in a **potentially-significant** cumulative impact.

**TABLE 3.1-13
RBOC FORECASTED OPERATIONAL MOBILE EMISSIONS FOR CUMULATIVE ANALYSIS**

Source	2024 NO _x (g/mile) ¹	2036 NO _x (g/mile) ¹	Reduction (%) ²	Projected NO _x (ppd)
Mobile	0.200	0.106	47%	42
SMAQMD Thresholds ³	--	--	--	65
Significant (Yes or No)?	--	--	--	No

NOTES:

g/mile = grams per mile; ppd = pounds per day

1 Vehicle Emission Factors were obtained from EMFAC2014 and default vehicle fleet mix. See Appendix D1 for model outputs.

2 Percent reduction in emission factors directly applied to 2024 NO_x emission estimates for operational mobile sources.

3 Mobile source emissions are the majority contributor to the RBOC project operational emissions and therefore is compared to the SMAQMD significance threshold. The SMAQMD significance threshold for NO_x does include all operational emissions (e.g., area, stationary, etc.).

Mitigation Measure 3.1-4

Implement Mitigation Measures 3.1-2(a), (b), (c), and (d).

Level of Significance After Mitigation: In terms of long-term impacts, as is described under Impact 3.1-2, above, the traffic reduction and other emission reductions built into the locality of the proposed project would exceed 15 percent reduction in NO_x emissions after mitigation. However, there are no approved mitigation measures for PM₁₀ so that remains significant even with the implementation of Mitigation Measure 3.1-4 and the AQMP. Much of the reduction would be achieved by the project's location within the Sacramento urban core with access to a variety of transportation options. Nonetheless, PM₁₀ emissions would still exceed the applicable SMAQMD threshold. The contribution from the proposed projects would result in an unavoidable considerable contribution to the significant cumulative impact and is **significant and unavoidable**.

Impact 3.1-5: The project, in conjunction with other planned projects, could cumulatively expose sensitive receptors to substantial pollutant concentrations.

The evaluation of health risks from TAC represents a local rather than regional analysis. Long term operational TAC emissions were found to be less than significant and therefore not would not be considered a cumulative impact. The analysis in Impact 3.1-3 shows that TACs and resulting health risks produced during construction of the RBOC would result in a short term impact that would not be present in cumulative year 2036. Thus this impact would be **less than significant**.

Mitigation Measure

None required.

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3.2 Biological Resources

This section assesses the potential effects on biological resources as a result of constructing the Richards Boulevard Office Complex (RBOC) project (or project). The section includes relevant baseline information, including a description of the habitat types at the project site, anticipated future conditions after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete, and habitat adjacent to the project site; a description of special-status plant and wildlife species that could potentially occur at the project site or be impacted by project construction; and the federal, state, and regional regulations that protect plant and wildlife species and the regulatory agencies that enforce these standards. A description of the potential impacts resulting from the project is also provided, as well as the identification of feasible mitigation (where applicable) to avoid or lessen the impacts.

The California Department of Fish and Wildlife (CDFW) provided comments on the notice of preparation (NOP) regarding nesting birds of prey, migratory birds, and burrowing owls. Their comments are addressed in this section.

The primary sources of data referenced for this section include:

- City of Sacramento 2035 General Plan,¹
- CDFW California Natural Diversity Database (CNDDDB) List of Regionally Occurring Special-Status Species² (**Appendix E**),
- U.S. Fish and Wildlife Service (USFWS) List of Federally Threatened and Endangered Species that May Occur in the Project Location³ (**Appendix E**), and
- California Native Plant Society (CNPS) Plant List of Regionally Occurring Special-Status Plants⁴ (**Appendix E**).

3.2.1 Environmental Setting

Project Location

The approximately 17.3-acre project site is located on two parcels within a largely commercial/industrial area, although some existing residences and state and local offices are located nearby. The project site is bordered by North 7th Street to the east, Richards Boulevard to the north, North

¹ City of Sacramento, 2015. Sacramento 2035 General Plan. Adopted March 3, 2015.

² California Department of Fish and Wildlife, 2018. California Natural Diversity Database (CNDDDB: Taylor Monument, Rio Linda, Citrus Heights, Sacramento West, Sacramento East, Carmichael, Clarksburg, Florin, and Elk Grove U.S. Geological Survey 7.5-minute series quadrangles), Sacramento, California. Accessed December 17, 2018.

³ United States Fish and Wildlife Service, 2018. List of Threatened and Endangered Species that may occur in your Project Location, and/or may be Affected by your Project. Information for Planning and Consultation (IPaC). Consultation Code: 08ESMF00-2019-SLI-0623. Event Code: 08ESMF00-2019-E-01874. Available: <https://ecos.fws.gov/ipac/>. Accessed December 18, 2018.

⁴ California Native Plant Society (CNPS), 2018. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). (CNPS: Taylor Monument, Rio Linda, Citrus Heights, Sacramento West, Sacramento East, Carmichael, Clarksburg, Florin, and Elk Grove U.S. Geological Survey 7.5-minute series quadrangles). Accessed December 17, 2018.

B Street to the south, a commercial facility to the northwest, and an undeveloped lot to the southwest. A Sacramento Regional Transit Light Rail Station lies directly across from the printing plant to the north, on the opposite side of Richards Boulevard. The American River occurs approximately 0.4 mile north of the project site and the Sacramento River occurs approximately 0.6 mile west of the project site. The confluence of the two rivers occurs approximately 0.86 mile to the northwest.

The RBOC project site is located in Section 36, Township 9 North, and Range 4 East of the Sacramento East U.S. Geological Survey (USGS) 7.5-minute series quadrangle, Mount Diablo Base and Meridian. The approximate center of the project site is located at 38° 35' 41.59" North, 121° 29' 34.18" West. The site topography is generally flat, and elevations are around 25 feet above mean sea level.

Existing Conditions

A reconnaissance-level biological site assessment was conducted at the existing site and surrounding areas by an ESA biologist on January 8, 2019. Additionally, a Horizon biologist conducted a site visit on December 13, 2017 for preparation of the Demolition Project Initial Study/Mitigated Negative Declaration (IS/MND). This section is based on the data collected during the 2019 and 2017 site visits and review of a 2018 aerial photo⁵ and street view⁶ available in Google Earth.

The existing project site currently contains the OSP/FMD facilities. The northern two-thirds of the site contains the OSP buildings and paved parking and loading areas. The southern third of the site contains the FMD facilities, including several greenhouses and small structures, spoils piles, paved parking areas, and ruderal habitat. Onsite vegetation primarily consists of landscape trees. A line of Callery pear (*Pyrus calleryana*) trees occurs along the printing plant's east façade along North 7th Street; three California sycamores (*Platanus racemosa*) occur along Richards Boulevard at the northwestern corner of the OSP property; camellias (*Camellia* sp.) and an olive tree (*Olea europaea*) occur in the courtyard of the printing plant; several large eucalyptus (*Eucalyptus* sp.) trees and a large valley oak (*Quercus lobata*) occur along the fence line between the OSP and FMD facilities; camellias, orange trees (*Citrus x sinensis*), California fan palms (*Washingtonia filifera*), olive trees, eucalyptus trees, and various other cultivated plants occur within the FMD facilities; a large pine tree occurs at the east end of the break room building; and several large native valley oaks occur at the west end.

Piles of mulch and dirt are located within the FMD portion of the property. During the 2017 and 2019 site visits, burrows were observed in these dirt piles, as well as in various other locations in the FMD portion of the property.

⁵ Google Earth Pro, 2018. Aerial Imagery Date February 2018. Sacramento, CA. 38° 35' 41.59" North, 121° 29' 34.18" West. <http://www.google.com/earth>. Accessed December 31, 2018.

⁶ Google Earth Pro, 2018. Street View Imagery Date April and May 2018. Sacramento, CA. 38° 35' 41.59" North, 121° 29' 34.18" West. <http://www.google.com/earth>. Accessed December 31, 2018.

Baseline Conditions

For the purpose of evaluating potential impacts to biological resources, the expected environmental conditions after the Demolition Project is complete are evaluated. The Demolition Project will remove existing onsite buildings and related foundations, as well as remove asphalt paving, landscaping, utilities, and remove and/or remediate contaminated soil. When the Demolition Project is complete, the site will be completely clear of vegetation and the site surface will be largely dirt. The only remaining structure would be a small pump house on the northwest corner of the project site. The site would not be graded or filled, except in order to meet post-construction stormwater management requirements. Site restoration will involve installing temporary erosion controls, as necessary, and installing a security fence around the perimeter of the site.

During the 2019 site visit, areas within a quarter mile of the project site were reviewed to characterize potential habitat for species that could be affected by project construction, including valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) and nesting birds. This area primarily consists of commercial/industrial facilities, paved roads, and undeveloped parcels. The area is busy with vehicles, commercial/industrial operations, operation of the light rail, and pedestrians. Undeveloped land within a quarter mile of the project includes a parcel abutting the southwest edge of the project site, parcels along the south side of North B Street, several parcels north of the light rail station north of Richards Boulevard, and several open grassy areas on otherwise developed land.

The vacant lot adjacent to the southwest corner of the project site is grassy with several large clumps of blue elderberry shrubs (*Sambucus nigra* ssp. *caerulea*), giant reed (*Arundo donax*), Himalayan blackberry (*Rubus armeniacus*), and tree of heaven (*Ailanthus altissima*). Railyards housing and an MLS stadium are proposed for construction on the undeveloped parcels on the south side of North B Street.⁷ These parcels, as well as the parcels north of the light rail station, have been cleared of trees and shrubs and primarily consist of grassland and ruderal vegetation.

Trees within a quarter mile of the site include a mix of small to large deciduous and evergreen landscaped trees, roadside trees, and naturally growing trees. Large trees which could provide potential nesting habitat for birds of prey are scattered around the area. Medium to large deciduous and evergreen trees grow along the south side of North B Street; three large Fremont cottonwoods (*Populus fremontii*) grow in a grassy area approximately 500 feet west of the project site; several large tree of heaven grow on an industrial parcel approximately 200 feet east of the project site; two rows of large Coast redwoods (*Sequoia semperirens*) are planted around the California Highway Patrol building north of Richards Boulevard; several large elm trees occur along the south side of a grassy field northeast of North 8 Street; and a row of large eucalyptus grow along the south side of North B Street, approximately 0.18 mile east of the southern end of the project site.

⁷ The Railyards, 2019. Projects. <https://railyards.com/projects>. Accessed January 8, 2019.

Wetlands/Waters of the U.S.

A formal delineation has not been conducted at the project site. In 2017, a small area dominated by scouring rush (*Equisetum hyemale*) was identified along the western fence line of the FMD area. Due to locked gates, this area could not be accessed during the 2019 site visit. Scouring rush is classified as a facultative wetland plant,⁸ meaning that it usually occurs in wetlands (estimated probability is 67% to 99%), but occasionally is found in non-wetlands.⁹ This area may support a wetland. Fill of this potential wetland was addressed in the Demolition Project IS/MND.

Sensitive Natural Communities

The CNDDDB generates a list of ecologically sensitive and/or threatened habitat types within the state of California. The CNDDDB list documents the following sensitive communities within the vicinity of the project site: northern claypan vernal pool, northern hardpan vernal pool, northern volcanic mud flow vernal pool, elderberry savannah, great valley cottonwood riparian forest, and great valley oak riparian forest. There are no sensitive natural communities present at the project site.

Wildlife Corridors

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Fragmentation can also occur when a portion of one or more habitats is converted into another habitat, such as when woodland or scrub habitat is altered or converted into grasslands after a disturbance such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of this fragmentation by: (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The RBOC project site is not located within a major or local wildlife corridor/travel route because it does not connect two significant habitat areas. In both its current condition and expected future condition after the Demolition Project is complete, the site is and will be developed and lack overstory vegetation used by wildlife for cover. Additionally, the project site is surrounded by urban development, primarily consisting of commercial and industrial uses. No wildlife corridors occur within the RBOC project site.

⁸ Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin, 2016. The National Wetland Plant List: 2016 wetland ratings. *Phytoneuron* 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.

⁹ Lichvar, R.W., N.C. Melvin, M.L. Butterwick, and W.N. Kirchner, 2012. National Wetland Plant List Indicator Ratings Definitions. U.S. Army Corps of Engineers Cold Regions Research and Engineering Laboratory. Prepared for Wetland Regulatory Assistance Program, U.S. Army Corps of Engineers, Washington, DC. July 2012.

Special-Status Species

For the purposes of this EIR, special-status species include species listed, proposed, or candidate species for listing as threatened or endangered by the USFWS; species designated as species of special concern by the CDFW; species listed as rare, threatened, or endangered by the CDFW pursuant to the California Endangered Species Act (CESA); species designated as fully protected under Sections 3511 (birds), 4700 (mammals), and 5050 (reptiles and amphibians) of the California Fish and Game Code; plant species listed as California Rare Plant Rank (CRPR) 1B or 2 by the CNPS; and species not currently protected by statute or regulation, but considered rare, threatened, or endangered under CEQA (section 15380).

Special-status species considered for this analysis are based on the CNDDDB, CNPS, and USFWS lists (Appendix E). Appendix E includes the common and scientific names for each species, regulatory status (federal, State, local, CNPS), habitat descriptions, and potential for occurrence on the project site after the Demolition Project is complete. The 2019 reconnaissance-level biological survey characterized existing site conditions to determine whether the project site contains known special-status species or provides habitat suitability for special-status species. For preparation of this EIR, existing site conditions, anticipated future site conditions, known special-status species occurrences, and special-status species' habitats were analyzed to determine the potential to occur on or adjacent to the project site. Special-status species determined to not have the potential to occur are based on the RBOC project site lacking suitable habitat or occurring outside of the known extant geographical or elevation ranges; these species are not discussed further in this section. No USFWS-designated critical habitat is located within the project site.

Table 3.2-1 summarizes special-status species with the potential to occur on or adjacent to the RBOC project site based on suitable habitat. No special-status plants, amphibians, reptiles, fish, or mammals have the potential to occur on the project site after the Demolition Project has been completed (see Appendix E). There would be no impact to these biological resources.

**TABLE 3.2-1
 SPECIAL-STATUS SPECIES WITH POTENTIAL TO OCCUR IN THE RBOC PROJECT SITE**

Common Name Scientific Name	Listing Status: Federal/ State/CRPR	Habitat Description/ Blooming Period	Potential to Occur on or Adjacent to the RBOC Project Site
Invertebrates			
Valley elderberry longhorn beetle (VELB) <i>Desmocerus californicus dimorphus</i>	FT/--/--	Host plant is elderberry (<i>Sambucus</i> sp.) shrubs usually associated with riparian areas. Adults emerge in spring until June. Exit holes visible year-round.	Low. Several large blue elderberry (<i>Sambucus nigra</i> ssp. <i>caerulea</i>) shrubs are located from 35 feet to over 170 feet west of the western FMP fence line. The shrubs are not located in a riparian area and are located over 0.7 mile from known VELB records. No elderberry shrubs were found on the project site.

**TABLE 3.2-1
 SPECIAL-STATUS SPECIES WITH POTENTIAL TO OCCUR IN THE RBOC PROJECT SITE**

Common Name Scientific Name	Listing Status: Federal/ State/CRPR	Habitat Description/ Blooming Period	Potential to Occur on or Adjacent to the RBOC Project Site
Birds			
Burrowing owl <i>Athene cunicularia</i>	--/SSC/-- (burrowing sites and some wintering sites)	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open dry grassland and desert habitat. The burrows are found in dry, level, open terrain, including prairie, plains, desert, and grassland with low height vegetation for foraging and available perches, such as fences, utility poles, posts, or raised rodent mounds. Found year-round. Breeding season extends from March to August.	Low. Burrows were identified in several locations on the FMP portion of the project site during the 2017 and 2019 reconnaissance fieldwork. No burrowing owls or evidence of burrowing owls was observed. The nearest presumed extant CNDDDB occurrence of this species located 3.2 miles east-southeast of the project site.
Swainson's hawk <i>Buteo swainsoni</i>	--/ST/--	Nests peripherally to valley riparian systems and within lone trees or groves of trees in agricultural fields. Valley oak, Fremont cottonwood (<i>Populus fremontii</i> ssp. <i>fremontii</i>), walnut, and large willow (<i>Salix</i> sp.) trees, ranging in height from 41 to 82 feet, are the most commonly used nest trees in the Central Valley. Breeding season extends from March 1 through September 14.	Low. Upon completion of the Demolition Project, no trees will remain on the project site. The project site will not provide nesting habitat for Swainson's hawks. Mature trees adjacent to the site could provide habitat, although more suitable habitat is located within the riparian corridors of the Sacramento and American rivers located over 0.4 mile away.
White-tailed kite <i>Elanus leucurus</i>	--/CFP/-- (nesting)	Nests in isolated trees or woodland areas with suitable open foraging habitat. Nesting season extends from February 15 to August 31.	Low. Upon completion of the Demolition Project, no trees will remain on the project site. The project site will not provide nesting habitat for white-tailed kite. Mature trees adjacent to the site could provide habitat, although more suitable habitat is located within the riparian corridors of the Sacramento and American rivers located over 0.4 mile away. The nearest CNDDDB occurrence of this species is located 1.2 mile east of the project site.

KEY:

Federal: (USFWS)

- FE = Listed as Endangered by the Federal Government
- FT = Listed as Threatened by the Federal Government
- FC = Candidate for listing by the Federal Government
- (PD) = Proposed for Delisting

State: (CDFW)

- SE = Listed as Endangered by the State of California
- ST = Listed as Threatened by the State of California
- SR = Listed as Rare by the State of California (plants only)
- SC = Candidate for listing by the State of California
- SSC = California Species of Special Concern
- FP = CDFW Fully Protected Species

CRPR: (California Rare Plant Rank)

- Rank 1A = Plants presumed extinct in California
- Rank 1B = Plants rare, threatened, or endangered in California and elsewhere
- Rank 2A = Plants presumed extirpated in California but common elsewhere
- Rank 2B = Plants rare, threatened, or endangered in California but more common elsewhere

Note: Ranks at each level also includes a threat rank (e.g., CRPR 2B.2) and are determined as follows:

- 0.1 Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
- 0.2 Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
- 0.3 Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

**TABLE 3.2-1
 SPECIAL-STATUS SPECIES WITH POTENTIAL TO OCCUR IN THE RBOC PROJECT SITE**

Common Name Scientific Name	Listing Status: Federal/ State/CRPR	Habitat Description/ Blooming Period	Potential to Occur on or Adjacent to the RBOC Project Site
<p>Present: Species known to occur within the Site based on CNDDB records and/or observed within the Site during the biological surveys.</p> <p>High: Species known to occur on or near the Site (based on CNDDB records within five miles and/or based on professional expertise specific to the Site or species) and there is suitable habitat for the species on the Site.</p> <p>Low: Species known to occur in the vicinity of the Site and there is marginal habitat within the Site -OR- Species is not known to occur in the vicinity of the site, however, there is suitable habitat for the species on the site.</p> <p>None: Species is not known to occur on or in the vicinity of the Site and there is no suitable habitat within the Site -OR- Species was surveyed for during the appropriate season with negative results -OR- The Site does not provide suitable soils or occurs outside of the known elevation or geographic ranges -OR- Species is not known to occur in Sacramento County.</p>			

Special-Status Wildlife

Invertebrates

Several large blue elderberry shrubs, host plant for federal-threatened valley elderberry longhorn beetle (VELB), grow on the undeveloped parcel southwest of the project site (Figure 3.2-1). Because the shrubs are located on an offsite parcel, they were not accessible to survey. The locations of the elderberry shrubs were mapped in the field from accessible areas, including the edge of the project site and from North B Street. There is potential for additional shrubs to occur toward the interior of this parcel which were not visible from accessible areas. The closest shrub is located approximately 35 feet west of the western FMP fence line at the southern end of the project site. Four other shrubs are located 45 to 85 feet west of the western FMP fence line. Several additional shrubs are located over 170 feet west of the western FMP fence line. These shrubs provide marginal habitat for federal-threatened VELB. The USFWS *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*¹⁰ (the framework) provides guidelines for determining the potential effects and developing appropriate avoidance and minimization measures. The framework recommends assessing elderberry shrubs on or within 165 feet of a project site.

The VELB metapopulation in the Central Valley occurs throughout contiguous intact riparian habitat as subpopulations. VELB typically stay within the local elderberry clump from which they emerge. VELB may occupy non-riparian elderberry shrubs when they are reasonably close to riparian areas or known VELB populations. In non-riparian areas, the framework recommends using exit hole surveys and evaluating the distance to riparian areas to assess the likelihood of VELB occupancy. Isolated, non-riparian elderberry clumps are less likely to be occupied or become colonized by VELB, and those beyond 2,526 feet (0.48 mile) from the nearest VELB record become increasingly less likely to be occupied. The shrubs are located offsite and were not surveyed. The shrubs are not located in a riparian area and are located over 0.7 mile from known VELB records. No elderberry shrubs occur on the project site.

¹⁰ United States Fish and Wildlife Service, 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service, Sacramento, CA. May 2017.

Birds

After the Demolition Project is complete, the site will not provide suitable nesting habitat for Swainson's hawk, white-tailed kite, or other nesting birds of prey because all trees will be removed. There are 44 CNDDDB occurrences of Swainson's hawk and 7 CNDDDB occurrences of white-tailed kite within 5 miles of the existing site, the closest of which occur in the riparian areas along the Sacramento and American rivers.¹¹ Large mature trees in the areas surrounding the project site provide potential nesting habitat for Swainson's hawk and white-tailed kite. Foraging habitat is present on the undeveloped parcels around the project site. Due to the urban environment, any nesting bird is likely to be habituated to noise and activity. More suitable nesting habitat for Swainson's hawk and white-tailed kite occurs in the riparian corridors of the Sacramento and American rivers located over 0.4 mile away.

Burrows were identified in several locations on the FMP portion of the project site during the 2017 and 2019 reconnaissance fieldwork. No burrowing owls or evidence of burrowing owls was observed. Any burrows remaining on or adjacent to the project site after the Demolition Project is complete could provide potential habitat for burrowing owls.

After the Demolition Project is complete, the project site will provide potential habitat for ground nesting birds protected under 50 CFR 10 of the Migratory Bird Treaty Act (MBTA) and/or Section 3503 of the California Fish and Game Code, such as killdeer (*Charadrius vociferus*) and mourning dove (*Zenaida macroura*). Adjacent trees, undeveloped areas, and developed areas also provide potential nesting habitat for protected birds, including non-special-status birds of prey such as red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), Cooper's hawk (*Accipiter cooperii*), and American kestrel (*Falco sparverius*).

3.2.2 Regulatory Setting

Federal

Federal Endangered Species Act

The FESA (16 U.S. Code Section 1531 et seq.) protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process. Procedures for addressing impacts to federally listed species follow two principal pathways. The first pathway is a Section 10(a) incidental take permit, which applies to situations where a non-federal government entity must resolve potential adverse impacts to species protected under the FESA. The proposed PCCP, discussed below, is an example of this first path. The second pathway involves Section 7 consultation, which applies to projects directly undertaken by a federal agency or private projects requiring a federal permit or approval such as a Section 404 permit under the CWA, or receiving federal funding.

¹¹ California Department of Fish and Wildlife, 2018. California Natural Diversity Database, Commercial (ds85). California Department of Fish and Wildlife Biogeographic Data Branch, Sacramento, California. Accessed December 31, 2018 and January 2, 2019.

FESA defines an endangered species as “any species or subspecies that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species or subspecies that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” The term “take” means to “harass, harm, pursue, hunt, shoot, wound, kill, trap, or collect or to attempt to engage in any such conduct.”

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (16 USC, Sec. 703, Supp. I, 1989) prohibits killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. This act encompasses whole birds, parts of birds, and bird nests and eggs.

State

California Endangered Species Act

The CESA was enacted in 1984. Under CESA, the California Fish and Game Commission has the responsibility for maintaining a list of threatened species and endangered species. Pursuant to the requirements of the CESA, an agency reviewing a project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project site and determine whether the project would have a potentially significant impact on such species. In addition, CDFW encourages informal consultation on any project which may impact a candidate species. The CESA prohibits the take of California listed animals and plants in most cases, but the CDFW may issue incidental take permits under special conditions.

Pursuant to the requirements of the CESA, an agency reviewing a project within its jurisdiction must determine whether any state-listed endangered or threatened species may be present in the project study area and determine whether the project will have a potentially significant impact on such species. Project-related impacts to species on the CESA endangered or threatened list would be considered significant. “Take” of protected species incidental to otherwise lawful management activities may be authorized under Fish and Game Code Section 206.591. Authorization from CDFW would be in the form of an Incidental Take Permit under Section 2801.

California Fish and Game Code

Certain species are considered *fully protected*, meaning that the code explicitly prohibits all take of individuals of these species except for take permitted for scientific research. Section 5050 lists fully protected amphibians and reptiles, Section 5515 lists fully protected fish, Section 3511 lists fully protected birds, and Section 4700 lists fully protected mammals. Except as provided in Sections 2081.7 or 2835, fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the species for the protection of livestock.

Under Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any

regulation made pursuant thereto. Section 3503.5 of the code prohibits take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs. Migratory non-game birds are protected under Section 3800, while other specified birds are protected under Section 3505.

Species of Special Concern

The CDFW maintains lists for candidate-endangered species and candidate-threatened species. California candidate species are afforded the same level of protection as listed species. California also designates species of special concern, which are species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. These species do not have the same legal protection as listed species or fully protected species, but may be added to official lists in the future. The CDFW intends the species of special concern list to be a management tool for consideration in future land use decisions.

CEQA Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, CEQA Guidelines section 15380(d) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specific criteria.

The CEQA also specifies the protection of other locally or regionally significant resources, including natural communities or habitats. Although natural communities do not presently have legal protection, the CEQA requires an assessment of such communities and potential project impacts. Natural communities that are identified as sensitive in the CNDDDB are considered by the CDFW to be significant resources and fall under the CEQA Guidelines for addressing impacts.

Local

The project is located on State-owned property and would be implemented by the California State Department of General Services (DGS). State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot conflict with these policies and ordinances. As a good faith gesture, local plans, policies, and regulations that are applicable to the project are described herein for reference. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

City of Sacramento 2035 General Plan

The following goals and policies from the City of Sacramento 2035 General Plan¹² are relevant to biological resources.

Goal ER 2.1: Natural and Open Space Protection. Protect and enhance open space, natural areas, and significant wildlife and vegetation in the city as integral parts of a sustainable environment within a larger regional ecosystem.

¹² City of Sacramento, 2015. Sacramento 2035 General Plan. Adopted March 3, 2015.

Policy ER 2.1.1: Resource Preservation. The City shall encourage new development to preserve onsite natural elements that contribute to the community's native plant and wildlife species value and to its aesthetic character.

Policy ER 2.1.10: Habitat Assessments and Impact Compensation. The City shall consider the potential impact on sensitive plants and wildlife for each project requiring discretionary approval. If site conditions are such that potential habitat for sensitive plant and/or wildlife species may be present, the City shall require habitat assessments, prepared by a qualified biologist, for sensitive plant and wildlife species. If the habitat assessment determines that suitable habitat for sensitive plant and/or wildlife species is present, then either (1) protocol-level surveys shall be conducted (where survey protocol has been established by a resource agency), or, in the absence of established survey protocol, a focused survey shall be conducted consistent with industry-recognized best practices; or (2) suitable habitat and presence of the species shall be assumed to occur within all potential habitat locations identified on the project site. Survey Reports shall be prepared and submitted to the City and the California Department of Fish and Wildlife (CDFW) or the United States Fish and Wildlife Service (USFWS) (depending on the species) for further consultation and development of avoidance and/or mitigation measures consistent with state and federal law.

Policy ER 2.1.11: Agency Coordination. The City shall coordinate with State and Federal resource agencies (e.g., California Department of Fish and Wildlife (CDFW)), U.S. Army Corps of Engineers, and United States Fish and Wildlife Service (USFWS)) to protect areas containing rare or endangered species plants and animals.

Goal ER 3.1: Urban Forest. Manage the City's urban forest as an environmental, economic, and aesthetic resource to improve Sacramento residents' quality of life.

Policy ER 3.1.2: Manage and Enhance the City's Tree Canopy. The City shall continue to plant new trees, ensure new developments have sufficient right-of-way width for tree plantings, manage and care for all publicly owned trees, and work to retain healthy trees. The City shall monitor, evaluate and report, by community plan area and city wide, on the entire tree canopy in order to maintain and enhance trees throughout the City and to identify opportunities for new plantings.

Policy ER 3.1.3: Trees of Significance. The City shall require the retention of City trees and Heritage Trees by promoting stewardship of such trees and ensuring that the design of development projects provides for the retention of these trees wherever possible. Where tree removal cannot be avoided, the City shall require tree replacement or appropriate remediation.

Policy ER 3.1.4: Visibility of Commercial Corridor. The City shall balance the tree canopy of the urban forest with the need for visibility along commercial corridors, including the selection of tree species with elevated canopies.

Policy ER 3.1.6: Urban Heat Island Effects. The City shall continue to promote planting shade trees with substantial canopies and require, where feasible, site design that uses trees to shade rooftops, parking facilities, streets, and other facilities to minimize heat island effects.

City of Sacramento Tree Ordinance

The City of Sacramento has adopted an ordinance to protect trees as a significant resource to the community (City Code Title 12, Chapter 12.56, Ordinance 2016-0026 Section 4¹³). The City's policy is to retain all trees when possible regardless of their size. When circumstances will not allow for retention, permits are required to remove trees that are within City jurisdiction. City trees are defined as any tree the trunk of which, when measured 4.5 feet above the ground, is partially or completely located in a City park, on real property the City owns in fee, or on a public right-of-way, including any street, road, sidewalk, park strip, mow strip, or alley. Regulated work, including removal, pruning, or construction around trees that are protected by the tree ordinance, requires a tree permit and is subject to permission by the Director. Trees on State-owned property are not within City jurisdiction and are not subject to the City tree ordinance.

3.2.3 Analysis, Impacts and Mitigation

Significance Criteria

For the purposes of this EIR, impacts on biological resources are considered significant if the project would:

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- Have a substantial adverse effect on federally or State-protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or by other means;
- 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 CDFW or USFWS;
- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted habitat conservation plan (HCP); natural community conservation plan; or other approved local, regional, or state HCP.

Methodology and Assumptions

The State has already approved the Demolition Project. Whether or not the project is approved, the State will relocate the printing plant and all employees and demolish the existing structures. The approved Demolition Project will remove existing onsite buildings and related foundations, as well as remove asphalt paving, landscaping, utilities, and remove and/or remediate contaminated soil. When the Demolition Project is complete, the site will be completely clear of

¹³ City of Sacramento, 2016. Ordinance No. 2016-0026 Section 4. Chapter 12.56 Tree Planting, Maintenance, and Conservation. August 4, 2016.

vegetation and the site surface will be largely dirt. As these actions will occur with or without the approval of this project, the most appropriate baseline from which to compare the true impacts of the project is the future condition of the site once the Demolition Project has been completed. Because of this reason, the impact discussions below will compare the project against a barren site.

Information for this biological resources impact assessment is based on a review of literature research (e.g., CNDDDB, CNPS, and USFWS), review of aerial photographs, and the results of the reconnaissance-level biological survey conducted on January 8, 2019. Resources potentially impacted by the project have been identified and recommendations for mitigation, if necessary to protect those resources, are provided.

Issues or Potential Impacts Not Discussed Further

The project site is located in a developed urban environment and does not contain or occur adjacent to riparian habitat or other sensitive natural communities. The project site does not provide habitat for special-status plant species. The project site does not contain habitat for special-status amphibians, reptiles, mammals, or fish. No impact on riparian habitat, sensitive natural communities, special-status plants, amphibians, reptiles, mammals, or fish would occur as a result of the project. These issues are not discussed further in the EIR.

All trees on the project site will be removed as part of the Demolition Project. No trees will be present on the project site at the time of project implementation. There are no City trees around the perimeter of the project site. No City trees are anticipated to be impacted as part of project construction. Project implementation will not conflict with the City of Sacramento tree ordinance and is not discussed further in the EIR.

Fill of a potential wetland was identified and addressed in the Demolition Project IS/MND. No impact to federal or State-protected wetlands will occur as a result of the project. Wetlands are not addressed further in the EIR.

Project implementation would not interfere substantially with the movement of any native resident or migratory wildlife species because the project site does not contain any wildlife movement corridors. The project site does not contain any known wildlife nurseries, such as deer fawning sites. These issues are not discussed further in the EIR.

There is no adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan that applies to the project site. The recently approved South Sacramento Habitat Conservation Plan does not encompass the project area. Project implementation will not conflict with any habitat conservation plans and are not discussed further in the EIR.

Impacts and Mitigation Measures

Impact 3.2-1: Implementation of the project could impact valley elderberry longhorn beetle.

Several large blue elderberry shrubs, host plant for federal-threatened VELB, grow on the undeveloped parcel southwest of the project site (Figure 3.2-1). The closest shrub is located approximately 35 feet west of the western FMP fence line at the southern end of the project site. Four other shrubs are located 45 to 85 feet west of the western FMP fence line. Several additional shrubs are located over 170 feet west of the western FMP fence line. In non-riparian habitats, the USFWS *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*¹⁴ assumes that a project may affect VELB if project activities occur within 165 feet of an elderberry shrub with exit holes, or disturbs elderberry shrubs reasonably close to riparian areas or known VELB populations. The elderberry shrubs occur offsite and were not surveyed for VELB exit holes. No elderberry shrubs will be removed or pruned as part of the project. If VELB are present in the offsite shrubs, work occurring within 165 feet of the elderberry shrubs could impact VELB. This would be a **potentially significant** impact.

Mitigation Measure 3.2-1

- a) Activities that may damage or kill an elderberry shrub (e.g., trenching, paving, etc.) will have an avoidance area of at least 20 feet from the drip-line of the elderberry shrubs. If activities must occur within 20 feet, the project applicant shall consult with the USFWS to determine potential effects and mitigation requirements.
- b) All areas within 165 feet of the elderberry shrubs to be avoided during construction activities will be fenced using high visibility construction fencing, followed by silt fencing, as close to construction limits as feasible. The silt fencing shall be installed to prevent migration of soils into the protected zone around the elderberry shrubs.
- c) A qualified biologist will provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for non-compliance.
- d) During work within 165 feet of the elderberry shrubs, a qualified biologist will monitor the work area on a weekly basis to ensure that all avoidance and minimization measures are implemented. Time spent onsite will be sufficient to verify that no damage to elderberry shrubs has occurred, to ensure that protective fencing is in place and in good working order, and to coordinate any concerns with the client/contractor.
- e) As much as feasible, all activities that occur within 165 feet of an elderberry shrub will be conducted outside the flight season of the VELB (March – July).
- f) Herbicides will not be used within the drip-line of any elderberry shrubs. Insecticides will not be used within 98 feet of an elderberry shrub. All chemicals will be applied using a backpack sprayer or similar direct application method.

¹⁴ United States Fish and Wildlife Service, 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service, Sacramento, CA. May 2017.

- g) Mechanical weed removal within the drip-line of the shrub will be limited to the season when adults are not active (August – February) and will avoid damaging the elderberry.

Level of Significance After Mitigation: Mitigation Measure 3.2-1 would ensure that the project avoids or mitigates for impacts to VELB through implementation of a no-work buffer for activities that may damage or kill an elderberry shrub, and minimizes project activities which could impact the shrubs. Therefore, this impact would be reduced to a **less-than-significant** level.

Impact 3.2-2: Implementation of the project could result in impacts to nesting migratory birds and birds of prey.

Migratory birds and other birds of prey that are protected under 50 CFR 10 of the MBTA and/or Section 3503 of the California Fish and Game Code could nest on or in the vicinity of the project site. The project could result in direct mortality to nesting migratory birds or birds of prey should they be present on or adjacent to the project site at the time of construction through removal of, damage to, or abandonment of eggs or young. This would be a **potentially significant** impact.

Mitigation Measure 3.2-2

- a) Project construction shall occur outside of the nesting season to the extent feasible. If project construction begins during the nesting season (Table 3.2-2), a qualified biologist shall conduct a preconstruction survey for active nests on and adjacent to the project site. The pre-construction survey shall be conducted within 14 days prior to commencement of ground disturbing activities. If no active nests are found during the pre-construction survey, no additional mitigation measures are required. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, an additional pre-construction survey is required. Additional survey requirements for Swainson’s hawk and burrowing owl are provided below.

**TABLE 3.2-2
NESTING SEASON FOR SPECIAL-STATUS AND COMMON NESTING BIRDS**

Species	Nesting Season^a
White-tailed kite	February 1 to September 30
Swainson’s hawk	March 1 to September 15
Burrowing owl	Year-round: February 1 to August 31 (nesting); September 1 to January 31 (wintering)
Common nesting birds (raptors, passerines, herons and egrets)	February 1 to August 31

- b) If an active nest is located on or adjacent to the construction footprint, an appropriate buffer zone shall be established around the nest, as determined by the qualified biologist. The biologist shall mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or until the young have successfully fledged or the nest is determined to no longer be active. Buffer zones are typically 50-100 feet for migratory bird nests and 250-500 feet for bird of prey nests

(excluding Swainson's hawk). Buffer size will be determined by the qualified biologist based on the species of bird, the location of the nest relative to the project, project activities during the time the nest is active, and other project-specific conditions.

- c) If establishing the typical buffer zone is impractical, the qualified biologist may reduce the buffer depending on the species and daily monitoring would be required to ensure that the nest is not disturbed and no forced fledging occurs. Daily monitoring shall occur until the qualified biologist determines that the nest is no longer active.

Additional Measures for Burrowing Owl

- d) Prior to project initiation, a qualified biologist will conduct preconstruction Take Avoidance Surveys in accordance with Appendix D of the CDFW *Staff Report on Burrowing Owl Mitigation*.¹⁵ One survey will be conducted no less than 14 days prior to initiating ground disturbance activities. A second survey will be conducted within 24 hours prior to ground disturbance. If no burrowing owls are identified on or in the vicinity of the project site, no additional mitigation measures are required.
- e) If burrowing owls are discovered on the project site or in the vicinity of the project site, a qualified biologist shall establish a fenced exclusion zone around each occupied burrow. No construction activities shall be allowed within the exclusion buffer zone until such time that the burrows are determined to be unoccupied by a qualified biologist. The buffer zones shall be a minimum of 160 feet from an occupied burrow during the non-breeding season (September 1 through January 31), and a minimum of 500 feet from an occupied burrow during the breeding season (February 1 through August 31). If work will occur within the buffer zones, construction will be monitored daily by a qualified biologist to ensure no disturbance occurs to the burrowing owl.
- f) A biologist monitor will conduct weekly monitoring of the burrowing owl during construction activities.
- g) If complete avoidance is not feasible, the CDFW shall be consulted regarding the implementation of avoidance or passive relocation methods. All activities that will result in a disturbance to burrows shall be approved by the CDFW prior to implementation.

Additional Measures for Swainson's Hawk

- h) If construction activities are anticipated to commence during the Swainson's hawk nesting season (March 1 to September 15), a qualified biologist shall conduct a minimum of two pre-construction surveys during the recommended survey periods in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*.¹⁶ All potential nest trees within 0.25 mile of the project footprint shall be visually examined for potential Swainson's

¹⁵ California Department of Fish and Game, 2012. Staff Report on Burrowing Owl Mitigation. State of California. Natural Resources Agency. Department of Fish and Game. March 7, 2012.

¹⁶ Swainson's Hawk Technical Advisory Committee, 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in the Central Valley.

hawk nests, as accessible. If no active Swainson's hawk nests are identified on or within 0.25-mile of the project site, no additional mitigation measures are required.

- i) If an active Swainson's hawk nest is found within 0.25 mile of the project site, the following measures will be implemented to avoid and minimize impacts to the nest:
 - a. A Worker Awareness Training Program will be conducted prior to the start of construction;
 - b. A no-disturbance buffer zone will be established and work will be scheduled to avoid impacting the nest during critical periods. To the extent feasible, no work will occur within 500 feet of the nest while it is in active use. If work will occur within 500 feet of the nest, then construction will be monitored daily by a qualified biologist to ensure no disturbance occurs to the nest;
 - c. A biological monitor will conduct weekly monitoring of the nest during construction activities; and
 - d. The biologist may halt construction activities if s/he determines that the construction activities are disturbing the nest. CDFW will be consulted prior to re-initiation of activities that maybe disturb the nest.

Level of Significance After Mitigation: Mitigation Measure 3.2-2 would ensure that the project avoids impacts to migratory birds and other birds of prey through clearing vegetation outside of the nesting season or conducting preconstruction surveys. No-work buffers will be established if birds are observed nesting in the vicinity of the construction footprint. Therefore, this impact would be reduced to a **less-than-significant** level.

Cumulative Impacts

The cumulative context for this analysis is the Sacramento Valley, generally areas within portions of the City of Sacramento and Sacramento County. This region is bounded on the west by the Inner North Coast Ranges and to the east by the Sierra Nevada foothills. Cumulative impacts to VELB are not addressed in this analysis because Mitigation Measure 3.2-1 would ensure no take of VELB occurs as a result of the project. Cumulative impacts to nesting migratory birds and birds of prey, with the exception of burrowing owl, are not addressed in this analysis because the post-construction conditions will provide similar nesting habitat to the existing, pre-demolition conditions. Additionally, Mitigation Measure 3.2-2 would ensure no take of protected nesting birds occurs as a result of the project.

Impact 3.2-3: Implementation of the project, in combination with other development in the Central Sacramento Valley, would contribute to cumulative loss of nesting habitat for burrowing owl.

Development over time has encroached upon and displaced ecologically diverse biological resources throughout the Sacramento Valley of California by replacing grassland, oak woodland, riparian woodland, wetland, riverine, and other native habitats that support special-status species, with urban and agricultural uses. Conversion of these remaining natural ecosystems has accelerated within the past few decades due to increased developmental pressures to accommodate California's rapidly growing human population within this portion of the state.

Future projects in the region resulting in habitat loss could contribute to a significant cumulative effect.

The project site and surrounding areas are highly urbanized and have already been converted to commercial, industrial, and residential development. However, the existing project site contains burrows potentially suitable for use by burrowing owl. Development of the project will likely result in the loss of existing burrows on the project site. Loss of burrow habitat reduces potential burrowing owl habitat. There are no CNDDDB records of burrowing owl in downtown Sacramento more recent than 1974.¹⁷ Burrowing owl are unlikely to use the project site. Due to the low potential for burrowing owl to occur in downtown Sacramento, and because impacts associated with the loss of burrows occupied by burrowing owl can be mitigated to less-than-significant levels, the project's contribution to cumulative impacts on burrowing owls is not considerable. Higher quality habitat for burrowing owl is found in less developed areas of Sacramento County and the surrounding region. Therefore, this is considered a **less-than-significant cumulative** impact.

Mitigation Measure

None required.

¹⁷ California Department of Fish and Wildlife, 2018. California Natural Diversity Database, Commercial (ds85). California Department of Fish and Wildlife Biogeographic Data Branch, Sacramento, California. Accessed December 31, 2018 and January 2, 2019.

3.3 Cultural Resources

This section assesses the potential effects on cultural resources as a result of constructing the Richards Boulevard Office Complex (RBOC) project (or project). The section includes relevant baseline information, including a description of architectural resources, prehistoric and historic-era archaeological resources, and tribal cultural resources at the project site; anticipated future conditions after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete; and the federal, state, and regional regulations that protect resources, including human remains, and the regulatory agencies that enforce these standards. A description of the potential impacts resulting from the project is also provided, as well as the identification of feasible mitigation (where applicable) to avoid or lessen the impacts.

No comments were received on the notice of preparation (NOP) related to cultural or tribal cultural resources.

The primary sources of data referenced for this section include:

- Cultural Resources Inventory Report, Department of General Services State Printing Plant and Textbook Warehouse Demolition Project, Sacramento, Sacramento County, California March 2018;¹ and
- State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration.²

3.3.1 Environmental Setting

Existing Conditions

Natural Setting

The project site is located near the confluence of the Sacramento and American rivers in the southern reaches of the Sacramento Valley in central California. The rivers are 0.86 and 0.5 miles to the west and north, respectively; the confluence itself is 0.87 mile west of the site. Beyond the Sacramento metropolitan area are the vast agricultural fields of the Sacramento Valley where acres of rice and row crops, such as tomatoes, corn, and sunflowers, along with fruit and nut orchards, abound. To the south, the Sacramento River flows into the great Sacramento-San Joaquin River Delta before reaching San Francisco Bay. The valley in the project vicinity is hemmed by the Sierra Nevada Mountains, with peaks over 10,000 feet above mean sea level (amsl), to the east, and the North Coast Range mountains that rise to over 3,000 feet amsl to the west.

¹ Horizon Water and Environment, 2018. Cultural Resources Inventory Report, Department of General Services State Printing Plant and Textbook Warehouse Demolition Project, Sacramento, Sacramento County, California. Prepared for California Department of General Services. March 2018.

² Department of General Services, 2018. *State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration*. March 2018.

The elevation of the project site is about 22 feet amsl. As a result, prior to the construction of the levees along the Sacramento and American rivers, the entire region was subject to regular flooding. The east side of the Sacramento River gradually rises to meet the Sierra Nevada, but large portions of what is now downtown Sacramento were swamplands until they were reclaimed in the late 1800s. The marshes and swamps were covered with tule, sedges, cattail, and other aquatic plants. Vast grasslands occupied much of the remainder of the valley, although stands of valley oak dominated the slightly higher uplands. Riparian woodlands, consisting of cottonwoods, willows, alders, sycamores and valley oaks crowded the river and stream banks. The rivers teemed with salmon, sturgeon, and other food fish while the marshes were filled with migrating waterfowl, and herds of deer and elk populated the oak woodlands. This environment, including the generally mild Mediterranean climate, made the Sacramento region a desirable place to live for indigenous Californians, as demonstrated by the presence of several known village sites in close proximity to the project.

Geologically, the Central Valley, which includes both the Sacramento and San Joaquin river valleys, is “structural downwarp” that contains deep sedimentary deposits formed by erosion from the surrounding mountains, and which date from the Cretaceous Period to recent times. The recent Holocene deposits on both sides of the Sacramento River in the project site are flood-basin and river deposits comprised largely of silt and clay. Frequent flooding prior to the establishment of the modern levee system continually deposited new layers of soil that could bury cultural materials left by the Native Americans living in the vicinity, as well as those from the early historic era.

Until post World War II, the area was largely undeveloped and isolated from the Sacramento urban area by the southern Pacific Railyards, which lie directly south of the project site. Today, the current environment of the project site is in an entirely developed setting within the City of Sacramento. It is within the River District, one of 28 historic districts in the City’s Central City Community Plan area, and is identified as the River District Specific Plan Area. Warehouses and government office buildings are the predominant businesses, but retail/wholesale business are also prevalent; housing represents a minor element within the district, and hotels line Interstate 5.

Prehistory

Categorizing the prehistoric period into cultural stages allows researchers to describe a broad range of archaeological resources with similar cultural patterns and components during a given timeframe, thereby creating a regional chronology. Rosenthal et al.³ provide a framework for the interpretation of the Central Valley prehistoric record and have divided human history in the region into three basic periods: *Paleo-Indian* (13,550 to 10,550 years before present [BP]), *Archaic* (10,550 to 900 BP), and *Emergent* (900 to 300 BP). The Archaic period is subdivided into three sub-periods: *Lower Archaic* (10,550 to 7550 BP), *Middle Archaic* (7,550 to 2,550 BP), and *Upper Archaic* (2,550 to 900 BP). Economic patterns, stylistic aspects, and regional phases

³ Rosenthal, Jeffrey, Gregory G. White, and Mark Q. Sutton, 2007. The Central Valley: A View from the Catbird’s Seat. In *California Prehistory: Colonization, Culture, and Complexity*, Terry L. Jones and Kathleen Klar, editors, pp. 147-164. Altamira Press, Lanham, MD.

further subdivide cultural patterns into shorter phases. This scheme uses economic and technological types, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods.

Ethnography

The project site is within the lands occupied and used by the Nisenan, or Southern Maidu. The language of the Nisenan, which includes several dialects, is classified in the Maiduan family of the Penutian linguistic stock.^{4,5} The western boundary of Nisenan territory was the western bank of the Sacramento River. The eastern boundary was “the line in the Sierra Nevada mountains where the snow lay on the ground all winter.”⁶

As with other California Native American groups, the gold rush of 1849 had a devastating effect on the Valley Nisenan. The flood of miners that came to the area in search of gold brought diseases with them that decimated the Nisenan population. Those who survived were subjected to violence and prejudice at the hands of the miners, and the Nisenan eventually were pushed out of their ancestral territory. Although this contact with settlers had a profound negative impact on the Nisenan population through disease and violent actions, the Nisenan people survived and continue to maintain strong communities and action-oriented organizations.⁷

Historic Background

The Spanish made forays into the Central Valley starting in the mid-18th century, and the earliest significant non-indigenous presence in the region began in 1808 when Gabriel Moraga led an expedition from Mission San Jose to the northern Sacramento Valley. However, the Sacramento Valley was still predominantly occupied by Native Americans with only the occasional Spanish expedition into the interior to search for mission sites or escaped neophytes. By the late 1820s, English, American, and French fur trappers, attracted by the Valley’s abundance of animal life, had established operations throughout the region. The earliest Euro-American settlement of the area occurred in the 1840s with the establishment of land grants by the Mexican government. In 1839, John Sutter, born in Germany to Swiss parents, became a Mexican citizen and obtained Governor Juan B. Alvarado’s permission to establish a settlement in the California interior. Sutter left Yerba Buena (modern day San Francisco City area) in August of 1839, traveling up the Sacramento River in search of a site for his estate. Sutter arrived at the confluence of the American and Sacramento rivers, established a settlement, and received the first land grant in the region in 1841 for his New Helvetia Rancho. The New Helvetia Ranch, within which the APE

⁴ Kroeber, Alfred L., 1976. *Handbook of the Indians of California*, Bureau of American Ethnology Bulletin 78, Smithsonian Institution, Washington, D.C., reprinted from 1925 edition, Dover Publications, Inc., New York.

⁵ Shipley, William F., 1978. “Native Languages of California”, In *California*, edited by Robert F. Heizer, pp. 80-90, Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

⁶ Littlejohn, Hugh W., 1928. *Nisenan Geography*, Document 18, University of California Department of Anthropology, Berkeley, California.

⁷ Castillo, Edward D., 1978. “The Impact of Euro-American Exploration and Settlement,” In *California*, edited by Robert F. Heizer, pp. 99-127, Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

was located, encompassed 97 square miles and included lands on the east bank of the Feather and Sacramento Rivers. Sutter established Sutter's Fort, and developed fisheries, a flourmill, and a lumber mill.⁸

The Sacramento Valley remained relatively isolated and sparsely populated until the advent of the Gold Rush period. Given Sacramento's proximity to mining areas, and its accessibility to maritime traffic, the area quickly became a trading and economic center. Commerce along the Sacramento River encouraged continued population growth, with many of the miners and farmers settling along the natural levees of the Sacramento River. Settlers recognized that the active flood plain deposited fertile soils in the lands nearest to the river, which supported bountiful crops and provided easy access to transportation corridors along the river itself. Ranchers and farmers found economic success in providing food and supplies for the miners, although frequent flooding troubled settlers' agricultural efforts and additional settlement.⁹

Although an early railroad line was established between Sacramento and Folsom in the late 1850s, the construction of the Transcontinental Railroad, which had a terminus at Front and J streets in Sacramento, greatly expanded commerce in the region. As part of the Transcontinental Railroad, the Central Pacific Railroad Company constructed the first railroad station and tracks at this location in 1864, and over the next 15 years continued to expand its operations with upgraded stations and freight sheds. During these early years, the area adjacent the Sacramento River, north of I Street and west of 7th Street, was occupied by a body of water referred to as Sutter Lake or China Slough (now California Historical Landmark 594). The railroad tracks swung from Front and J streets, to the north on top of a levee along the Sacramento River to north of China Slough, where the railyard shops were centered, and then eastward. The Central Pacific Railroad worked to reclaim the slough in order to expand their facilities, beginning as early as 1869, but the effort was not completed until 1907. Although a new station was planned for construction at the location of the reclaimed swamp in 1911, the intercession of World War I delayed the ground breaking until 1925. This building is the NRHP-eligible Sacramento Valley Station that is still in use today. North of the railyards, the land was primarily used for agricultural purposes until the late 1940s. USGS maps and aerial photographs from 1947 reflect this agricultural use, but by the early 1950s significant industrial development had occurred.¹⁰

Archival information provided by the North Central Information Center (NCIC), and obtained from DGS and the City of Sacramento, indicates that the printing plant was recommended not eligible for listing in the National and California Registers or eligible as a California Historical Landmark. The State Historic Preservation Officer (SHPO) concurred with this evaluation in a

⁸ Hoover, M. B., H. E. Rensch, E. G. Rensch, W. N. Abeloe, 2002. *Historic Spots in California*. Revised by Douglas E. Kyle. Stanford University Press, Palo Alto, 2002:310-311.

⁹ Hoover, M. B., H. E. Rensch, E. G. Rensch, W. N. Abeloe, 2002. *Historic Spots in California*. Revised by Douglas E. Kyle. Stanford University Press, Palo Alto, 2002:310-311.

¹⁰ Horizon Water and Environment, 2018. Cultural Resources Inventory Report, Department of General Services State Printing Plant and Textbook Warehouse Demolition Project, Sacramento, Sacramento County, California. Prepared for California Department of General Services. March 2018.

letter dated May 3, 2011.¹¹ Demolition of the onsite buildings was addressed in the Demolition Project IS/MND.

Baseline Conditions

Historical Resources

The approved Demolition Project would result in a project site with no buildings or structures other than a pump house on the northwest corner of the site. As has been described previously, SHPO concurred that there are no historic-era buildings on the project site that could be considered historical resources for the purposes of CEQA, and the pump house was included in that concurrence. Therefore, no historic buildings or known resources would be present on the project site under baseline conditions.

Archaeological Resources

No archaeological resources, as defined in Section 15064.5 of the CEQA Guidelines, were identified at the project site during the analysis completed for the Demolition Project.¹² An archaeological survey was conducted and no archaeological resources were identified, although much of the project site was covered with buildings, concrete, asphalt, fill, or stored materials and archaeological remains could be buried beneath the buried hardscape and landscape materials.

Excavations for the Demolition Project could potentially extend to 6 feet below the existing surface; the Demolition Project required implementation of mitigation measures to reduce potential impacts to archaeological resources to a less-than-significant level, including conducting pre-demolition exploratory investigations within the project site, which would provide additional information on the presence or absence of buried cultural resources. The baseline condition for the archaeological resources for the project assumes that the mitigation measures outlined for the Demolition Project have been implemented, and any potential archaeological resources uncovered during demolition activities were appropriately handled as required by the Demolition Project mitigation.

Tribal Cultural Resources

The project is in the traditional ancestral territory of the Nisenan. DGS conducted consultation with the Ione Band of Miwok Indians and the United Auburn Indian Community (UAIC) for the Demolition Project. The analysis concluded that Native American tribes with a traditional and cultural affiliation with the project site consider the area highly sensitive for the presence of buried Native American resources.

¹¹ Horizon Water and Environment, 2018. Cultural Resources Inventory Report, Department of General Services State Printing Plant and Textbook Warehouse Demolition Project, Sacramento, Sacramento County, California. Prepared for California Department of General Services. March 2018.

¹² Horizon Water and Environment, 2018. Cultural Resources Inventory Report, Department of General Services State Printing Plant and Textbook Warehouse Demolition Project, Sacramento, Sacramento County, California. Prepared for California Department of General Services. March 2018.

DGS received an email from UAIC on February 2, 2018, in which the tribe requested consultation on the Demolition Project, along with record search materials and any other environmental documentation on the project site. The record search data were forwarded to the tribe on February 5, 2018. DGS met with UAIC to discuss the Demolition Project on February 12, 2018, during which a number of mutually agreeable mitigation measures were discussed. The tribe indicated that the project site is in an area considered sensitive for Native American resources, but they did not provide any specific information about tribal cultural resources. UAIC conveyed additional mitigation measures to DGS, via email, on February 16, 2018. DGS also received a letter from UAIC for the project on December 17, 2018 requesting additional consultation as well as a request to attend cultural surveys, a request for documents, and to be invited to monitor if any cultural materials are identified. DGS is continuing consultation with the tribe.

For the Demolition Project, excavations could potentially extend to 6 feet below the existing surface; the Demolition Project required implementation of mitigation measures to reduce potential impacts to archaeological resources that are also considered tribal cultural resources to a less-than-significant level, including conducting pre-demolition exploratory investigations within the project site, which would provide additional information on the presence or absence of buried cultural resources. The baseline condition for tribal cultural resources for the project assumes that the mitigation measures outlined for the Demolition Project have been implemented, and any potential tribal cultural resources uncovered during demolition activities were appropriately handled as required by the Demolition Project mitigation.

3.3.2 Regulatory Setting

Federal

Cultural resources are considered through the National Historic Preservation Act (NHPA) of 1966, as amended (54 U.S.C. 306108), and its implementing regulations. Prior to implementing an “undertaking” (e.g., federal funding or issuing a federal permit), Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties (i.e., properties listed in or eligible for listing in the National Register) and to afford the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register. Under the NHPA, a property is considered significant if it meets the National Register listing criteria at 36 Code of Federal Regulations (CFR) 60.4, as stated below:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and that:

- a) Are associated with events that have made a significant contribution to the broad patterns of our history, or
- b) Are associated with the lives of persons significant in our past, or

- c) Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction, or
- d) Have yielded, or may be likely to yield, information important in prehistory or history.

Federal review of projects is normally referred to as the Section 106 process. This process is the responsibility of the federal lead agency. The Section 106 review normally involves a four-step procedure, which is described in detail in the implementing regulations (36 CFR Part 800):

- Identify historic properties in consultation with the SHPO and interested parties;
- Assess the effects of the undertaking on historic properties;
- Consult with the SHPO, other agencies, and interested parties to develop an agreement that addresses the treatment of historic properties and notify the ACHP; and finally,
- Proceed with the project according to the conditions of the agreement.

State

The State of California consults on implementation of the NHPA of 1966, as amended, and also oversees statewide comprehensive cultural resource surveys and preservation programs. The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historical Resources Inventory System. The SHPO is an appointed official who implements historic preservation programs within the state's jurisdictions.

California Environmental Quality Act

CEQA requires lead agencies to determine if a project would have a significant effect on historical resources, including archaeological resources. The CEQA Guidelines define a historical resource as: (1) a resource in the California Register; (2) a resource included in a local register of historical resources, as defined in Public Resources Code (PRC) Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); or (3) any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

CEQA requires lead agencies to determine if a project would have a significant effect on important archaeological resources, either historical resources or unique archaeological resources. If a lead agency determines that an archaeological site is a historical resource, the provisions of PRC Sections 21083.2 and 21084.1, and, CEQA Guidelines Sections 15064.5 and 15126.4 would apply. If an archaeological site does not meet the CEQA Guidelines criteria for a historical resource, then the site may meet the threshold of PRC Section 21083 regarding unique

archaeological resources. A unique archaeological resource is “an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria.

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person” (PRC Section 21083.2 [g]).

The CEQA Guidelines note that if a resource is neither a unique archaeological resource nor a historical resource, the effects of the project on that resource shall not be considered a significant effect on the environment (CEQA Guidelines Section 15064[c][4]).

California Register of Historical Resources

The California Register is “an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change” (PRC Section 5024.1[a]). The criteria for eligibility are based on National Register criteria (PRC Section 5024.1[b]). Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for or listed in the National Register.

To be eligible for the California Register, an historical resource must be significant at the local, state, and/or federal level under one or more of the following criteria.

- 1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- 2) Is associated with the lives of persons important in our past.
- 3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- 4) Has yielded, or may be likely to yield, information important in prehistory or history (PRC Section 5024.1[c]).

For a resource to be eligible for the California Register, it must also retain enough integrity to be recognizable as a historical resource and to convey its significance. A resource that does not retain sufficient integrity to meet the National Register criteria may still be eligible for listing in the California Register.

California Public Resources Code and Health and Safety Code

Several sections of the PRC protect cultural resources. Under PRC Section 5097.5, no person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site (including fossilized footprints), inscriptions made by human agency, rock art, or any other archaeological, paleontological, or historical feature situated on public lands, except with the express permission of the public agency that has jurisdiction over the lands. Violation of this section is a misdemeanor. PRC Section 5097.98 states that if Native American remains are identified within a project site, the lead agency must work with the appropriate Native Americans as identified by the Native American Heritage Commission and develop a plan for the treatment or disposition of, with appropriate dignity, the human remains and any items associated with Native American burials. These procedures are also addressed in Section 15046.5 of the CEQA Guidelines. California Health and Safety Code Section 7050.5 prohibits disinterring, disturbing, or removing human remains from a location other than a dedicated cemetery. Section 30244 of the PRC requires reasonable mitigation for impacts on paleontological and archaeological resources that occur as a result of development on public lands.

In September 2014, the California Legislature passed Assembly Bill 52 (AB 52), which added provisions to the PRC regarding the evaluation of impacts on tribal cultural resources under CEQA, and consultation requirements with California Native American tribes. AB 52 now requires lead agencies to analyze project impacts on “tribal cultural resources” separately from archaeological resources (PRC Section 21074; 21083.09). The bill added a definition of “tribal cultural resources” in a new PRC Section 21074, and added requirements for lead agencies to engage in additional consultation procedures with respect to California Native American tribes (PRC Section 21080.3.1, 21080.3.2, 21082.3).

Specifically, PRC Section 21084.3 states:

- a. Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.
- b. If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process provided in Section 21080.3.2, the following are examples of mitigation measures that, if feasible, may be considered to avoid or minimize the significant adverse impacts:
 - 1) Avoidance and preservation of the resources in place, including, but not limited to, planning and construction to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - 2) Treating the resource with culturally appropriate dignity taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

- A. Protecting the cultural character and integrity of the resource.
 - B. Protecting the traditional use of the resource.
 - C. Protecting the confidentiality of the resource.
- 3) Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
- 4) Protecting the resource.

Finally, as requirements under AB 52, the Governor's Office of Planning and Research (OPR) updated Appendix G of the CEQA Guidelines to address potential impacts to tribal cultural resources (PRC Section 21083.09).

Local

The project is located on State-owned property and would be implemented by the California State Department of General Services (DGS). State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot conflict with these policies and ordinances. As a good faith gesture, local plans, policies, and regulations that are applicable to the project are described herein for reference. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

City of Sacramento 2035 General Plan

The City's 2035 General Plan's Historic and Cultural Resources Element and Public Awareness and Appreciation Element include goals and policies relating to the identification and preservation of its cultural resources. The following goals from the 2035 General Plan are relevant to cultural resources.

Goal HCR 2.1: Identification and Preservation of Historic and Cultural Resources.

Identify and preserve the city's historic and cultural resources to enrich our sense of place and our understanding of the city's prehistory and history.

Goal HCR 3.1: Public Awareness and Appreciation. Foster public awareness and appreciation of Sacramento's historic and cultural resources.

City of Sacramento Historic Preservation Program

The City's historic preservation program began in 1975 with the enactment of the City's first historic preservation ordinance. Amendments to the original preservation ordinance, under Ordinance No. 2006-063, were enacted in October 2006, amending Chapter 17.134 of Title 17 of the Sacramento City Code. On September 30, 2013, these sections of the Code were included in a comprehensive update of Title 17. Under the new Title 17, the substance of the preservation sections was not materially changed, and changes related to procedures were also relatively minor. Title 17, section 17.604.210 relates to eligibility criteria for historic resources. Other preservation related matters are found under Chapter 17.604 or other sections of Title 17.

The City Code provides for the compilation of the ordinances, adopting designations and deletions of Landmarks, Contributing Resources, and Historic Districts into the Sacramento Register.

3.3.3 Analysis, Impacts and Mitigation

Significance Criteria

Based on Appendix G of the CEQA Guidelines, the project would have a significant impact on cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;
- Cause a substantial adverse change in the significance of tribal cultural resources, as defined in PRC section 21074(a); or
- Disturb any human remains, including those interred outside of formal cemeteries.

Methodology and Assumptions

The State has approved the Demolition Project. Whether or not the RBOC project is approved, the State will relocate the printing plant and all employees and demolish existing structures, except for a small pump house on the northwest corner of the site. The approved Demolition Project would result in a project site with no buildings and excavation to a depth of up to 6 feet below the existing surface. Because of this, the impact discussions below will compare the project against the future condition of the project site with no existing buildings and excavation up to 6 feet below the existing surface already having occurred.

Baseline Conditions

As discussed above, the approved Demolition Project would result in an adjusted baseline condition that is different than existing conditions. Under the Demolition Project, the project site would be cleared of existing structures (except the pump house), and onsite excavations associated with infrastructure removal and soil remediation would occur. Implementation of Mitigation Measure CR-1 from the Demolition Project IS/MND would be implemented as part of that ground disturbance. For reference, CR-1 includes conducting pre-demolition exploratory investigations within the project site and monitoring of ground disturbing activities during demolition, immediately halting work if materials are discovered during demolition activities, evaluating the finds for California Register eligibility, and implementing appropriate mitigation measures, as necessary. Implementation of Mitigation Measure CR-1 was determined to reduce archaeological impacts associated with the Demolition Project to a less-than-significant level.

Issues or Potential Impacts Not Discussed Further

There are no historical resources eligible for listing in the California Register in the project site. The printing plant, which will be demolished as part of the Demolition Project, has been recommended not eligible for listing in the National Register/California Register nor is it eligible as a California Historical Landmark; the SHPO concurred with this evaluation. Following demolition of this building and other non-age eligible buildings, there will be no additional architectural resources in the project site. As there are no architectural historical resources on the project site, there would be no impact on historical resources and no further discussion is required.

Impacts and Mitigation Measures

Impact 3.3-1: Implementation of the project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.

This section discusses archaeological resources that are potentially historical resources according to CEQA Guidelines Section 15064.5 as well as unique archaeological resources defined in Section 21083.2(g).

No archaeological resources, as defined in Section 15064.5 of the CEQA Guidelines, have been identified within the project site. An archaeological study was completed at the project site and no archaeological resources were identified.¹³ However, at the time of the study much of the project site was covered with buildings, concrete, asphalt, fill, or stored materials and the study determined that archaeological remains may be buried beneath the buried hardscape and landscape materials. In addition, Native American tribes with a traditional and cultural affiliation with the project vicinity consider the general area highly sensitive for the presence of buried Native American resources (see discussion below on tribal cultural resources). Excavations for the Demolition Project could potentially extend to 6 feet below the existing surface; the project excavations could extend an additional 14 feet, to 20 feet below the existing surface. Such excavation activities could uncover buried prehistoric archaeological materials in previously undisturbed soils, or those that have been previously disturbed by construction or brought in as fill.

The project site is not sensitive for historic-era archaeological remains; historic maps and aerial photographs indicate that the site was used for agricultural purposes prior to construction of the printing plant. Historic-era archaeological remains, should they exist, would consist of agricultural-related items such as pieces of wire, or perhaps equipment parts, and possibly items left from construction of the printing plant and warehouse.

Following the pre-demolition exploratory investigation and monitoring during demolition as prescribed by Demolition Project Mitigation Measure CR-1 as described above under Baseline Conditions, there remains a slight potential that additional archaeological resources could be

¹³ Horizon Water and Environment, 2018. Cultural Resources Inventory Report, Department of General Services State Printing Plant and Textbook Warehouse Demolition Project, Sacramento, Sacramento County, California. Prepared for California Department of General Services. March 2018.

uncovered during ground disturbing activity associated with the proposed project. Impacts to any previously unidentified archaeological materials could be **potentially significant**.

Mitigation Measure 3.3-1(a)

If evidence of any subsurface archaeological features or deposits are discovered during construction-related earth-moving activities (e.g., lithic scatters, midden soils, historic era farming or construction materials), all ground-disturbing activity in the area of the discovery shall be halted until a qualified archaeologist and Native American representative, as appropriate, can assess the significance of the find. If after evaluation, a resource is considered significant, or is considered a tribal cultural resource, all preservation options shall be considered as required by Public Resources Code 21084.3, including possible capping, data recovery, mapping, or avoidance of the resource. If artifacts are recovered from significant prehistoric archaeological resources or tribal cultural resources, the first option shall be to transfer the artifacts to an appropriate tribal representative. If possible, accommodations shall be made to re-enter the artifacts at the project site. Only if no other options are available will recovered prehistoric archaeological material be housed at a qualified curation facility. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the public.

Mitigation Measure 3.3-1(b)

A cultural resources awareness training program will be provided to all construction personnel active on the project site during earth moving activities. The first training will be provided prior to the initiation of ground disturbing activities. The training will be developed and conducted in coordination with a qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists. The program will include relevant information regarding sensitive cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program will also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and will outline what to do and whom to contact if any potential archaeological resources or artifacts are encountered.

Where ground disturbing activities occur in native soils, or there is no evidence of extensive past ground disturbances, a qualified archaeologist meeting the United States Secretary of Interior guidelines for professional archaeologists will monitor ground-disturbing activities, as needed. If evidence of any historic-era subsurface archaeological features or deposits are discovered during construction-related earth-moving activities (e.g., ceramic shard, trash scatters), all ground-disturbing activity in the area of the discovery shall be halted until a qualified archaeologist can assess the significance of the find. If after evaluation, a resource is considered significant, all preservation options shall be considered as required by CEQA, including possible data recovery, mapping, capping, or avoidance of the resource. If artifacts are recovered from significant historic archaeological resources, they shall be housed at a qualified curation facility. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, analyzes and interprets the results, and distributes this information to the public.

Level of Significance After Mitigation: Implementation of Mitigation Measure 3.3-1(a), which would require that work halt in the vicinity of a find until it can be evaluated by a qualified archaeological consultant, as well as the training required by Mitigation Measure 3.3-1(b), would reduce any potential impacts to a **less-than-significant** level.

Impact 3.3-2: Implementation of the project could cause a substantial adverse change in the significance of tribal cultural resources, as defined in PRC section 21074(a).

No tribal cultural resources listed or eligible for listing listed or eligible for listing in the California Register, or in a local register of historical resources are known to occur in the project vicinity. As a result, there would be no impact to known tribal cultural resources on state or local historical registers.

Both the Ione Band of Miwok Indians and the UAIC indicated the possible presence of a tribal cultural resources of an archaeological nature within the project existing site. Although no surface manifestation of an archaeological resource was identified during the course of the archaeological survey,¹⁴ such materials may be buried.

Following the pre-demolition exploratory investigation and monitoring during demolition as prescribed by Demolition Project Mitigation Measure CR-1, as described above, there remains a slight potential that additional archaeological or tribal cultural resources could be uncovered during ground disturbing activity. Impacts to any previously unidentified archaeological materials or tribal cultural resources could be **potentially significant**.

Mitigation Measure 3.3-2

Implement Mitigation Measures 3.3-1(a) and 3.3-1(b).

Level of Significance After Mitigation: Implementation of Mitigation Measure 3.3-1, which would require that work halt in the vicinity of a find until it can be evaluated by a qualified archaeological consultant and Native American representative, as well as the training described in Mitigation Measure 3.3-1(b), would reduce any potential impacts to a **less-than-significant** level.

Impact 3.3-3: Implementation of the project could disturb any human remains, including those interred outside of formal cemeteries.

No evidence of human remains was observed within the project site during the cultural resources study completed for the Demolition Project.¹⁵ Although the project site has been previously

¹⁴ Horizon Water and Environment, 2018. Cultural Resources Inventory Report, Department of General Services State Printing Plant and Textbook Warehouse Demolition Project, Sacramento, Sacramento County, California. Prepared for California Department of General Services. March 2018.

¹⁵ Horizon Water and Environment, 2018. Cultural Resources Inventory Report, Department of General Services State Printing Plant and Textbook Warehouse Demolition Project, Sacramento, Sacramento County, California. Prepared for California Department of General Services. March 2018.

disturbed by construction buildings, there is the possibility that human remains could be discovered during ground disturbing activities. Should any such remains be discovered during ground disturbing activities, the California Health and Safety Code Section 7050.5 requires that work immediately stop within the vicinity of the finds and that the County coroner be notified to assess the finds. This is a **potentially significant** impact.

Mitigation Measure 3.3-3: Inadvertent Discovery of Human Remains.

Consistent with the California Health and Safety Code and the California Native American Historical, Cultural, and Sacred Sites Act, if suspected human remains are found during project construction, all work shall be halted in the immediate area, and the County coroner shall be notified to determine the nature of the remains. The coroner shall examine all discoveries of suspected human remains within 48 hours of receiving notice of a discovery on private or State lands (Health and Safety Code Section 7050.5[b]). If the coroner determines that the remains are those of a Native American, he or she shall contact the Native American Heritage Commission (NAHC) by phone within 24 hours of making that determination (Health and Safety Code Section 7050[c]). The NAHC shall then assign a Most Likely Descendent (MLD) to serve as the main point of Native American contact and consultation. Following the coroner's findings, the MLD, in consultation with the State, shall determine the ultimate treatment and disposition of the remains.

Level of Significance After Mitigation: Implementation of Mitigation Measure 3.3-3 would ensure that the project would not result in any substantial adverse effects on human remains uncovered during the course of construction by requiring that, if human remains are uncovered, work must be halted and the County coroner must be contacted. Adherence to these procedures and provisions of the California Health and Safety Code would reduce potential impacts on human remains to **less than significant**.

Cumulative Impacts

The geographic scope for cumulative effects on archaeological resources, tribal cultural resources, and human remains includes the immediate vicinity of locations where the project would cause ground disturbance.

Impact 3.3-4: Implementation of the project, in combination with other development, would contribute to cumulative adverse impacts on archaeological resources.

Similar to the project as described under Impact 3.3-1, cumulative projects in the project vicinity could have a significant impact on previously unidentified archaeological resources, given the substantial amount of construction-related ground disturbance that could occur for many of the cumulative projects. The potential impacts of the project when considered together with similar impacts from other probable future projects in the vicinity could result in a significant cumulative impact on buried archaeological resources. The project's contribution to this impact could be cumulatively considerable, and the cumulative impact would be **potentially significant**.

Mitigation Measure 3.3-4

Implement Mitigation Measure 3.3-1(a) and Mitigation Measure 3.3-1(b).

Level of Significance After Mitigation: Implementation of Mitigation Measure 3.3-1 would require protocol to follow in the event of an inadvertent discovery of archaeological resources. Mitigation Measure 3.3-1(b) would require that construction personnel receive proper training regarding how to address potential discoveries of previously unknown cultural resources. Therefore, with implementation of Mitigation Measure 3.3-1(a) and Mitigation Measure 3.3-1(b), the project's contribution to cumulative impacts would not be considerable, and the impact would be **less than significant**.

Impact 3.3-5: Implementation of the project, in combination with other development, would contribute to cumulative adverse impacts on tribal cultural resources.

Similar to the project as described under Impact 3.3-2, cumulative projects in the project vicinity could have a significant impact on previously unidentified tribal cultural resources, given the substantial amount of construction-related ground disturbance that could occur for many of the cumulative projects. The potential impacts of the project when considered together with similar impacts from other probable future projects in the vicinity could result in a significant cumulative impact on buried tribal cultural resources. The project's contribution to this impact could be cumulatively considerable, and the impact would be **potentially significant**.

Mitigation Measure 3.3-5

Implement Mitigation Measure 3.3-1(a) and Mitigation Measure 3.3-1(b).

Level of Significance After Mitigation: Implementation of Mitigation Measure 3.3-1 would require protocol to follow in the event of an inadvertent discovery of archaeological resources or tribal cultural resources. Mitigation Measure 3.3-1(b) would require that construction personnel receive proper training regarding how to address potential discoveries of unknown cultural resources. Therefore, with implementation of Mitigation Measure 3.3-1(a) and Mitigation Measure 3.3-1(b), the project's contribution to cumulative impacts would not be considerable, and the impact would be **less than significant**.

Impact 3.3-6: Implementation of the project, in combination with other development, would contribute to cumulative adverse impacts on human remains.

Similar to the project as described under Impact 3.3-3, cumulative projects in the project vicinity could have a significant impact on previously undiscovered human remains, including those interred outside of formal cemeteries, given the substantial amount of construction-related ground disturbance that could occur for many of the cumulative projects. The potential impacts of the project when considered together with similar impacts from other probable future projects in the

vicinity could result in a significant cumulative impact on previously undiscovered human remains. The project's contribution to this impact could be cumulatively considerable, and the impact would be **potentially significant**.

Mitigation Measure 3.3-6

Implement Mitigation Measure 3.3-3.

Level of Significance After Mitigation: Implementation of Mitigation Measure 3.3-3 would require implementation of legally-required appropriate treatment of human remains. Therefore, with implementation of Mitigation Measure 3.3-3, the project's contribution to cumulative impacts would not be considerable, and the impact would be **less than significant**.

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3.4 Energy

This section provides a summary of existing energy utilities and service systems provided to the Richards Boulevard Office Complex (RBOC) project (or project). Pertinent regulations and requirements at the federal, state, and local level are summarized in this section. Potential impacts on energy utilities and service systems that could result from construction and operation of the RBOC are discussed, and as warranted, potentially feasible mitigation measures are described in order to avoid or reduce the magnitude of potential utilities and service system-related impacts.

Sacramento Municipal Utility District (SMUD) comments on the NOP were received related to utilities and service systems; these comments are addressed in this chapter to the extent they pertain to the energy-related impacts of the project. NOP comments relevant to this section include requests to evaluate impacts related to energy efficiency.

The primary sources of data referenced for this section include:

- Data provided by SMUD and the California Energy Commission (CEC), and
- the City of Sacramento 2035 General Plan.¹

3.4.1 Environmental Setting

Existing Conditions

Electricity

Electrical service to the RBOC facilities would be provided by SMUD, via an existing connection to the 21-kV distribution network along Richards Boulevard. The existing SMUD vault along Richards Boulevard would be demolished by the Demolition Project; however, SMUD is currently in the process of installing new 21-kV feeders along North 7th Street which will have the capacity to serve the project site. The project would extend the infrastructure supporting electricity delivery from two new 21-kV circuits installed along North 7th Street as a result of this ongoing SMUD project to serve various facilities via a new onsite, underground electrical utility distribution. Each building on the complex, as well as each potential commercial retail tenant in the facilities, would be expected to be individually metered by SMUD.

In 2017 based on SMUD's Power Content Label, the utility obtained its electricity from the following sources: large hydroelectric (35 percent), and natural gas (44 percent). Around 2 percent of SMUD's energy resources are from "unspecified sources of power," which means they were obtained through transactions and the specific generation source was externally generated. Approximately 19 percent of SMUD's energy portfolio is from eligible renewable resources, including biomass and waste (8 percent), geothermal (1 percent), eligible hydroelectric

¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

(2 percent), solar (2 percent), and wind (5 percent).² There is an existing SMUD vault along Richards Boulevard that serves the existing printing plant on the project site.

Natural Gas

Gas service is currently provided to the project site by Pacific Gas and Electric (PG&E). PG&E is a publicly-owned utility that provides electricity and natural gas distribution, electricity generation, transportation and transmission, natural gas procurement, and storage. The utility company is bound by contract to update its systems to meet any additional demand. PG&E serves 48 counties in California with a total service area of approximately 70,000 square miles in northern and central California. PG&E provides services with 42,141 miles of natural gas distribution pipelines and 6,438 miles of transportation pipelines. PG&E serves approximately 4.3 million natural gas distribution customers.

Energy from Fuel Consumption by Construction and Operational Transportation

Energy is consumed by vehicles operated for both construction and operational transportation through the consumption of transportation fuels. Calculation of the consumption of energy by way of transportation fuels is completed by using the appropriate consumption factors based on type of construction equipment used, the period of time for construction and vehicle miles traveled (VMT) for operational transportation fuels. Over time, technology has become more efficient for construction and passenger vehicles and the consumption of transportation fuels has decreased on a per vehicle basis. The implementation of alternative modes of transportation, such as transit, bicycling, and walking, have also contributed to the decrease of transportation fuels consumed.³ The total sales of gasoline and diesel fuel in Sacramento County in 2017 was 599 million gallons and 94 million gallons, respectively.⁴

Baseline Conditions

The approved Demolition Project will result in a site cleared of all structures, except for a small pump house on the northwest corner of the site. The only use of energy under baseline conditions will be minimal, in order to serve the pump house as it maintains water levels on the site and drains into the existing stormwater pipe. This minimal energy use is considered negligible for the purpose of this analysis.

² Sacramento Municipal Utility District, 2017. Power Content Label. Available: <https://www.smud.org/assets/documents/pdf/Power-Content-Label-full.pdf>.

³ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report* (SCH No. 2012122006). Certified March 3, 2015. Section 6-6.

⁴ California Energy Commission, 2018. 2017 California Annual Retail Fuel Outlet Report Results (CEC-A15), September 27, 2018, obtained from Energy Almanac, Transportation Energy Data, Facts, and Statistics webpage, http://www.energy.ca.gov/almanac/transportation_data/. Accessed February 5, 2019.

3.4.2 Regulatory Setting

Federal

National Highway Traffic Safety Administration Standards

Federal standards are being set by the National Highway Traffic Safety Administration (NHTSA) and the U.S. Environmental Protection Agency to encourage and incentivize the production of clean energy vehicles with improved fuel efficiency. NHTSA sets the Corporate Average Fuel Economy (CAFE) standard, which is increasing into the future in order to improve energy security and reduce fuel consumption. The first phase of the CAFE standards (for model year 2017 to 2021) is projected to require, on an average industry fleet-wide basis, a range from 40.3 to 41.0 mpg in model year 2021. The second phase of the CAFE program (for model years 2022 to 2025) is projected to require, on an average industry fleet-wide basis, a range from 48.7 to 49.7 mpg in model year 2025. The second phase of standards has not been finalized due to the statutory limitation that the NHTSA set average fuel economy standards not more than five model years at a time.⁵

State

California Public Utilities Commission Requirements

The California Public Utilities Commission (CPUC) is a constitutionally created State agency that came into existence through amendment in 1911. The mission of the CPUC is to regulate privately-owned utilities providing telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation services, and in-State moving companies. The CPUC is responsible for assuring that California utility customers have safe, reliable utility services at reasonable rates, while protecting utility customers from fraud. The CPUC provides oversight of a number of regulatory programs including the planning and approval for the physical construction of electric generation, transmission, or distribution facilities; and local natural gas distribution pipelines.⁶ The CPUC 2008 Energy Efficiency Strategic Plan established goals of having all new residential construction in California meet zero net energy (ZNE) by 2020 and all new commercial construction meet ZNE by 2030.

California Energy Commission

California's primary energy policy and planning agency is The CEC which was created by the California Legislature in 1974. The CEC has five major responsibilities: (1) forecasting future energy needs and keeping historical energy data; (2) licensing thermal power plants 50 MW or larger; (3) promoting energy efficiency through appliance and building standards; (4) developing energy technologies and supporting renewable energy; and (5) planning for and directing State response to energy emergencies. Under the requirements of the California Public Resources Code, the CEC in conjunction with the California Department of Conservation (DOC) Division of

⁵ National Highway Traffic Safety Administration, 2019. Available: <http://www.nhtsa.gov/fuel-economy>. Accessed February 28, 2019.

⁶ California Public Utilities Commission, 2019. *California Public Utilities Commission*. Available: <http://www.cpuc.ca.gov>. Accessed February 28, 2019.

Oil, Gas, and Geothermal Resources is required to assess electricity and natural gas resources on an annual basis or as necessary. The CECs integrated policy report concludes that efficiency achieved through building codes, appliance standards, and ratepayer-funded programs has had, and will continue to have, a positive impact on GHG emissions in recent years.

The Renewable Portfolio Standard

An important State program to promote the increase of renewable energy into the state's energy grid is the Renewable Portfolio Standard (RPS). The RPS is enforced by both the CPUC and CEC. As a publically-owned utility SMUD is required to comply with this standard. Established by Senate Bill (SB) 1078 in 2002 the RPS was accelerated in 2006 by SB 107 and requires that 20 percent of electricity retail sales need to be served by renewable energy resources by 2010. In 2008 Governor Arnold Schwarzenegger signed Order S-14-08 which required electricity retailers to meet a 33 percent threshold for renewable energy by 2020 this was passed into state law by SB X1-2 in 2011. All electricity retailers, including SMUD, now have a target of 33 percent renewables by the end of 2020. A new 50 percent renewables goal has been set for 2050.

The Clean Energy and Pollution Reduction Act

In 2015, the Clean Energy and Pollution Reduction Act (SB 350) was passed into law and set reduction goals for both energy and carbon for 2030 and beyond. This Act codifies the goals described in the RPS above and, along with AB 32 and other regulations is part of California's overall climate strategy. SB 350 supports the State's efforts to meet its long-term climate goal of reducing GHG emissions to 40 percent of 1990 levels by 2030 and 80 percent below 1990 levels by 2030.

Title 20 and Title 24, California Code of Regulations

Because the project includes new construction, it must comply with the standards contained in Title 20, Energy Building Regulations, and Title 24, Energy Conservation Standards, of the California Code of Regulations (CCR). Part 11 of Title 24, referred to as the California Green Building Standards Code (CALGreen), sets minimum and mandatory energy efficiency and materials requirements, in order to reduce environmental impact through better planning, design and construction practices. CALGreen works along with the mandatory construction codes of Title 24 and is enforced at the City building department level.⁷

Title 20 contains standards ranging from power plant procedures and siting to energy efficiency standards for appliances to ensuring reliable energy sources are provided and diversified through energy efficiency and renewable energy resources. Title 24 (AB 970) contains energy efficiency standards for commercial office buildings based on a State mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy used for lighting, water heating, heating and air conditioning, including the energy impact

⁷ California Department of Housing and Community Development, 2018. *2018 Report to the Legislature: Status of the California Green Building Standards Code*. Accessed February 28, 2019.

of the building envelope such as windows, doors, skylights, wall/floor/ceiling assemblies, attics, and roofs.^{8,9}

Additionally, any project-related construction would be required to comply with the Title 24 codes currently in place, including the CALGreen code. The existing 2016 standards became effective on January 1, 2017.¹⁰

Warren-Alquist Energy Resources Conservation and Development Act

The Warren-Alquist Energy Resources Conservation and Development Act (Warren-Alquist Act), initially passed in 1974 and amended since, created the CEC, the State's primary energy and planning agency. The seven responsibilities of the Commission are: forecasting future energy needs, promoting energy efficiency and conservation through setting standards, supporting energy related research, developing renewable energy resources, advancing alternative and renewable transportation fuels and technologies, certifying thermal power plants 50 megawatts or larger, and planning for and directing state response to energy emergencies. The State Energy Commission regulates energy resources by incentivizing research into energy supply and demand dynamics to reduce the rate of growth of energy consumption. Additionally, the Warren-Alquist Act acknowledges the need for renewable energy resources and encourages the Commission to explore renewable energy options that would be in line with environmental and public safety goals. (Warren-Alquist Energy Resources Conservation and Development Act Public Resources Code section 25000 et seq.).¹¹

Green Building Initiative

In 2012, Governor Brown's Executive Order B-18-12 (State of California Governor Office 2012) identified the following energy efficiency improvement goals for facilities owned, funded, and leased by the State: (1) All new state buildings beginning design after 2025 shall be constructed as ZNE facilities with an interim target for 50 percent of new facilities beginning design after 2020 to be ZNE. State agencies shall also take measures toward achieving ZNE for 50 percent of the square footage of existing state-owned building area by 2025. (2) The state shall identify at least three buildings by January 1, 2013, to pursue ZNE as pilot projects. (3) New and major renovated state buildings shall be designed and constructed to exceed the applicable version of CCR Title 24, Part 6, by 15 percent or more, and include building commissioning, for buildings authorized to begin design after July 1, 2012. (4) Any proposed new or major renovation of state buildings larger than 10,000 square feet shall use clean, onsite power generation such as solar photovoltaic, solar thermal, and wind power generation, and clean backup power supplies, if economically feasible. (5) New and major renovated state buildings larger than 10,000 square feet

⁸ California Energy Commission, 2019. Title 20 Public Utilities and Energy, January 2019. Available: <https://www.energy.ca.gov/2019publications/CEC-140-2019-002/CEC-140-2019-002.pdf>. Accessed March 1, 2019.

⁹ California Building Standards Commission, 2016. Title 24 California Building Standards Code. Available: <http://www.bsc.ca.gov/codes.aspx>. Accessed March 1, 2019.

¹⁰ California Building Standards Commission, 2019. 2016 Building Energy Efficiency Standards. Available: <https://www.energy.ca.gov/title24/2016standards/>. Accessed March 1, 2019.

¹¹ California Energy Commission, 2019. Warren-Alquist Act, revised February 2019. Available: http://www.energy.ca.gov/reports/Warren-Alquist_Act/index.html. Accessed March 1, 2019.

shall obtain Leadership in Energy and Environmental Design (LEED) “Silver” certification or higher.

Local

The project is located on State-owned property and would be implemented by the California State Department of General Services (DGS). State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot conflict with these policies and ordinances. As a good faith gesture, local plans, policies, and regulations that are applicable to the project are described herein for reference. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

City of Sacramento 2035 General Plan

The following goals and policies from the City of Sacramento 2035 General Plan are relevant to project energy use and impacts. It is important to note that the City’s Climate Action Plan (CAP), originally adopted in 2012, has been integrated into the 2035 General Plan. The CAP policies outline strategies that can contribute to the reduction of greenhouse gas emissions as a result of cleaner energy generation and lower consumption, and adaptive measures addressing future climate impacts.¹²

Goal U 6.1: Adequate Level of Service. Provide for the energy needs of the city and decrease dependence on nonrenewable energy sources through energy conservation, efficiency, and renewable resource strategies.

Policy U 6.1.1: Electricity and Natural Gas Services. The City shall continue to work closely with local utility providers to ensure that adequate electricity and natural gas services are available for existing and newly developing areas.

Policy U 6.1.5: Energy Consumption per Capita. The City shall encourage residents and businesses to consume 25 percent less energy by 2030 compared to the baseline year of 2005.

Policy U 6.1.6: Renewable Energy. The City shall encourage the installation and construction of renewable energy systems and facilities such as wind, solar, hydropower, geothermal, and biomass facilities.

Policy U 6.1.15: Energy Efficiency Appliances. The City shall encourage builders to supply Energy STAR appliances and HVAC systems in all new residential developments, and shall encourage builders to install high-efficiency boilers where applicable, in all new non-residential developments.

¹² City of Sacramento, 2015. 2035 General Plan, Utilities. Available: <http://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/General-Plan/2035-GP/Utilities.pdf?la=en>. Accessed March 1, 2019.

3.4.3 Analysis, Impacts and Mitigation

Significance Criteria

Appendix G of the CEQA Guidelines outline significance criteria for the evaluation of impacts related to energy demand and conservation. The project would result in a significant impact on energy demand and conservation if it would:

1. result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
2. conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Methodology and Assumptions

The State has already approved the Demolition Project. Whether or not the RBOC project is approved, the State will relocate the printing plant and all employees and demolish the existing structures. When the Demolition Project is complete, the site will be clear of all structures, except for a small pump house on the northwest corner of the site, with negligible electricity use. As these actions will occur with or without the approval of this project, the most appropriate baseline from which to compare the true impacts of the project is the future condition of the site once the Demolition Project has been completed. Because of this reason, the impact discussions below will compare the project against an empty site.

The analysis in this section focuses on the nature and magnitude of the change in energy resources due to construction and operation of land uses developed under the RBOC. To address the significance thresholds, the focus of the analysis is related to energy efficiency at the building level and performance within the context of existing regulatory environment.

Electricity

Electrical service will be provided to the RBOC site through service from SMUD's 21-kV distribution line. There is an existing SMUD vault along Richards Boulevard that currently serves the printing plant. The RBOC will extend the electric infrastructure from the existing SMUD vault with new onsite underground electric utility service distribution to serve the RBOC. It is anticipated each building, as well as each commercial retail tenant, at the complex will be individually metered by SMUD.

The service voltage for the midrise offices will be 480/277V, pad mounted or alcove and will be provided for the utility service transformer. For the high-rise office and the Central Plant, medium voltage service will likely be required, as the loading will exceed the maximum capacity of 480/277V service allowed by SMUD. There will be no onsite solar or renewable generation; however, 100 percent of the project's energy will be provided through renewable sources through the participation in SMUD's Greenergy program.

Operational-related electricity annual consumption rates for the RBOC were calculated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. CalEEMod is a statewide

land use emission computer model designed to estimate criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operation from a variety of land use projects. In addition to estimating pollutant and GHG emissions, CalEEMod can provide annual energy (i.e., electricity and natural gas) consumption estimates for non-residential and residential developments based on land use. **Table 3.4-1** shows the estimated electricity in Kilowatt-Hours (kWh) on an annual basis that would be consumed by each land use proposed under the project. CalEEMod assumptions and modeling details can be found in Appendix D1.

**TABLE 3.4-1
 PROJECT OPERATIONAL ENERGY USE**

Land Use	Amount	Units	Electricity ¹ (kWh/year)
Enclosed Parking with Elevator	1,020	spaces	1,909,440
Government Office Building	1,437	KSF	18,609,200
Parking Lot	400	spaces	56,000
Total Energy Use (kWh/year)			20,574,640

NOTES:
 kWh = Kilowatt-Hours
 1 Electricity consumption estimates were generated using CalEEMod 2016.3.2. See Appendix D1 for model outputs.
 SOURCE: ESA, 2019

Operational Transportation Fuel Use

Transportation fuel consumption for construction and operation are a key element of project energy consumption. For construction, this includes fuel use (diesel fuel and gasoline) associated with construction equipment and vehicles. For operations, this includes fuel use associated with on-road vehicles.

Operational-related fuel use was estimated using the CalEEMod 2016.3.2 and unit volume fuel factors for gasoline and diesel provided by the U.S. Energy Information Administration.¹³ **Table 3.4-2** presents estimated annual fuel use for project operations. CalEEMod assumptions and modeling details can be found in Appendix D1.

**TABLE 3.4-2
 PROJECT ANNUAL OPERATIONAL FUEL USE**

Category	Diesel Fuel (gallons) ^{1,2}	Gasoline (gallons) ^{1,2}
Government Office Building	10,789	1,216,715

NOTES:
 1 Operational fuel use based on the CalEEMod 2016.3.2 model and the methodology described above. See Appendix D1 for model outputs.
 2 Unit volume fuel factors (kg CO₂/gallon) for gasoline and diesel are from the U.S. Energy Information Administration Frequently Asked Questions. Available: <https://www.eia.gov/tools/faqs/faq.php?id=307&t=11>.
 SOURCE: ESA, 2019

¹³ U.S. Energy Information Administration, 2016. Carbon Dioxide Emissions Coefficients. Available: https://www.eia.gov/environment/emissions/co2_vol_mass.php. Assessed March 1, 2019.

Construction Fuel Use

For construction, diesel and gasoline fuel use were estimated using CalEEMod as follows. Fuel estimated was proportioned into diesel- and gasoline-generated emissions. This proportioning was based on the percentage of diesel and gasoline vehicles typically operated during construction projects. These percentages are heavily weighted towards diesel vehicles. Diesel and gasoline usage were converted to gallons using standard conversion factors provided by the U.S. Energy Information Administration. **Table 3.4-3** summarizes the estimated the fuel use for construction. These estimates have been calculated using CalEEMod 2016.3.2 model. CalEEMod assumptions and modeling details can be found in Appendix D1. These fuel use amounts represent approximately 0.003 percent of the gasoline and 0.306 percent of the diesel fuel sold in Sacramento County in 2017.

**TABLE 3.4-3
PROJECT CONSTRUCTION FUEL USE**

Category	Diesel Fuel^{1,2} (gallons)	Gasoline^{1,2} (gallons)
DGS Richards	290,739	17,432

NOTES:
 1 Assumes worst-case construction fuel use based on the CalEEMod 2016.3.2 model and the methodology described above. See Appendix D1 for model outputs.
 2 Unit volume fuel factors (kg CO₂/gallon) for gasoline and diesel are from the U.S. Energy Information Administration Frequently Asked Questions. Available: <https://www.eia.gov/tools/faqs/faq.php?id=307&t=11>.

SOURCE: ESA, 2019

Issues or Potential Impacts Not Discussed Further

The RBOC will not use any natural gas, and no impact to natural gas supplies or as a result of natural gas consumption would occur. Therefore, impacts related to the project resulting in the wasteful, inefficient, or unnecessary consumption of natural gas are not discussed further.

Impacts and Mitigation Measures

Impact 3.4-1: The RBOC could result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Electricity

Table 3.4-1, above, summarizes the anticipated demand from the RBOC and estimates an electricity demand 20,574,640 kWh/year. As stated in Chapter 2, Project Description, the RBOC will be designed to perform better than the 2019 Building Energy Efficiency Standards, to meet or perform better than U.S. Green Building Council’s LEED Silver certification, which would result in high performing building and campus from an efficiency standpoint. Additionally, the types of measures required to meet the Building Efficiency Standard and the LEED requirements would be consistent with the City’s Climate Action Plan policies that require efficient and non-wasteful energy use and performance.

Specifically, the RBOC development will achieve a 15 percent better energy performance than the Title 24 requirements due to the design of the project. Additionally, the RBOC will meet the high performance Energy Use Index (EUI) design criteria, and will participate in SMUD's renewable energy resource program Greenergy, buying 100 percent of its power from SMUD's renewable energy portfolio. Some of the energy efficient design criteria features include Energy Star office equipment, energy-efficient computer monitors, and LED (light-emitting diode) lighting throughout the project site to achieve LEED Silver certification. Electrical metering and control systems would be installed to control and monitor electrical loads on a per system basis (e.g., lighting, mechanical) and on a per floor basis.

The RBOC would be designed to be 15 percent more energy efficient than required by the Title 24 2019 Building Energy Efficiency Standards, to meet or exceed the LEED Silver threshold, and to achieve the target of ZNE as set by the State's Green Building Initiative.

Operational Transportation Fuel Use

During operations, transportation will require the use of fuels (primarily gasoline and diesel fuel) for the operation of passenger vehicles and light trucks associated with the RBOC. The estimated demand for operational diesel fuel and gasoline provided for the project is shown in Table 3.4-2. For the operation of the RBOC, it is estimated that there will be approximately 1,216,715 gallons of gasoline and 10,789 gallons of diesel fuel consumed annually.

Under baseline conditions, the State employees and other uses that are proposed to be relocated to the RBOC result in 163,168 daily VMT. This estimate includes employee travel, visitor travel, and service/delivery travel trips in relation to the current locations of employees' homes and their current workplaces. The majority of relocated employees currently work in suburban settings. Among the more than three-quarters of relocated employees that currently drive alone and park, the vast majority park onsite for free. The data supports the conclusion that it is reasonable to anticipate that the urban setting of the RBOC would yield lower VMT than suburban locations¹⁴ elsewhere in the Sacramento region. This efficiency is due to the availability of a variety of non-automobile travel modes and public transit options. The VMT efficiency benefits from the synergistic qualities with surrounding land uses that would reduce the length of vehicle trips and allow for a greater share of trips to be completed via transit (light rail transit and bus service), walking, biking, and ridesharing, and result in a lower carbon intensity for the relocated workers who will commute to the RBOC. In conclusion, the project's location and site design would lead to a change in travel modes such that daily VMT would be reduced by approximately 50,000 miles (34 percent) to 107,414 total daily VMT as compared to baseline conditions.

Construction Fuel Use

The estimated quantity of diesel fuel and gasoline used to support project construction is shown in Table 3.4-3. It is estimated there would be approximately 290,739 gallons of diesel fuel and

¹⁴ Includes comparable facilities of similar size, programming, and functionality to those of the proposed RBOC project.

17,432 gallons of gasoline consumed under the proposed construction phasing schedule. Although there are some inherently wasteful practices generally during construction the project will be complying with SMAQMD's construction mitigations that will also have co-benefits from a fuel and energy efficiency standpoint. Some of these measures include limiting vehicle speeds, allowing a maximum of five minutes of idling time, and particularly utilizing Tier 4 engines for heavy-duty diesel-fired equipment.

Summary

The building will achieve a 15 percent better energy performance than the Title 24 requirements and is designated as a ZNE through 100 percent use of SMUD's renewables program; Greenergy. This high operational performance ensures that there will be no wasteful, inefficient, or unnecessary consumption of energy.

Due to the RBOC's location and design features that promote a lower energy intensity commute, VMT will be reduced considerably in comparison to existing suburban state facilities with longer average distances and higher fuel intensity commutes. This reduction in trips and trip lengths by the relocated workers would have a commensurate reduction in transportation fuel consumption. Because the project would be more efficient with its energy consumption for operational fuel use, the project would not have wasteful, inefficient, or unnecessary consumption of energy related to transportation.

While construction operations can be inherently wasteful of resources, the RBOC will utilize a number of measures to limit wasteful, inefficient, or unnecessary consumption of energy to the maximum extent possible to maximize efficiency.

Thus, construction and operation of the future proposed RBOC would not result in a wasteful or unnecessary use of energy. Therefore, this impact would be considered **less than significant**.

Mitigation Measure

None required.

Impact 3.4-2: The RBOC could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Renewable Energy

Electricity for RBOC construction and operations will be provided by SMUD. As a publicly-owned utility SMUD is regulated at the federal level and the CPUC and CEC at the State level. The RPS is enforced by both the CPUC and CEC. As a publicly-owned utility SMUD is required to comply with this standard. All electricity retailers, including SMUD, now have a target of 33 percent renewables by the end of 2020 and 50 percent renewables by 2030. It should also be noted that 100 percent of the project's energy will be provided through renewable sources from

participation in SMUD’s Greenergy program. With 100 percent renewable energy delivery through SMUD’s Greenergy program, the RBOC will meet the CPUC’s Energy Efficiency Strategic Plan, the RPS requirements, and the Clean Energy and Pollution Reduction Act standards; thus, meeting all renewable energy plan standards and requirements.

Electricity

Because the project will consist of new construction, it must comply with the standards contained in Title 20, Energy Building Regulations, and CALGreen. CALGreen sets minimum and mandatory energy efficiency and materials requirements, in order to reduce environmental impact through better planning, design and construction practices. CALGreen works along with the mandatory construction codes of Title 24 and is enforced at the City building department level.¹⁵

Title 24 (AB 970) contains energy efficiency standards for commercial office buildings based on a State mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy used for lighting, water heating, heating and air conditioning, including the energy impact of the building envelope such as windows, doors, skylights, wall/floor/ceiling assemblies, attics, and roofs.¹⁶⁻¹⁷

Additionally, any project-related construction would be required to comply with the Title 24 codes currently in place, including the CALGreen code. The existing 2016 standards became effective on January 1, 2017.¹⁸ The building will achieve a 15 percent better energy performance than the Title 24 requirements and is designated as a ZNE facility through use of SMUD’s 100 percent renewables program, and meet all energy efficiency statewide targets and plans.

Transportation

All vehicles related to both the construction and operations of the RBOC will be in compliance with the Federal and State of California CAFÉ standards.

The RBOC will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and this impact will be considered **less than significant**.

Mitigation Measure

None required.

¹⁵ California Department of Housing and Community Development, 2018. *2018 Report to the Legislature: Status of the California Green Building Standards Code*. Accessed February 28, 2019.

¹⁶ California Energy Commission, 2019. Title 20 Public Utilities and Energy, January 2019. Available: <https://www.energy.ca.gov/2019publications/CEC-140-2019-002/CEC-140-2019-002.pdf>. Accessed March 1, 2019.

¹⁷ California Building Standards Commission, 2016. Title 24 California Building Standards Code. Available: <http://www.bsc.ca.gov/codes.aspx>. Accessed 2017March 1, 2019.

¹⁸ California Building Standards Commission, 2017. 2016 Building Energy Efficiency Standards. Available: <https://www.energy.ca.gov/title24/2016standards/>. Accessed March 1, 2019.

Cumulative Impacts

The geographic scope of potential cumulative effects with respect to energy includes the electrical grid that would serve electricity to the project, areas from which transportation fuels would be provided (for this EIR, publicly available fuel sources in Sacramento County), and the other active cumulative construction projects in the immediate vicinity of the project, including the Central City Specific Plan, Railyards Specific Plan, and the River District Specific Plan, the I Street Bridge Replacement project, the Powerhouse Science Center, development in the Bridge District of West Sacramento, potential future development in Downtown Commons, and the Downtown Riverfront Streetcar project.

Impact 3.4-3: Implementation of the project, in combination with other development, could contribute to wasteful, inefficient, or unnecessary consumption of energy resources.

Continued growth throughout SMUD's service areas will contribute to ongoing increases in demand for electricity and is considered a cumulative impact. Overall, electricity supply in SMUD's service area is adequate during most conditions. However, if demand continues to increase, shortfalls could occur on SMUD's electrical system (and other portions of the statewide grid) during temporary periods of high peak demand. SMUD is actively planning for anticipated increases in peak demand through 2050. Peak demands occur during hot summer afternoon weather conditions when people run their air conditioners. Although SMUD's facilities historically reach peak demand for approximately 40 hours per year, meeting future demand during peak periods is a key planning consideration for the utility.¹⁹ SMUD is currently planning to offset growth in peak demands by encouraging and deploying energy efficiency and conservation measures within its service area.²⁰

The proposed new buildings would achieve an energy conservation performance that would be 15 percent more efficient than the Title 24 requirements and would be designated as a ZNE through use of SMUD's 100 percent renewables program, and meet all energy efficiency statewide targets and plans. The highly efficient ZNE performance standard would ensure that the electricity use of the project would not be considered wasteful, inefficient, or an unnecessary consumption of energy. Although the overall increase in electrical demand in the SMUD service area due to the project, along with past, present, and reasonably foreseeable future project is expected to result in a cumulative impact, the RBOC's contribution to that demand would not be cumulatively considerable, and the associated cumulative impact would be **less than significant**.

Regarding the project's use of fuels, project-related transportation fuel use could overlap with the transportation needs (including fuel needs) of previously approved past projects, as well as other present or future projects. Regardless, there is no apparent significant cumulative condition to which the project could contribute, and given the project's less-than-significant incremental

¹⁹ Sacramento Municipal Utility District, 2019. The Challenge of Peak Demand. Available: <https://www.smud.org/en/about-smud/company-information/challenge-of-peak-demand.htm>. Accessed March 1, 2019.

²⁰ Sacramento Municipal Utility District, 2019. The Challenge of Peak Demand. Available: <https://www.smud.org/en/about-smud/company-information/challenge-of-peak-demand.htm>. Accessed March 1, 2019.

impacts, the project itself would not cause a significant cumulative impact. Due to the RBOC's proposed location and site design, its long-term operation would lead to a change in regional travel modes, such that existing daily VMT would be reduced by approximately 50,000 miles (34 percent) to 107,414 total daily VMT, which would result in a commensurate reduction of transportation-related fuel use. With regard to fuels that would be consumed during construction of the RBOC, the percentage of the project's construction-related fuel use compared to the amount of existing fuel consumed in the County would be low (0.003 percent of gasoline and 0.306 percent diesel fuel), and the project's less-than-significant incremental impacts related to the use of energy in a wasteful or inefficient manner would not be expected to combine with the incremental impacts of other future projects to cause an adverse cumulative impact. The RBOC's construction-related fuel use would not be cumulatively considerable, and the associated cumulative impact would be **less than significant**.

Mitigation Measure

None required.

Impact 3.4-4: Implementation of the project, in combination with other development, could conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Although the need for renewable sources and energy efficient equipment and materials are considered existing adverse cumulative issues in the SMUD service area, as addressed under Impact 4.4-2, the RBOC would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and would therefore not be cumulatively considerable. The associated cumulative impact would be **less than significant**.

Mitigation Measure

None required.

3.5 Greenhouse Gas Emissions and Climate Change

This section assesses the potential greenhouse gas (GHG) emissions and climate change effects and impacts from construction and operation of the Richards Boulevard Office Complex (RBOC) project (or project). This section includes relevant baseline information, including an assessment of current GHG emissions at the city, state, national and global levels; and anticipated future conditions after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete. A description of the potential impacts resulting from the RBOC is also provided, as well as a mitigation analysis for the need to avoid or lessen the potential impacts.

No comments were received on the NOP related to greenhouse gas emissions or climate change.

The primary sources of data referenced for this section include:

- Project-specific construction and operational features described in Chapter 2, Project Description;
- State of California climate regulatory guidance;
- SMAQMD CEQA Guidelines;
- the City of Sacramento 2035 General Plan;¹ and
- the City’s Community-Wide Climate Action Plan checklist.²

3.5.1 Environmental Setting

“Global warming” and “climate change” are common terms used to describe the increase in the average temperature of the earth’s near-surface air and oceans since the mid-20th century. Natural processes and human actions have been identified as impacting climate. The International Panel on Climate Change (IPCC) has concluded that variations in natural phenomena such as solar radiation and volcanoes produced most of the warming from pre-industrial times to 1950 and had a small cooling effect afterward. Since the 19th century however, increasing GHG concentrations resulting from human activity such as fossil fuel combustion, deforestation and other activities are believed to be a major factor in climate change. GHGs in the atmosphere naturally trap heat by impeding the exit of solar radiation that has hit the earth and is reflected back into space—a phenomenon sometimes referred to as the “greenhouse effect”. Some GHGs occur naturally and are necessary for keeping the earth’s surface inhabitable. However, increases in the concentrations of these gases in the atmosphere during the last 100 years have trapped solar radiation and decreased the amount that is reflected back into space, intensifying the natural greenhouse effect and resulting in the increase of global average temperature.

¹ City of Sacramento, 2015. City of Sacramento 2035 General Plan. Adopted March 3, 2015.

² City of Sacramento, 2015. Climate Action Plan Consistency Review Checklist. June 19, 2015.

Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) are the principal GHGs. When concentrations of these gases exceed historical concentrations in the atmosphere, the greenhouse effect is intensified. CO₂, CH₄, and N₂O occur naturally and are also generated through human activity. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing,³ natural gas leaks from pipelines and industrial processes and incomplete combustion associated with agricultural practices, landfills, energy providers and other industrial facilities. Other human-generated GHGs include fluorinated gases such as SFCs, PFCs, and SF₆, which have much higher heat-absorption potential than CO₂, and are byproducts of certain industrial processes.

CO₂ is the reference gas for climate change, as it is the GHG emitted in the highest volume. The effect that each of the GHGs have on global warming is the product of the mass of their emissions and their global warming potential (GWP). GWP indicates how much a gas is predicted to contribute to global warming relative to how much warming would be predicted to be caused by the same mass of CO₂. For example, CH₄ and N₂O are substantially more potent GHGs than CO₂, with GWPs of approximately 30 and approximately 275 times that of CO₂, which has a GWP of 1.

In emissions inventories, GHG emissions are typically reported as metric tons of CO₂ equivalents (CO₂e). CO₂e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH₄ and N₂O have much higher GWPs than CO₂, CO₂ is emitted in higher quantities and it accounts for the majority of GHG emissions in CO₂e, both from commercial developments and human activity in general.

Impacts of Climate Change

Ecosystem and Biodiversity Impacts

Climate change is having effects on diverse types of ecosystems and the effect is anticipated to become more severe over time.⁴ As temperatures and precipitation change, seasonal shifts in vegetation will occur; this is affecting the distribution of associated flora and fauna species. As the range of species shifts, habitat fragmentation will occur, with impacts on the distribution of certain sensitive species. The IPCC states that “a large fraction of both terrestrial and freshwater species faces increased extinction risk under projected climate change during and beyond the 21st century, especially as climate change interacts with other stressors, such as habitat modifications, over exploitation, and invasive species.”⁵ Shifts in existing biomes could make ecosystems vulnerable to encroachment by invasive species. Forest dieback poses risks for carbon sequestration and storage, biodiversity, wood production, water quality, and economic activity. Wildfires, which are an important control mechanism in many ecosystems, have become more

³ Off-gassing is defined as the release of chemicals under normal conditions of temperature and pressure.

⁴ U.S. Environmental Protection Agency, 2008. Climate Change – Ecosystems and Biodiversity. Available: www.epa.gov/climatechange/effects/eco.html. Accessed June 19, 2012.

⁵ Intergovernmental Panel on Climate Change, 2014. Climate Change 2013: Impacts, Adaptation, and Vulnerability, Summary for Policymakers. Working Group II Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. pp. 14-15.

severe and more frequent, making it difficult for native plant species to repeatedly re-germinate. Continued emission of GHGs will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive, and irreversible impacts for people and ecosystems.⁶

Human Health Impacts

Climate change may increase the risk of vector-borne infectious diseases, particularly those found in tropical areas and spread by insects such as malaria, dengue fever, yellow fever, and encephalitis. Cholera, which is associated with algal blooms, could also increase. While these health effects would largely affect tropical areas in other parts of the world, effects are also impacting California and the Sacramento area. Warming of the atmosphere is expected to increase smog and particulate pollution, which could adversely affect individuals with heart and respiratory problems, such as asthma. Extreme heat events would also be expected to occur with more frequency and could adversely affect the elderly, children, and the homeless. Finally, the water supply impacts and seasonal temperature variations expected as a result of climate change could affect the viability of existing agricultural operations, making the food supply more vulnerable.⁷

Greenhouse Gas Emissions Estimates

Global Emissions

Worldwide emissions of GHGs in 2017 were approximately 50.9 billion metric tons of CO₂e per year.⁸ This includes both ongoing emissions from industrial and agricultural sources, but excludes emissions from land use changes.

U.S. Emissions

In 2016, the United States emitted about 6.5 billion metric tons of CO₂e. Of the four major emission sectors—residential, commercial, industrial, and transportation—transportation accounts for the highest fraction of GHG emissions (approximately 36 percent); these emissions are generated from direct fossil fuel combustion.⁹

State of California Emissions

In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation. California produced approximately 429.4 million metric tons of CO₂e in 2016. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2016, accounting for 41 percent of total GHG emissions in the state. This

⁶ Intergovernmental Panel on Climate Change, 2014. Climate Change 2014, Synthesis Report Summary for Policymakers, Fifth Assessment Report.

⁷ U.S. Environmental Protection Agency, 2008. Climate Change – Health and Environmental Effects. Available: www.epa.gov/climatechange/effects/health.html#climate. Accessed June 19, 2012.

⁸ PBL Netherlands Environmental Assessment Agency, 2018. Trends in Global CO₂ and Total Greenhouse Gas Emissions. p. 11.

⁹ U.S. Environmental Protection Agency, 2018. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2016; Executive Summary, Table ES-2 and Table ES-3. April 2018.

sector was followed by the industrial sector (23 percent), and the electric power sector (including both in-state and out-of-state sources) (16 percent).¹⁰

Existing Conditions

City of Sacramento Emissions

Based on the 2011 GHG inventory for the City of Sacramento, the transportation sector represents the largest source of GHG emissions, accounting for 52.2 percent of the City’s annual emissions of 3.85 million metric tons of CO₂e. Electricity and natural gas use to operate, heat, and cool commercial, industrial, and residential buildings accounted for another 38.2 percent of annual CO₂e emissions. The other CO₂e emission sectors included in the inventory (with percent contributions reported in parentheses) were waste (8.2 percent), wastewater treatment (0.5 percent), water consumption (0.3 percent) and industrial specific sources (0.5 percent).¹¹

Baseline Conditions

The approved Demolition Project will result in relocation of State printing plant operations, and the demolition of all buildings and structures, aside from a small pump house located on the northwest corner of the site. For this analysis, baseline conditions consist of a vacant project site, devoid of structures or facilities. While the pump house will continue to be electrified until the project construction begins, its effect on the baseline condition is negligible.

3.5.2 Regulatory Setting

Federal

U.S. Environmental Protection Agency “Endangerment” and “Cause or Contribute” Findings

The U.S. Supreme Court has held that the United States Environmental Protection Agency (US EPA) must consider regulation of motor vehicle GHG emissions. In *Massachusetts v. Environmental Protection Agency* et al., twelve states and cities, including California, together with several environmental organizations sued to require the US EPA to regulate GHGs as pollutants under the CAA (127 S. Ct. 1438 (2007)). The Supreme Court ruled that GHGs fit within the CAA’s definition of a pollutant and the US EPA had the authority to regulate GHGs. While the current administration has begun efforts to overturn these findings they currently remain in place.

¹⁰ California Air Resources Board, 2018. California Greenhouse Gas Inventory 2018 Edition of the GHG Emission Inventory Release (July 2018). Available: <https://www.arb.ca.gov/cc/inventory/data/data.htm>.

¹¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan* Master Environmental Impact Report. Adopted March 3, 2015.

On December 7, 2009, the US EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:¹²

- **Endangerment Finding:** The current and projected concentrations of the six key GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The combined emissions of these GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution that threatens public health and welfare.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, the US EPA released its final Greenhouse Gas Reporting Rule (Reporting Rule). The Reporting Rule is a response to the fiscal year (FY) 2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), that required the US EPA to develop “...mandatory reporting of GHGs above appropriate thresholds in all sectors of the economy...” The Reporting Rule applies to most entities that emit 25,000 metric tons of CO₂e or more per year. Since 2010, facility owners must submit an annual GHG emissions report with detailed calculations of facility GHG emissions. The Reporting Rule also mandates recordkeeping and administrative requirements in order for the US EPA to verify annual GHG emissions reports.

Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards

In 2014 the US EPA and the Department of Transportation’s National Highway Traffic Safety Administration (NHTSA) established a program that reduces GHG emissions and improves fuel economy for all new cars and trucks sold in the U.S. The program requires manufacturers to build a fleet that meets all federal and state requirements with an end target fuel economy of 54.5 miles per gallon by model year 2025.

State

In California, the legal framework for GHG emission reduction has been established through an incremental set of Governors’ Executive Orders, legislation, and regulations put in place since 2002. The major components of California’s climate change initiative are summarized below:

California Environmental Quality Act (CEQA) and Senate Bill 97

Under CEQA, lead agencies are required to disclose the reasonably foreseeable adverse physical environmental effects of projects they are considering for approval. GHG emissions have the potential to adversely affect the environment because they contribute to climate change. In turn, climate change has the potential to raise sea levels, alter rainfall and snowfall, and affect habitat.

Senate Bill 97

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is a prominent environmental issue requiring analysis under CEQA. This bill directed the Governor’s Office of

¹² U.S. Environmental Protection Agency, 2016. Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act. Available: www3.epa.gov/climatechange/endangerment/.

Planning and Research (OPR) to prepare, develop, and transmit to the California Natural Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, no later than July 1, 2009. The California Natural Resources Agency was required to certify or adopt those guidelines by January 1, 2010. On December 30, 2009, the Natural Resources Agency adopted amendments to the State CEQA Guidelines, as required by SB 97. These State CEQA Guidelines amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents. The amendments became effective March 18, 2010.

State CEQA Guidelines

The State CEQA Guidelines are embodied in the California Code of Regulations (CCR), Public Resources Code (PRC), Division 13, starting with Section 21000. State CEQA Guidelines section 15064.4 specifically addresses the significance of GHG emissions, requiring a lead agency to make a “good-faith effort” to “describe, calculate or estimate” GHG emissions in CEQA environmental documents. State CEQA Guidelines Section 15064.4 further states that the analysis of GHG impacts should include consideration of (1) the extent to which the project may increase or reduce GHG emissions, (2) whether the project emissions would exceed a locally applicable threshold of significance, and (3) the extent to which the project would comply with “regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.” The CEQA Guidelines also state that a project’s incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program (including plans or regulations for the reduction of GHG emissions) that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located (State CEQA Guidelines Section 15064(h)(3)). The State CEQA Guidelines do not, however, set a numerical threshold of significance for GHG emissions.

The CEQA Guidelines also include the following direction on measures to mitigate GHG emissions, when such emissions are found to be significant:

Consistent with Section 15126.4(a), lead agencies shall consider feasible means, supported by substantial evidence and subject to monitoring or reporting, of mitigating the significant effects of greenhouse gas emissions. Measures to mitigate the significant effects of greenhouse gas emissions may include, among others:

- (1) Measures in an existing plan or mitigation program for the reduction of emissions that are required as part of the lead agency’s decision;
- (2) Reductions in emissions resulting from a project through implementation of project features, project design, or other measures;
- (3) Off-site measures, including offsets that are not otherwise required, to mitigate a project’s emissions;
- (4) Measures that sequester greenhouse gases; and

- (5) In the case of the adoption of a plan, such as a general plan, long range development plan, or plans for the reduction of greenhouse gas emissions, mitigation may include the identification of specific measures that may be implemented on a project-by-project basis. Mitigation may also include the incorporation of specific measures or policies found in an adopted ordinance or regulation that reduces the cumulative effect of emissions.¹³

Assembly Bill 1493

In 2002, then-Governor Gray Davis signed Assembly Bill (AB) 1493. AB 1493, also known as the “Pavley” regulations (named for the bill’s author, State Senator Fran Pavley), required CARB to develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state.”

To meet the requirements of AB 1493, in 2004 CARB approved amendments to the CCR, adding GHG emissions standards to California’s existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1), require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight (GVW) rating of less than 10,000 pounds and that is designed primarily for the transportation of persons), beginning with model year 2009. For passenger cars and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 pounds or less, the GHG emission limits for model year 2016 are approximately 37 percent lower than the limits for the first year of the regulations, model year 2009. For light-duty trucks with an LVW of 3,751 pounds to a GVW of 8,500 pounds, as well as for medium-duty passenger vehicles, GHG emissions were reduced approximately 24 percent between 2009 and 2016.

Because the Pavley regulations would impose stricter standards than those under the CAA, California applied to the US EPA for a waiver under the CAA; this waiver was initially denied in 2008. In 2009, however, the US EPA granted the waiver.

Advanced Clean Cars Program

In January 2012, the CARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into standards for vehicle model years 2017 through 2025. The program strengthens the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program’s zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California’s new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of

¹³ State CEQA Guidelines section 15126.4(a).

zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the state.

The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions than the statewide fleet in 2016.¹⁴

Executive Order S-3-05

In 2005, in recognition of California's vulnerability to the effects of climate change, then-Governor Arnold Schwarzenegger established Executive Order S-3-05, which set forth the following target dates by which statewide GHG emissions would be progressively reduced: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels.

Executive Order B-30-15

In 2015, Governor Brown issued Executive Order B-30-15, establishing a GHG reduction target of 40 percent below 1990 levels by 2030. This goal was set to make it possible to reach the ultimate goal of AB 32 to reduce GHG emissions 80 percent under 1990 levels by 2050.

Global Warming Solutions Act and the California Climate Change Scoping Plan Assembly Bill 32

In 2006, the California legislature passed AB 32 (California Health and Safety Code Division 25.5, Sections 38500, et seq.), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emissions limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25-percent reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. CARB has identified a GHG reduction target of 15 percent from current levels for local governments (municipal and community-wide) and notes that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions.

Senate Bill 32 and Assembly Bill 197

Signed into law on September 8, 2016, SB 32 (Amendments to California Global Warming Solutions Act of 2006: Emission Limit) amends HSC Division 25.5 and codifies the 2030 target in Executive Order B-30-15 (40 percent below 1990 levels by 2030). The 2030 target is intended to ensure that California remains on track to achieve the goal set forth by Executive Order B-30-15 to reduce statewide GHG emissions by 2050 to 80 percent below 1990 levels. SB 32 states the

¹⁴ California Air Resources Board, 2017. *California's Advanced Clean Cars Midterm Review*, January 18, 2017. https://www.arb.ca.gov/msprog/acc/mtr/acc_mtr_summaryreport.pdf. Accessed February 14, 2019.

intent of the legislature to continue to reduce GHGs for the protection of all areas of the state and especially the state's most disadvantaged communities, which are disproportionately impacted by the deleterious effects of climate change on public health. The law amends HSC Division 25.5 and establishes a new climate pollution reduction target of 40 percent below 1990 levels by 2030, while AB 197 includes provisions to ensure the benefits of State climate policies include disadvantaged communities.

Scoping Plan Provisions

Pursuant to AB 32, CARB adopted a *Climate Change Scoping Plan* in December 2008 (re-approved by CARB on August 24, 2011¹⁵) outlining measures to meet the 2020 GHG reduction goals. In order to meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today's levels. The Scoping Plan relies on the requirements of SB 375 (discussed below) to implement the carbon emission reductions anticipated from land use decisions.

The *First Update to the Climate Change Scoping Plan* describes progress made to meet near-term emissions goals of AB 32, defines California's climate change priorities and activities for the next few years, and describes the issues facing the State as it establishes a framework for achieving air quality and climate goals beyond the year 2020.

On December 14, 2017, CARB approved the final version of California's *2017 Climate Change Scoping Plan* (2017 Scoping Plan Update), which outlines the proposed framework of action for achieving the 2030 GHG target of 40 percent reduction in GHG emissions relative to 1990 levels.¹⁶ The 2017 Scoping Plan Update identifies key sectors of the implementation strategy, which includes improvements in low carbon energy, industry, transportation sustainability, natural and working lands, waste management, and water. The CARB determined that the target Statewide 2030 emissions limit is 260 million metric tons of CO₂e (MMTCO₂e), and that further commitments will need to be made to achieve an additional reduction of 50 MMTCO₂e beyond current policies and programs. The cornerstone of the 2017 Scoping Plan Update is an expansion of the Cap-and-Trade program to meet the aggressive 2030 GHG emissions goal represented by SB 32 and ensure achievement of the 2050 limit set forth by E.O. B-30-15.

Cap-and-Trade Program

The Scoping Plan identifies cap-and-trade as a key strategy for helping California reduce its GHG emissions.¹⁷ A cap-and-trade program sets the total amount of GHG emissions allowable for facilities under the cap and allows covered sources, including producers and consumers of

¹⁵ California Air Resources Board (CARB), 2008. *Climate Change Scoping Plan*. Adopted December 11, 2008, re-approved by CARB August 24, 2011. pp. ES-1 and 17.

¹⁶ California Air Resources Board, 2017. *California's 2017 Climate Change Scoping Plan: The strategy for achieving California's 2030 greenhouse gas target*, November 2017.

¹⁷ California Air Resources Board (CARB), 2008. *Climate Change Scoping Plan*. Adopted December 11, 2008, re-approved by CARB on August 24, 2011. pp. 18-20.

energy, to determine the least expensive strategies to comply. AB 32 required CARB to adopt the cap-and-trade regulation by January 1, 2011, and the program itself began in November 2012.

Carbon offset credits are created through the development of projects, such as renewable energy generation or carbon sequestration projects, that achieve the reduction of emissions from activities not otherwise regulated, covered under an emissions cap, or resulting from government incentives. As required by AB 32, any reduction of GHG emissions used for compliance purposes must be real, permanent, quantifiable, verifiable, enforceable, and additional. The criteria developed will ensure that the reductions are quantified accurately and are not double-counted within the system.¹⁸

Senate Bill 375

In addition to policy directly guided by AB 32, the legislature in 2008 passed SB 375, which provides for regional coordination in land use and transportation planning and funding to help meet the AB 32 GHG reduction goals. SB 375 aligns regional transportation planning efforts, regional GHG emissions reduction targets, land use and housing allocations. SB 375 requires Regional Transportation Plans (RTPs) developed by the state's 18 metropolitan planning organizations (MPOs) to incorporate a "sustainable communities strategy" (SCS) that will achieve GHG emission reduction targets set by CARB. SB 375 also includes provisions for streamlined CEQA review for some infill projects, such as transit-oriented development. SB 375 would be implemented over the next several years. The Sacramento Area Council of Government's (SACOG) 2016 *Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)* was adopted on February 18, 2016. SACOG's MTC/SCS calls for meeting and exceeding CARB GHG reduction goals from passenger vehicles and light-duty trucks of 7.6 percent by 2020 and 15.6 percent by 2035, where 2005 is the baseline year for comparison.¹⁹

Executive Order B-16-12

In 2012, Governor Brown issued Executive Order B-16-12, ordering that California's State vehicle fleet increase the number of zero-emission vehicles through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles be zero-emission by 2015 and 25 percent of fleet purchases of light-duty vehicles be zero-emission by 2020. The executive order also requires that California target for 2050 a reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels.

California Renewables Portfolio Standard

SB 1078 established the Renewables Portfolio Standard (RPS) in 2002, which requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from eligible renewable sources by 2017. SB 107 changed the target date to 2010. In November 2008, Executive Order S-14-08 expanded the

¹⁸ California Air Resources Board (CARB), 2008. Climate Change Scoping Plan. Adopted December 11, 2008, re-approved by CARB on August 24, 2011. pp. 36-38.

¹⁹ Sacramento Area Council of Governments, 2016. 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy. Adopted February 18, 2016. p. 173.

state's RPS goal to 33 percent renewable power by 2020. In September 2009, Executive Order S-21-09 directed CARB (under its AB 32 authority) to enact regulations to help the state meet the 2020 goal of 33 percent renewable energy. The 33 percent by 2020 RPS goal was codified in April 2011 with SB X1-2. This new RPS applies to all electricity retailers in the state, including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators. SB 350 (see below) was signed in October 2015, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030. Most recently, SB 100, signed by Governor Brown on September 10, 2018, increases the RPS requirement to 60 percent eligible renewables by 2030 and 100 percent by 2045.

Senate Bill 350

SB 350 (Clean Energy and Pollution Reduction Act of 2015) was signed into law on October 7, 2015, establishing new goals for clean energy, clean air, and GHG reduction goals for 2030 and beyond. SB 350 requires the following:

- Increase California's renewable electricity procurement goal under the RPS from 33 percent by 2020 to 50 percent by 2030,
- Double existing building energy efficiency by 2030; and
- Facilitate the growth of renewable energy markets within the western U.S. by reorganizing the California Independent System Operator (CAISO).

California Building Efficiency Standards – Title 24, Part 6

California's Energy Efficiency Standards for Residential and Nonresidential Buildings were established by the California Energy Commission (CEC) in Title 24, Part 6 of the CCR. These standards mandate a reduction in California's energy consumption and are updated on a 3-year cycle to allow for innovation and incorporation of new energy efficient technologies and methods. All buildings for which an application for a building permit is submitted on or after January 1, 2017 must follow the 2016 standards. Applications for building permits after January 1, 2020 would have to be compliant with the 2019 standards. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions.

California Green Building Standards Code – CALGreen

In January 2010, the State of California adopted the California Green Building Standards Code (CALGreen) that establishes new sustainable building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of minimum guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels. This Code went into effect as part of local jurisdictions' building codes on January 1, 2011

and was most recently updated as the 2016 California Green Building Standards Code (effective January 1, 2017).²⁰

For buildings providing more than 200 parking spaces, the 2016 CalGreen Code mandates that a minimum of 6 percent of the spaces be constructed to accommodate future electric vehicle charging stations.

To facilitate lowering the carbon intensity of commuting, bicycle parking provisions are a part of the planning and design category of CALGreen. Nonresidential buildings within the authority of California Building Standards Commission must comply with the CalGreen standards or meet the applicable local ordinance, whichever is stricter. Buildings anticipated to have tenant-occupants must provide long-term parking, specifically secure bicycle parking for at least 5 percent of tenant-occupant vehicular parking spaces. Non-residential buildings anticipated to generate visitor traffic are required to provide short-term anchored bicycle parking within 200 feet of the visitor entrance for at least 5 percent of new visitor motorized vehicle parking spaces. Additionally, long-term bike parking must be convenient from the street and must meet one of the following criteria:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

These provisions are an important part of the State's approach to encouraging and facilitating forms of commuting that are less GHG intensive, or GHG-free in this case.

Executive Order B-18-12

In April 2012, Governor Brown signed Executive Order B-18-12 requiring State agencies to implement green building practices to improve energy, water and materials efficiency, improve air quality and working conditions for State employees, reduce costs to the State and reduce environmental impacts from State operations. Among other actions, EO B-18-12 requires State agencies to reduce agency-wide water use by 10 percent by 2015 and 20 percent by 2020, as measured against a 2010 baseline. The Executive Order directs that new State buildings larger than 10,000 square feet use clean, onsite power generation and obtain the U.S. Green Building Council's Leadership in Energy and Environmental (LEED) Silver certification.

Further, EO B-18-12 states that all new State buildings beginning design after 2025 be constructed as Zero Net Energy (ZNE) facilities, with an interim target of 50 percent of new facilities beginning design after 2020 to be ZNE. The Executive Order also calls for State agencies to identify and pursue opportunities to provide electric vehicle charging stations at employee parking facilities in new and existing buildings.

²⁰ California Building Standards Commission, 2016. California 2016 Green Building Standards Code, CalGreen California Code of Regulations, Title 24, Part 11. Effective Date: January 1, 2017.

California Integrated Waste Management Act and California Assembly Bill 341

The State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939) in 1990, requiring all cities and counties to divert 50 percent of all solid waste from landfill facilities by January 1, 2000. In order of priority, waste reduction efforts must promote source reduction, recycling and composting, and environmentally-safe transformation and land disposal. AB 341 (PRC Division 30, Part 3, Chapter 12.8), which became law in 2011, established a new statewide goal of 75 percent diversion by 2020, and changed the way that the state measures progress toward the 75 percent recycling goal, focusing on source reduction, recycling and composting. AB 341 also requires all businesses and public entities that generate 4 cubic yards or more of waste per week to have a recycling program in place. The purpose of the law is to reduce GHG emissions by diverting commercial solid waste to recycling efforts and expand the opportunity for additional recycling services and recycling manufacturing facilities in California. Although AB 341 established a statewide recycling goal of 75 percent; the 50 percent disposal reduction mandate still applies for cities and counties under AB 939.

California Assembly Bill 1826

AB 1826 (PRC Division 30, Part 3, Chapter 12.9, Commercial Organic Waste Recycling Law) became effective on January 1, 2016, and requires businesses (including commercial and public entities) and multi-family complexes (with 5 units or more) that generate specified amounts of organic waste (compost) to arrange for organics collection services. The law phases in the requirements on businesses with full implementation realized in 2019:

- **First Tier:** Commencing in April 2016, the first tier of affected businesses included those that generate eight or more cubic yards of organic materials per week.
- **Second Tier:** In January 2017, the affected businesses expanded to include those that generate four or more cubic yards of organic materials per week.
- **Third Tier:** In January 2019, the affected businesses are further expanded to include those that generate four or more cubic yards of commercial solid waste per week.

Local

The project is located on State-owned property and would be implemented by the California State Department of General Services (DGS). State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot conflict with these policies and ordinances. In many cases, local plans, policies, and regulations that are applicable to the project are appropriate thresholds for the project and incorporated herein. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

City of Sacramento Zoning Code for Bicycle Requirements

The City of Sacramento's Zoning Code establishes bicycle parking requirements by land use and parking district. According to the zoning code, office buildings located in urban districts require both short- and long-term bicycle parking. For short-term bicycle parking, one space is required

per 20,000 gross square feet of building, and for long-term bicycle parking, one space is required per 6,667 gross square feet of building.

City of Sacramento Climate Action Plan (CAP) and City of Sacramento 2035 General Plan

The City of Sacramento CAP includes several initiatives to reach its goals of reducing community-wide emissions by 15 percent below 2005 levels by 2020, 38 percent below 2005 levels by 2030, and 83 percent below 2005 levels by 2050. These goals must be achieved with the addition of new residents living in the city and additional people working in the city. As compared to 2005, by 2020 Sacramento expects an additional 116,400 people, 58,500 housing units, and 80,200 employees. On a per capita basis (including new residents), Sacramento will need to reduce its emissions to about 6.2 metric tons of CO₂e per person by 2020. This represents a 31 percent reduction from 2005 per capita emission levels (8.9 metric tons CO₂e per person).

The CAP outlines seven strategies to meet Sacramento's GHG reduction goals.²¹ Those strategies include:

- Strategy 1: Sustainable Land Use – This strategy focuses on using land efficiently, while preserving the character of existing neighborhoods, by providing for complete neighborhoods that incorporate natural resources and green infrastructure.
- Strategy 2: Mobility and Connectivity – This strategy involves creating a multi-modal transportation network that increases the use of sustainable modes of transportation (walking, biking, and transit) and reduces dependence on automobiles.
- Strategy 3: Energy Efficiency and Renewable Energy – The third strategy increases the energy efficiency of existing and new buildings and maximizes the use and generation of renewable energy.
- Strategy 4: Water Reduction and Recycling – This strategy reduces the production, consumption, and disposal of waste materials, while encouraging reuse, recycling, and composting.
- Strategy 5: Water Conservation and Wastewater Reduction – This strategy encourages water conservation and management and wastewater treatment practices that reduce energy demand.
- Strategy 6: Climate Change Adaptation – This strategy plans for climate change risks and is designed to create resilient communities, economies, and environments.
- Strategy 7: Community Involvement and Empowerment – This strategy enlists the ideas and energy of residents and businesses to help achieve the City's climate action objectives.

For each of the seven strategies listed above, the CAP includes measures and actions that the City will use to reduce GHG emissions and adapt to climate change. Measures organize the specific

²¹ City of Sacramento, 2012. *Sacramento Climate Action Plan*. Adopted February 14, 2012. pp. i-xiv.

programs, policies, and actions that the City will carry out to achieve its climate action strategies. Within each measure are the detailed actions that the City will take to implement the measures.

In 2015, the City adopted its 2035 General Plan. The strategies, measures, and actions that formed the City's CAP were incorporated into the 2035 General Plan. Appendix B of the 2035 General Plan identifies the location of each CAP measure within the 2035 General Plan.²²

To determine a project's consistency with the CAP, the City developed a Climate Action Plan Consistency Checklist.²³ This checklist provides a streamlined review process for proposed development projects subject to environmental review under CEQA.

3.5.3 Analysis, Impacts and Mitigation

Significance Criteria

Appendix G of the CEQA Guidelines outline significance criteria for the evaluation of impacts related to GHGs. The project would result in a significant impact on the climate if it would:

1. Generate(s) GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
2. Conflict with and applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

GHG emissions are an inherently cumulative impact because no single project makes a significant contribution to climate change. The State CEQA Guidelines require the analysis of GHGs and potential climate change impacts from new development. Section 15183.5 of the State CEQA Guidelines states:

[p]ublic agencies may choose to analyze and mitigate significant greenhouse gas emissions in a plan for the reduction of greenhouse gas emissions or similar document. A plan to reduce greenhouse gas emissions may be used in a cumulative impacts analysis as set forth below. Pursuant to sections 15064(h)(3) and 15130(d), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program under specified circumstances.

SMAQMD's currently adopted GHG thresholds of significance consist of a construction threshold (1,100 metric tons GHG/year), a land-use operational threshold (1,100 metric tons GHG/year) and a stationary source operational threshold (10,000 metric tons GHG/year). Up until 2016, the SCAQMD recommended 21.7% mitigation from a business-as-usual scenario for projects that exceeded the operational thresholds, but SMAQMD recommended suspending the use of business-as-usual analysis following the California Supreme Court decision in *Center for Biological Diversity v. California Department of Fish and Wildlife and Newhall Land and*

²² City of Sacramento, 2015. *General Plan Climate Action Plan Policies and Programs*, Appendix B, pp. 1-78.

²³ City of Sacramento, 2013. *Climate Action Plan Consistency Review Checklist*. June 19, 2015. pp. 1-20.

Farming (Newhall Ranch case) in January 2016. Consistent with the recommendations of the Court in the Newhall Ranch case, SMAQMD encouraged local agencies in Sacramento to develop a climate action plan (CAP) or greenhouse gas reduction plan that could be used programmatically to reduce GHG emissions and streamline CEQA review for development projects, per Section 15183.5 of the CEQA Guidelines.

In November 2018, the SMAQMD issued proposed new draft thresholds of significance for GHG emissions, in response to recent changes in legislation (e.g., SB 32) and CARB’s adoption of the 2017 Scoping Plan Update, which recommends communities establish per-capita emissions targets that support the State’s climate stabilization goal.²⁴ The SMAQMD’s recommendations reiterate that if a project is subject to CEQA review and the proponent demonstrates the project is consistent with all applicable measures from an adopted CAP or GHG reduction plan that meets the requirements of CEQA Guidelines Section 15183.5, the proponent would qualify for CEQA streamlining of GHG analysis. Regarding quantitative thresholds for determining significance, SMAQMD recommends including a screening level for smaller projects and an efficiency metric for projects exceeding the screening level to determine significance of GHG emissions. The recommended screening level is 3,500 MT CO₂e for smaller projects (which SMAQMD determined would capture 98 percent of the emissions from projects for review and potential mitigation). For projects exceeding the 3,500 metric tons GHG/year screening threshold, SMAQMD recommends comparing the project emissions to one of the efficiency metrics shown in **Table 3.5-1** to determine significance and the need to mitigate GHG emissions. Two build-out years are provided by SMAQMD, 2020 and 2036, which correspond with the data available from SACOG. Proponents would extrapolate the target emission thresholds for build out years falling between 2020 and 2036.

**TABLE 3.5-1
 SMAQMD RECOMMENDED LAND USE OPERATIONAL GHG THRESHOLDS OF SIGNIFICANCE**

Year	MT CO ₂ e/capita	MT CO ₂ e/service population
2020	5.90	4.16
2036	2.94	2.05

The City of Sacramento CAP qualifies under section 15183.5 of the State CEQA Guidelines as a plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects. Although State projects are exempt from local ordinances and standards, compliance with the City’s CAP is a reasonable and appropriate threshold for determination of significance, given the Newhall case and the SMAQMD’s proposed recommendations. Thus, for purposes of this EIR, impacts related to GHGs would be considered significant if the project would conflict with the City’s CAP Consistency Review Checklist as shown in Table 3.5-4

²⁴ Sacramento Metropolitan Air Quality Management District, 2018. Draft Sacramento Metropolitan Air Quality Management District Greenhouse Gas Thresholds of Significance Update for Land Development Project Operational Emissions, November 28, 2018. Available: <http://www.airquality.org/LandUseTransportation/Documents/11-28-18PublicDraftSMAQMDGHGThresholdsUpdate.pdf>.

below. In addition, for informational purposes, the project’s emissions are compared to the SMAQMD’s proposed CEQA significance thresholds. For the project’s first year of operation (2024), the per-service population threshold would be 3.63 MT CO₂e per year, which is based on a linear analysis between 2020 and 2036, as shown in Table 3.5-1.

Methodology and Assumptions

Project-related GHG impacts fall into two categories: short-term impacts due to construction, and long-term, on-going, impacts due to operations. Estimated construction- and operation-related emissions are presented below in **Table 3.5-2** and **Table 3.5-3**. This project is evaluated for its consistency with currently adopted State and local regulations intended to reduce GHG emissions, including the 2017 Scoping Plan Update, Executive Order B-18-12, the California Integrated Waste Management Act, and the City of Sacramento General Plan and Climate Action Plan.

**TABLE 3.5-2
 PROJECT CONSTRUCTION GREENHOUSE GAS EMISSIONS**

Construction Year	CO ₂ e (MT/year)
2020	143
2021	3,106
2022	2,985
2023	2,923
2024	346
Total Construction GHG Emissions	9,503
Emissions Amortized Over 25 Years	380

NOTES:
 Project construction emissions were estimated using CalEEMod version 2016.3.2. See Appendix D1 for model outputs and more detailed assumptions.
 CO₂e = carbon dioxide equivalent, MT = metric tons
 SOURCE: ESA, 2019.

GHG emissions associated with the project were estimated for the construction phase and the operational phase using the California Emissions Estimator Model (CalEEMod), version 2016.3.2. CalEEMod is an approved emissions inventory software program that allows the user to estimate criteria pollutant and GHG emissions from land use development projects. Project-specific information was used for modeling when possible, e.g., land use, construction schedule, area to be developed. Where project-specific data is unavailable, CalEEMod default construction equipment and worker trips were used which capture assumed values consistent with standard practice. Construction of the project was assumed to begin in 2021 and end in 2024, when the project would become operational. Additional assumptions and model results are presented in Appendix D1. Construction emissions are amortized over the project life expectancy of 25 years, and added to operational emissions to provide an annual average for project GHG emissions.

**TABLE 3.5-3
 PROJECT ANNUAL GREENHOUSE GAS EMISSIONS**

Source	CO₂e (MT/year)
Area	<1
Energy	6,255
Mobile	10,950
Stationary	6
Waste	672
Water	722
Amortized Construction Emissions	380
Total Annual GHG Emissions (Operation + Construction)	18,985
Proposed Screening Threshold	3,500
Exceed Screening Threshold	Yes
Project Service Population ^a	6,000
Total Annual Emissions per Service Population	3.16
Proposed Service Population Threshold	3.63
Exceed Service Population Threshold	No

NOTES:

Project construction emissions were estimated using CalEEMod version 2016.3.2. See Appendix D1 for model outputs and more detailed assumptions.

CO₂e = carbon dioxide equivalent, MT = metric tons

a – Service population from Table 2-1 in Project Description

SOURCE: ESA, 2019.

Impacts and Mitigation Measures

Impact 3.5-1: The project could generate greenhouse gas emissions, either directly or indirectly, that may have significant impact on the environment.

Project Construction Greenhouse Gas Emissions

Construction-related emissions arise from a variety of activities, including: (1) grading, excavation, road building, and other earth moving activities; (2) travel by construction equipment and employee vehicles, especially on unpaved surfaces; (3) exhaust from construction equipment; (4) architectural coatings; and (5) asphalt paving.

Using the methods described above, construction GHG (CO₂e) emissions for the years 2021, 2022, 2023, and 2024 were estimated. Annual unmitigated construction emissions are presented in Table 3.5-2.

Project Operational Greenhouse Gas Emissions

Over the long-term, the project would result in an increase in GHG emissions primarily due to motor vehicle trips and onsite area and energy sources (e.g., natural gas combustion for space and water heating, landscape maintenance, use of consumer products such as hairsprays, deodorants, cleaning products). For this analysis, GHG emissions for the project were modeled for

operational year 2024 using CalEEMod version 2016.3.2. Annual total emissions, which include operational emissions in addition to amortized construction emissions, are presented in Table 3.5-3.

Summary

The GHG emissions from RBOC would be 3.16 MT CO₂e per year, which is less than SMAQMD's proposed per-service population significance threshold of 3.63; therefore, the GHG impacts on the environment would be considered **less than significant**.

Mitigation Measure

None required.

Impact 3.5-2: The project could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Consistency with Applicable Plans and Regulations

CEQA Guidelines Section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of GHGs and describes the required contents of such a plan. As described below, the project would be consistent with the following plans and regulations:

- 2017 Scoping Plan Update,
- Executive Order B-18-12,
- The California Integrated Waste Management Act, and
- The City of Sacramento's CAP.

Consistency with 2017 Scoping Plan Update

The 2017 Scoping Plan Update lays out the framework for achieving the 2030 statewide GHG reduction target of 40 percent below 1990 levels. The update details local actions that land use development projects and municipalities can implement to support the statewide goal. For project-level CEQA analyses, the 2017 Scoping Plan Update states that projects should implement feasible mitigation, preferably measures that can be implemented onsite. Many of the RBOC features align with these actions and would contribute to direct and indirect reduction of GHG emissions.

The Scoping Plan Update incorporates a broad array of regulations, policies and state plans designed to reduce GHG emissions. Those that are applicable to the construction and operation of the project are listed in **Table 3.5-4**. Actions, plans and programs that are not under the control or influence of the project, such as the Cap-and-Trade program, are not included. As shown below, the project would implement sustainability features and incorporate characteristics to reduce energy use, conserve water, reduce waste generation, promote EV use, and reduce vehicle travel consistent with statewide strategies and regulations. As a result, the project would not conflict

with applicable Climate Change Scoping Plan strategies and regulations to reduce GHG emissions.

**TABLE 3.5-4
 CONSISTENCY WITH APPLICABLE GREENHOUSE GAS REDUCTION ACTIONS IN 2017 SCOPING PLAN UPDATE**

Sector / Source	Category / Description	Consistency Analysis
Energy and Water		
California Renewables Portfolio Standard (RPS)	SB 100 requires that the proportion of electricity from renewable sources be 60 percent renewable power by 2030 and 100 percent renewable power by 2045.	Consistent. 100 percent of the RBOC's electricity will be provided through renewable sources through the participation in SMUD's Greenergy program. SMUD is required to comply with SB 100 and the RPS.
California Renewables Portfolio Standard and SB 350	SB 350 requires that the proportion of electricity from renewable sources be 50 percent renewable power by 2030 (superseded by SB 100). It also requires the state to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.	Consistent. 100 percent of the RBOC's electricity will be provided through renewable sources through the participation in SMUD's Greenergy program. SMUD is required to comply with the RPS. The project is designed to exceed the applicable Title 24 Building Energy Efficiency Standards by 15 percent or more, and to meet or exceed LEED Silver certification.
CCR, Title 24, Part 6	Energy Efficiency Standards for Residential and Nonresidential Buildings.	Consistent. The project is designed to exceed the applicable Title 24 Building Energy Efficiency Standards by 15 percent or more, and to meet or exceed LEED Silver certification.
CALGreen code, Title 24, Part 11	California's Green Building Standards (CALGreen) Code includes water efficiency requirements that apply to new public agency buildings.	Consistent. The project would include a commitment to achieve, at a minimum, the CALGreen Tier 1 water efficiency standards.
Senate Bill X7-7	The Water Conservation Act of 2009 sets an overall goal of reducing per capita urban water use by 20% by December 31, 2020. Each urban retail water supplier shall develop water use targets to meet this goal.	Consistent. In addition to the commitment to CALGreen Tier 1 water efficiency standards, the project would be consistent with EO B-18-12, which requires State agencies to reduce agency-wide water use 20 percent by 2020, as measured against a 2010 baseline.
Mobile Sources		
Advanced Clean Cars Program (ACC) and Mobile Source Strategy (MSS)	In 2012, CARB adopted the ACC program to reduce criteria pollutants and GHG emissions for model year vehicles 2015 through 2025. ACC includes the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulation, which requires manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. The Mobile Source Strategy (2106) calls for 1.5 million ZEVs (including plug-in hybrid electric, battery-electric, and hydrogen fuel cell vehicles) on the road by 2025, and 4.2 million ZEVs by 2030	Consistent. The standards would apply to all vehicles used by the DGS and their employees, and to construction workers traveling to the site. The parking facility associated with the project would be constructed to accommodate future electric vehicle charging station, as required by Executive Order B-18-12 and by CALGreen.

**TABLE 3.5-4
 CONSISTENCY WITH APPLICABLE GREENHOUSE GAS REDUCTION ACTIONS IN 2017 SCOPING PLAN UPDATE**

Sector / Source	Category / Description	Consistency Analysis
Mobile Sources (cont.)		
SB 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the state's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. SACOG's MTC/SCS calls for GHG reductions from passenger vehicles and light-duty trucks of 7.6 percent by 2020 and 15.6 percent by 2035.	Consistent. The project would be consistent with SACOG MTP/SCS goals and objectives under SB 375 to implement "smart growth." The project would provide employment opportunities in close proximity to off-site residential and other job centers in the city of Sacramento where people can live and work and have access to convenient modes of transportation that provides options for reducing reliance on automobiles and minimizing associated air pollutant emissions. The project would also reduce VMT as a result of its urban infill location, with nearby access to public transportation within a quarter-mile of the project site, and its proximity to other destinations including off-site residential, retail, and entertainment.
Solid Waste		
California Integrated Waste Management Act (IWMA) of 1989 and Assembly Bill (AB) 341	The IWMA mandated that state agencies develop and implement an integrated waste management plan which outlines the steps to be taken to divert at least 50 percent of their solid waste from disposal facilities. AB 341 directs CalRecycle to develop and adopt regulations for mandatory commercial recycling and sets a statewide goal for 75 percent disposal reduction by the year 2020.	Consistent. The project would be served by a solid waste collection and recycling service that may include mixed waste processing, and that yields waste diversion results comparable to source separation and consistent with Citywide recycling targets. The City of Sacramento has a goal to achieve 75 percent waste diversion by 2020 and zero waste to landfills by 2040.

SOURCE: ESA 2019.

Consistency with Executive Order B-18-12

California Executive Order B-18-12 directs that new State buildings larger than 10,000 square feet use clean, onsite power generation and obtain LEED Silver certification. It also requires that State agencies take measures toward achieving ZNE for 50 percent of the square footage of existing State-owned building area by 2025. New State buildings must be designed and constructed to exceed the applicable version of CCR Title 24, Part 6, by 15 percent or more. EO B-18-12 requires State agencies to reduce water use by 10 percent by 2015 and 20 percent by 2020, as measured against a 2010 baseline. The Executive Order also calls for State agencies to identify and pursue opportunities to provide electric vehicle charging stations at employee parking facilities in new buildings.

The project is consistent with EO B-18-12 as it would be designed to exceed the 2019 Building Energy Efficiency Standards, to meet or exceed LEED Silver certification, and to participate in Sacramento Municipal Utility District's (SMUD) renewable energy resource program. The project's energy goal is to achieve ZNE, the highest standard for energy performance. In addition, electric vehicle charging stations will be provided in the parking structure per CALGreen requirements for non-residential construction.

The project would be water efficient to comply with EO B-18-12's requirement that DGS reduce overall water use by 20 percent by 2020, as measured against a 2010 baseline. The project will be designed to meet the LEED credit requirements to reduce indoor potable water consumption by 40 percent from the LEED baseline, and outdoor potable water consumption by 50 percent from the LEED baseline. All plumbing fixtures in the building would be low-flow/high-efficiency fixtures. Landscape irrigation would use alternative sources of water if possible (e.g., grey water, collected rain water), and all landscaping would be selected based on suitability for the local climate, site conditions, and reduced water needs and maintenance requirements.

Consistency with the California Integrated Waste Management Act

As required for all State agencies under the California Integrated Waste Management Act, the project would achieve a waste diversion rate of at least 50 percent, reducing the level of GHGs associated with solid waste.

Consistency with the City of Sacramento General Plan and Climate Action Plan

As discussed above, the City has developed a Community-Wide CAP Consistency Review checklist. This checklist is designed to streamline the GHG emissions review process for new development projects subject to CEQA.

Table 3.5-5 below provides the CAP checklist. The first checklist question focuses on a project's consistency with the general plan and sustainable land use aspects of the CAP. Questions 2, 3, and 4 evaluate a project's consistency with the CAP's mobile source and commuting requirements, while questions 5 and 6 focus on evaluating whether a project is consistent with the energy efficiency and renewable energy portions of the CAP. Projects that achieve each item on the City's CAP Consistency Review Checklist would be consistent with the City's CAP, and therefore would not result in significant GHG emissions or climate change impacts.

**TABLE 3.5-5
CITY OF SACRAMENTO CAP CONSISTENCY REVIEW CHECKLIST**

City of Sacramento Consistency Review Checklist Questions	
1.	Is the proposed project substantially consistent with the land use and urban form designation, allowable floor area ratio (FAR) and/or density standards in the City's 2035 General Plan?
2.	Would the project incorporate traffic calming measures ?
3.	Would the project incorporate pedestrian facilities and connections to public transportation consistent with the City's Pedestrian Master Plan?
4.	Would the project incorporate bicycle facilities consistent with the City's Bikeway Master Plan and meet or exceed minimum standards for bicycle facilities in the Zone Code and CALGreen?
5.	Would the project include onsite renewable energy systems (e.g., solar photovoltaic, solar water heating, etc.) that would generate at least 15% of the project's total energy demand?
6.	Would the project comply with minimum CALGreen Tier 1 water efficiency standards?

SOURCE: City of Sacramento, 2015.

As shown in Table 3.5-5, the City's CAP consistency review checklist includes six criteria against which a project must be evaluated. Projects that are determined consistent with each of the six criteria are considered consistent with Sacramento's CAP and would not have a significant GHG impact. The following discussion evaluates the project's consistency with each of the six checklist questions.

1. *Is the RBOC substantially consistent with the land use and urban form designation, allowable floor area ratio (FAR) and/or density standards in the City's 2035 General Plan?*

The RBOC site is designated as Urban Center High within the City of Sacramento General Plan, which allows a floor-to-area ratio (FAR) ranging from 0.5 to 8.0. The project would include 1.375 million square feet of office space on 17.3 acres, resulting in an FAR of approximately 2.0. Therefore, the RBOC would be consistent with the City's 2035 General Plan FAR requirements for land designated as Urban Center High.

2. *Would the RBOC incorporate traffic calming?*

The RBOC would not result in the alterations of existing roadways or construction of additional roadways. The RBOC is within in an area of the city designated as Urban Center High. Consequently, this criterion would not apply to the project and traffic-calming measures are not proposed. However, development of employee-generating uses along Richards Boulevard and North 7th Street would introduce more people to the area, as well as new driveways and intersections along the project site frontage, resulting in slower vehicular speeds near the project site.

3. *Would the RBOC incorporate pedestrian facilities and connections to public transportation consistent with the City's Pedestrian Master Plan?*

The RBOC would include pedestrian access via sidewalks on all surface streets. The main pedestrian entries to the project site would be along North 7th Street and Richards Boulevard. People working at the RBOC would have access to the Sacramento Regional Transit light rail and bus stations. Since the RBOC would maintain pedestrian access to sidewalks and public transportation, the RBOC's pedestrian facilities and connections would be consistent with the City's Pedestrian Master Plan.

4. *Would the RBOC incorporate bicycle facilities consistent with the City's Bikeway Master Plan and meet or exceed minimum standards for bicycle facilities in the Zone Code and CALGreen?*

On August 14, 2018, the City of Sacramento Council amended the City of Sacramento Bicycle Master Plan. The Bicycle Master Plan guides the development of bikeways and supports facilities like bike parking throughout the City of Sacramento.²⁵ An existing Class II bike lane is present on Richards Boulevard. North 7th Street currently has a Class III bike lane, but is planned to have a Class II bike lane as described in the Bikeway Master Plan. The project would not result in the removal or obstruction of existing or planned bike routes along the project site frontage.

The RBOC would incorporate sufficient off-street bicycle parking to accommodate up to 500 bicycles, well over the minimum required number required by the City of Sacramento code.

²⁵ City of Sacramento, 2018. *Bicycle Master Plan*. Available: <https://www.cityofsacramento.org/Public-Works/Transportation/Programs-and-Services/Bicycling-Program>. Amended August 14, 2018.

As discussed in the City of Sacramento Zoning Code and CALGreen standards, a non-residential project of this size requires, by the strictest standards, at least 65 short-term and 195 long-term bicycle parking spaces. The project would be consistent with the Bikeway Master Plan and meets the CAP Consistency Checklist requirement for bicycle facilities.

5. *Would the RBOC project include onsite renewable energy systems (e.g., solar photovoltaic, solar water heating, etc.) that would generate at least 15 percent of the project's total energy demand?*

The RBOC would not generate 15 percent of its energy demand onsite; however, as explained in the Project Description, 100 percent of the RBOC's electricity will be provided through renewable sources through the participation in SMUD's Greenergy program. California Executive Order B-18-12 requires that State agencies take measures toward achieving ZNE for 50 percent of the square footage of existing State-owned building area by 2025. New State buildings must be designed and constructed to exceed the applicable version of CCR Title 24, Part 6, by 15 percent or more. The project's energy goal is to achieve ZNE. The RBOC would be designed to exceed the applicable Building Energy Efficiency Standards (presumed to be the 2019 Title 24 standard) and to meet or exceed U.S. Green Building Council's LEED Silver certification, which would make the entire building function more efficiently.

Since the RBOC would be designed to exceed the applicable Building Energy Efficiency Standards, and will include 100 percent renewable energy use through participation in the SMUD's Greenergy program, and would be LEED Silver certified, the project would meet 2016 Title 24 energy standards, meeting the Sacramento CAP's energy efficiency standards.

6. *Would the RBOC project comply with minimum CALGreen Tier 1 water efficiency standards?*

CALGreen Tier 1 requires the use of plumbing fixtures and fixture fittings that will reduce the overall use of potable water within the building by 12 percent. The project would be water efficient to comply with EO B-18-12's requirement that DGS reduce overall water use by 20 percent by 2020, as measured against a 2010 baseline. The RBOC would include water conserving plumbing fixtures and fittings for reducing indoor water use, and the use of drought-resistant landscaping and water-conserving irrigation methods to reduce outdoor water waste. Consequently, the RBOC would be consistent with this CAP energy efficiency and renewable energy requirement.

Summary

The GHG emissions from RBOC would have a **less-than-significant** impact because the RBOC project would be consistent with each of the applicable criteria for determining consistency with the CAP.

Mitigation Measure

None required.

3.6 Hydrology and Water Quality

This section assesses the potential effects on hydrologic resources at the project site, including water quality, groundwater resources, flooding, and drainage as a result of constructing the Richards Boulevard Office Complex (RBOC) project (or project). The section includes relevant baseline information including a description of regional and local drainage, flooding conditions, and water quality; anticipated future conditions after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete; and the federal, State, and regional regulations that protect hydrologic resources and the regulatory agencies that enforce these standards. A description of the potential impacts resulting from the project is also provided, as well as the identification of feasible mitigation (where applicable) to avoid or lessen the impacts.

Department of General Services (DGS) received comments on the NOP related to hydrology and water quality from the Central Valley Regional Water Quality Control Board (CVRWQCB) regarding the regulations and permits required for the proposed projects.

Issues related to stormwater drainage facilities and their capacity to handle flows generated by the project are addressed in Section 3.12, Utilities and Infrastructure.

The primary sources of data referenced for this section include:

- City of Sacramento 2035 General Plan¹ and
- State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration.²

3.6.1 Environmental Setting

Existing Conditions

Surface Water Resources

The City of Sacramento (City) is located at the confluence of the Sacramento and American rivers within the Sacramento River Basin. The Sacramento River Basin encompasses approximately 27,200 square miles and is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Sacramento – San Joaquin Delta (Delta) to the southwest. The Sacramento River Basin is the largest river basin in California, capturing, on average, approximately 22 million acre-feet of annual precipitation. The Sacramento River is approximately 327 miles long, and its major tributaries are the Pit and McCloud Rivers, which join the Sacramento River from the north, and the Feather and American

¹ City of Sacramento, 2015. *Sacramento 2035 General Plan*. Adopted March 3, 2015.

² Department of General Services, 2018. *State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration*. March 2018. Available: <http://www.dgs.ca.gov/resd/Programs/EnvironmentalServicesSection/CaliforniaEnvironmentalQualityAct.aspx>. Accessed December 17, 2018. pp. 3-86.

Rivers, which are tributaries from the east. Numerous additional tributary streams and creeks flow from the east and west.³

While the melting snow pack in the Sierra Nevada has historically maintained stream flows during most of the summer, the Sacramento River system experiences variations in water levels during different parts of the year and during different parts of the month, depending on climate conditions (e.g., drought years). Two factors affecting the water level are the amount of runoff entering the system from the rivers' watersheds and the amount of water being released from dams upriver. The system is also subject to tidal action from the Delta. Finally, the river channel is confined by a levee system on each bank of the river. During periods of high flows, primarily in the winter, a system of bypass channels allows water to leave the river channel and bypass the urbanized areas of the valley, thus reducing potential flood hazard. Chief of these in the project vicinity is the Yolo Bypass, which is located north and west of the confluence with the American River.

The Sacramento River, beginning at the "I" Street Bridge and including all portions downstream, is considered part of the Delta. The American River drains the central portion of the Sierra Nevada from the crest near Lake Tahoe to the reservoir at Folsom Lake, and the secondary reservoir below it at Nimbus Dam. The American River basin drains an area of roughly 1,875 square miles. An average of 2.2 million acre-feet drains from the basin annually. The Lower American River comprises the 24-mile stretch of river below Nimbus Dam to the confluence. Flows in the Lower American River are controlled by releases from Folsom Dam and Nimbus Dam.⁴

Flooding and Drainage

High water levels along the Sacramento and American rivers are a common occurrence in the winter and early spring months due to increased flows from stormwater runoff and/or snowmelt. To protect the area from regional flooding, an extensive system of dams, levees, overflow weirs, drainage pumping stations, and flood control bypass channels are strategically located on and adjacent to the Sacramento and American rivers, and their respective tributaries. In the project vicinity, the amount of water flowing through the levee system can be controlled by Folsom Dam on the American River and the reserve overflow area of the Yolo Bypass on the Sacramento River.⁵

As shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the city of Sacramento, the project site is classified as Zone X, or "areas protected by levees from 1% annual chance flood."⁶ Historical flooding in the project vicinity generally occurred along the Sacramento and American rivers. However, improvements to the levees along these rivers have reduced the risk of flooding in the city.

³ U.S. Department of Interior, U.S. Geological Survey, 2000. Water Quality in the Sacramento River Basin, California 1194-98, Circular 1215, p. 3.

⁴ City of Sacramento, 2016. *Sacramento 2035 General Plan Update Master Environmental Impact Report* (SCH No. 2012122006). Revised April 2016. pp. 4.7-1 – 4.7-18.

⁵ Sacramento County, 2016. Sacramento Countywide Local Hazard Mitigation Plan Update. October 2016.

⁶ Federal Emergency Management Agency, 2015. Flood Insurance Rate Map, Sacramento County, California. May number 06067C0176J. Revised June 16, 2015.

The project site is approximately 0.75 mile southeast of the confluence of the Sacramento and American Rivers. Currently, there is a 21-inch concrete stormwater pipe that drains the site. The pipe runs within the Richards Boulevard right-of-way to North 5th Street and up North 5th Street to the levee. The pipe extends through the levee and exits on the other side where it is protected by a metal grate and is surrounded by rip-rap. The collected stormwater runs through the existing stormwater drainage pipe and is discharged into the American River. Please refer to Section 3.11, Utilities and Infrastructure, for a detailed description of the stormwater conveyance system.

Surface Water Quality

The Sacramento River Basin has been classified by the CVRWQCB as having numerous beneficial uses, including providing a municipal, agricultural, and recreational water supply. Other beneficial uses include freshwater habitat, spawning grounds, wildlife habitat, and navigation on the Sacramento River. For planning purposes, this includes all watersheds tributary to the Sacramento River that are north of Cosumnes River watershed. It also includes the closed basin of Goose Lake and drainage sub-basins of Cache and Putah Creeks. The principal streams are the Sacramento River and its larger tributaries: the Pit, Feather, Yuba, Bear, and American Rivers to the east; and Cottonwood, Stony, Cache, and Putah Creeks to the west. Major reservoirs and lakes include Shasta, Oroville, Folsom, Clear Lake, and Lake Berryessa.⁷

The Clean Water Act (CWA) Section 303(d) list of impaired and threatened waters for California establishes the total maximum daily load (TMDL) process to assist in guiding the application of State water quality standards, requiring the states to identify streams in which water quality is impaired (affected by the presence of pollutants or contaminants) and to establish the TMDL or the maximum quantity of a particular contaminant that a water body can assimilate without experiencing adverse effects. The 303(d) list breaks up the Sacramento River into four sections, Keswick Dam to Cottonwood Creek, Cottonwood Creek to Red Bluff, Red Bluff to Knights Landing, and Knights Landing to the Delta. All sections of the Sacramento River are listed on the 303(d) list for unknown toxicity, and Red Bluff to the Delta is also listed for mercury.⁸ Mercury is primarily a remnant of gold mining.⁹

Ambient water quality in the Sacramento and American rivers is influenced by numerous natural and artificial sources, including soil erosion, discharges from industrial and residential wastewater plants, stormwater runoff, agriculture, recreation activities, mining, and timber harvesting.

Urban Runoff Water Quality

Constituents found in urban runoff vary as a result of differences in rainfall intensity and occurrence, geographic features, land use in the city, vehicle traffic, and percent of impervious surface. In the Sacramento area, there is a natural weather pattern of a long dry period from May

⁷ Central Valley Regional Water Quality Control Board, 2016. Water Quality Control Plan for the Sacramento and San Joaquin River Basins. Revised Pages, pp. I-1.00. June 2015.

⁸ Central Valley Regional Water Quality Control Board, 2018. TMDL – 2014-2016 Integrated Report – The Current 303 (d) List. August 2018.

⁹ U.S. Environmental Protection Agency, 2017. Impaired Waters and TMDLs: Impaired Waters and Mercury. May 2017.

to October. During this seasonal dry period, pollutants contributed by vehicle exhaust, vehicle and tire wear, crankcase drippings, spills, and atmospheric fallout accumulates within the urban watershed. Precipitation during the early portion of the wet season (November to April) washes these pollutants into the stormwater runoff, which can result in elevated pollutant concentrations in the initial wet weather runoff. This initial runoff with peak pollutant levels is referred to as the “first flush” of a storm event or events.

Stormwater discharge monitoring data have been collected from the Sacramento urban area monitoring stations since 1990. From this monitoring, the following six pollutants have been identified as “target pollutants:” mercury, diazinon, chlorpyrifos, lead, copper, and fecal coliform. These pollutants were determined based on their toxicity, potential of exceeding water quality criteria, ability to accumulate in humans and animals, or if listed as a pollutant impairing water bodies by the State Water Resources Control Board (SWRCB).¹⁰

Groundwater Resources

The project site is located within the South American Groundwater Subbasin of the Sacramento Valley Groundwater Basin, as delineated in the California Department of Water Resources (DWR) Bulletin 118 (2016 Update). The South American Subbasin encompasses 388 square miles, and is bounded by the Sierra Nevada to the east, the Sacramento River to the west, the American River to the north, and the Cosumnes and Mokelumne rivers to the south. The calculated groundwater storage capacity of the South American Subbasin is 4,816,000 acre-feet. Depth-to-groundwater within the South American Groundwater Basin ranges from 20 feet below ground surface (bgs) to 310 bgs.¹¹ The City operates two active municipal supply wells within the South American subbasin.¹²

Groundwater Quality

Except for areas of localized groundwater contamination, groundwater underlying the City’s service area generally meets primary and secondary drinking water standards for municipal water use, and is described as being calcium magnesium-bicarbonate type water, with minor fractions of sodium-magnesium bicarbonate. Due to high concentrations of iron and manganese in the lower aquifer system, the upper aquifer system is usually the preferred source of groundwater. The lower aquifer system also contains higher concentrations of total dissolved solids (TDS) than the upper aquifer.

The 2017 Phase I Environmental Site Assessment¹³ for the approved Demolition Project identified a groundwater contamination plume underneath the project site, originating from the

¹⁰ Sacramento Stormwater Quality Partnership, 2013. Report of Waste Discharge and Long Term Effectiveness Assessment. March 15, 2013. Available: http://www.beriverfriendly.net/docs/files/File/OtherPermitDocuments/2013_ROWDLTEA.pdf.

¹¹ California Department of Water Resources, 2004. *California’s Groundwater Bulletin 118, Sacramento Valley Groundwater Basin, South American Subbasin*. February 27, 2004. p. 1.

¹² West Yost Associates, 2016. *City of Sacramento 2015 Urban Water Management Plan*. June 2016. p. 6-4.

¹³ URS, 2017. Phase I Environmental Site Assessment: Office of State Publishing, 244 North 7th Street, Sacramento, Sacramento County, California. Prepared for the California Department of General Services.

Downtown Sacramento Railyard, which is located south of the project site. According to GeoTracker, the groundwater is polluted with solvents (chlorinated VOCs), metals, and petroleum hydrocarbons that currently measure approximately 0.5-mile long. The Phase I Environmental Site Assessment also identified several other Recognized Environmental Conditions (REC) that could have contributed to groundwater contamination, including several former underground storage tanks (USTs) on site, a suspected former solid waste disposal site at the Facilities Management Division (FMD) property, impacted floor drains at the Office of State Publishing facility and adjacent properties with current or historical USTs.¹⁴

Baseline Conditions

The Demolition Project will result in a flat project site with 17.3 acres of pervious surfaces and uncontaminated groundwater. The only remaining structure would be a small pump house on the northwest corner of the project site. During baseline conditions, the project site will continue to be drained via the pump house to the existing stormwater pipe and into the American River, subject to the requirements of the MS4 Discharge General Permit (Order No. R5-2016-0040, NPDES No. CAS0085324), as described below in Section 3.6.2, Regulatory Setting (Stormwater Discharges). Additionally, site runoff will be managed and discharged according to post-construction stormwater management requirements issued by the SWRCB General Construction Permit associated with Construction and Land Disturbance Activities, Order No. 2009-009-DWQ (as amended by CVRWQCB Order No. 2010-0014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002, effective July 1, 2010 and administratively extended until a new order is adopted).^{15,16}

3.6.2 Regulatory Setting

Federal

Surface Water Quality

Water quality objectives for all waters of the United States are established under applicable provisions of section 303 of the federal CWA. The CWA prohibits the discharge of pollutants to navigable waters from a point source unless authorized by a NPDES permit. Because implementation of these regulations has been delegated to the State, additional information regarding this permit is discussed under the “State” subheading, below.

¹⁴ Department of General Services, 2018. *State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration*. March 2018. Available: <http://www.dgs.ca.gov/resd/Programs/EnvironmentalServicesSection/CaliforniaEnvironmentalQualityAct.aspx>. Accessed December 17, 2018. pp. 3-84.

¹⁵ State Water Resources Control Board, 2018. Construction Stormwater Program. Available: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html. Accessed December 26, 2018.

¹⁶ Department of General Services, 2018. *State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration*. March 2018. Available: <http://www.dgs.ca.gov/resd/Programs/EnvironmentalServicesSection/CaliforniaEnvironmentalQualityAct.aspx>. Accessed December 17, 2018. pp. 2-13.

National Pollutant Discharge Elimination System Permits

The NPDES permit system was established in the CWA to regulate municipal and industrial point discharges to surface waters of the U.S. Each NPDES permit for point discharges contains limits on allowable concentrations of pollutants contained in discharges. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that the U.S Environmental Protection Agency (EPA) must consider in setting effluent limits for priority pollutants.

The CWA was amended in 1987 to require NPDES permits for non-point source (i.e., stormwater) pollutants in discharges. Stormwater sources are diffuse and originate over a wide area rather than from a definable point. The goal of NPDES stormwater regulations is to improve the quality of stormwater discharged to receiving waters to the “maximum extent practicable” through the use of structural and non-structural Best Management Practices (BMPs). BMPs can include the development and implementation of various practices including educational measures (workshops informing public of what impacts results when household chemicals are dumped into storm drains), regulatory measures (local authority of drainage facility design), public policy measures, and structural measures (filter strips, grass swales and detention ponds). The NPDES permits that apply to activities in the city are described under local regulations below.

Federal Emergency Management Agency

FEMA is the federal agency tasked with preparing for, protecting against, responding to, recovering from, and mitigating hazards and natural disasters, including flooding.¹⁷ FEMA administers the National Flood Insurance Program (NFIP) and delineates areas subject to flood hazards on FIRMs for each community participating in the NFIP. The FIRMs show the areas subject to inundation by a flood that has a one percent chance or greater of being equaled or exceeded in any given year. This type of flood is referred to as the 100-year or base flood. Areas on FIRMs are divided into geographic areas, or zones, that FEMA has defined according to varying levels of flood risk.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act, passed in 1969, established the SWRCB and divided the state into nine regions, each overseen by a regional Water Board. The SWRCB is the primary State agency responsible for protecting the quality of the state’s surface and groundwater supplies, but much of its daily implementation authority is delegated to the nine regional Water Boards, which are responsible for implementing CWA Sections 402, and 303(d). In general, the SWRCB manages both water rights and statewide regulation of water quality, while the regional Water Boards focus exclusively on water quality in their regions. The Sacramento River basin is under the jurisdiction of the CVRWQCB. Construction activities are subject to the requirements

¹⁷ Department of General Services, 2018. *State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration*. March 2018. Available: <http://www.dgs.ca.gov/resd/Programs/EnvironmentalServicesSection/CaliforniaEnvironmentalQualityAct.aspx>. Accessed December 17, 2018. pp. 3-81.

the NPDES General Permit for Discharges of Storm Water Runoff associated with Construction Activity (General Construction Permit CVRWQCB Order No. 2009-009-DWQ, as amended by Order No. 2010-0014-DWQ and 2012-0006-DWQ, NPDES No. CAS000002, effective July 1, 2010 and administratively extended until a new order is adopted).¹⁸), provided that the total amount of ground disturbance during construction is one acre or more. The CVRWQCB enforces the General Construction Permit within the city. Coverage under a General Construction Permit requires the preparation and implementation of a stormwater pollution prevention plan (SWPPP) and notice of intent (NOI). The SWPPP includes pollution prevention measures (erosion and sediment control measures and measures to control non-stormwater discharges and hazardous spills), demonstration of compliance with all applicable local and regional erosion and sediment control standards, identification of responsible parties, a detailed construction timeline, and a BMP monitoring and maintenance schedule. The NOI includes site specific information and the certification of compliance with the terms of the General Construction Permit.

Dewatering Activities

Where groundwater levels tend to be shallow, dewatering during construction is sometimes necessary to keep trenches or excavations free of standing water when improvements or foundations/footings are installed. Clean or relatively pollutant-free water that poses little or no risk to water quality may be discharged directly to surface water under certain conditions. The CVRWQCB has adopted a general NPDES permit for short-term discharges of small volumes of wastewater from certain construction-related activities (General Dewatering Permit). Permit conditions for the discharge of these types of wastewaters to surface waters are specified in “General Order for Dewatering and Other Low-Threat Discharges to Surface Waters” (Order No. R5-2013-0074, NPDES No. CAG995001). Discharges may be covered by the General Dewatering Permit provided they are (1) either four months or less in duration or (2) the average dry weather discharge does not exceed 0.25 million gallons per day and meet the effluent limitations provided in order for pH, turbidity, total suspended solids, and biological oxygen demand. Construction dewatering, well development water, pump/well testing, and miscellaneous dewatering/low-threat discharges are among the types of discharges that may be covered by the General Dewatering Permit.¹⁹

Stormwater Discharges

The CWA mandates permits for municipal stormwater discharges. Accordingly, the City has coverage under the MS4 Discharge General Permit. This permit requires that controls be implemented to reduce the discharge of pollutants in stormwater discharges to the maximum extent practicable, including management practices, control techniques and system, design and

¹⁸ State Water Resources Control Board, 2018. Construction Stormwater Program. Available: https://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.html. Accessed December 26, 2018.

¹⁹ Central Valley Regional Water Quality Control Board, 2013. Waste Discharge Requirements for Dewatering and Other Low Threat Discharges to Surface Waters. Available: https://www.waterboards.ca.gov/rwqcb5/board_decisions/adopted_orders/general_orders/r5-2013-0074.pdf. Accessed December 26, 2018. pp. 3.

engineering methods, and other measures as appropriate.²⁰ As part of permit compliance, the City has prepared a Stormwater Quality Improvement Plan (SQIP), which outlines the requirements for municipal operations, industrial and commercial businesses, illegal discharges, construction sites, planning and land development, public education and outreach, and watershed stewardship. These requirements include multiple measures to control pollutants in stormwater discharge and are reflected in City ordinances and design criteria. New development and redevelopment projects under the proposed plan would be required to follow the guidance contained in the latest edition of the Stormwater Quality Design Manual for the Sacramento Region.

Water quality objectives for the Sacramento River are specified in the Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin (Basin Plan) prepared by the CVRWQCB in compliance with the federal CWA and the California Water Code (section 13240). The Basin Plan contains water quality numerical and narrative standards and objectives for rivers and their tributaries within its jurisdiction.²¹ In cases where the Basin Plan does not contain a standard for a particular pollutant, other criteria, such as EPA water quality criteria developed under Section 304(a) of the CWA, apply.

Surface Water Quality

A Water Quality Control Plan, or Basin Plan, prepared by CVRWQCB, establishes water quality numerical and narrative standards and objectives for rivers and their tributaries within the area subject to the Basin Plan. In cases where the Basin Plan does not contain a standard for a particular pollutant, other criteria apply, such as EPA water quality criteria developed under section 304(a) of the CWA.

Water quality objectives for the Sacramento River and its tributaries are specified in the Basin Plan prepared by the CVRWQCB in compliance with the federal CWA and the California Water Code (Section 13240). The Basin Plan establishes water quality objectives and implementation programs to meet stated objectives and to protect the beneficial uses of water in the Sacramento-San Joaquin River Basin. Because the project site is located within the Sacramento River Basin, all discharges to surface water or groundwater fall under the CVRWQCB's jurisdiction and are subject to the Basin Plan requirements. The requirements outlined in the NPDES permits that regulate development within the city are based on the Basin Plan requirements.²²

Construction Site Runoff Management

In accordance with NPDES regulations, to minimize the potential effects of construction runoff on receiving water quality, the State requires that any construction activity affecting one acre or

²⁰ Central Valley Regional Water Quality Control Board, 2016. Notice of Availability; General Permit for Discharges from Municipal Separate Storm Sewer Systems, Order R5-2016-0040. Available: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0040/r5-2016-0040-004_010.pdf. Accessed December 26, 2018.

²¹ Central Valley Water Quality Control Board, 2018. The Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and San Joaquin River Basin. Revised May 2018.

²² Central Valley Water Quality Control Board, 2018. The Water Quality Control Plan (Basin Plan) for the Sacramento River Basin and San Joaquin River Basin. Revised May 2018.

more obtain coverage under a General Construction Permit. As stated above, General Construction Permit applicants are required to prepare and implement a SWPPP which includes implementing BMPs. Examples of typical construction BMPs included in SWPPPs include, but are not limited to: using temporary mulching, seeding, or other suitable stabilization measures to protect uncovered soils; storing materials and equipment so as to ensure that spills or leaks cannot enter the storm drain system or surface water; developing and implementing a spill prevention and cleanup plan; and installing sediment control devices such as gravel bags, inlet filters, fiber rolls, or silt fences to reduce or eliminate sediment and other pollutants from discharging to the City drainage system or receiving waters.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA) builds upon the historical and non-regulatory groundwater management framework of legislative bills AB 3030 (1992), SB 1938 (2002), and AB 359 (2011). Under the SGMA, DWR is responsible for (1) developing regulations related to local agency requests to modify groundwater basin boundaries; (2) adopting regulations for evaluating and implementing Groundwater Sustainability Plans (GSPs) and coordination agreements; (3) identifying basins subject to critical conditions of overdraft; (4) identifying water available for groundwater replenishment; and (5) publishing best management practices for the sustainable management of groundwater.

The Act gives local agencies the authority to develop a GSP in groundwater basins defined in DWR Bulletin 118, and to raise revenue to pay for facilities to manage the basin (extraction, recharge, conveyance, quality). Those basins that are designated high and medium priority in Bulletin 118 are required to develop a GSP. Those basins that are low and very low priority are not required to develop a GSP but are authorized and encouraged to do so. The intent of the Act is to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions and to provide a methodology for developing a GSP. GSPs developed in compliance with SGMA will consist of similar technical components.

2018 SGMA Basin Prioritization findings indicate that 109 of California's 517 groundwater basins and subbasins are high and medium priority.²³ SGMA required the formation of GSAs which must develop GSPs or alternatives to GSPs in the groundwater basins (or subbasins) that were designated by DWR as medium or high priority by June 2017.²⁴

SGMA requires governments and water agencies of high and medium priority basins to halt overdraft and bring groundwater basins into balanced levels of pumping and recharge. Under

²³ California Department of Water Resources, 2018. 2018 SGMA Basin Prioritization Process and Results. Available: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Basin-Prioritization/Files/2018-SGMA-Basin-Prioritization-Process-and-Results-Documents.pdf?la=en&hash=5514FC9614BEE3BE0179626F7CF57C8BB0B6AF1A>. May. Accessed January 15, 2019. pp. 5.

²⁴ California Department of Water Resources, 2016. Groundwater Sustainability Agency Frequently Asked Questions. Available: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Sustainable-Groundwater-Management/Groundwater-Sustainability-Agencies/Files/GSA-Frequently-Asked-Questions.pdf>. January. Accessed January 15, 2019. pp. 4.

SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans. For critically over-drafted basins, that will be 2040 (GSPs implemented by 2020). For the remaining high and medium priority basins, 2042 is the deadline (GSPs implemented by 2022).²⁵

The GSP must have measurable objectives to show how the plan will meet the Sustainability Goal in the basin within 20 years. (Water Code section 10727.2 (b) (1).) The GSP must also include interim milestones in increments of five years that demonstrate how the GSP is moving towards the sustainability goal. (Water Code section 10727.2 (b) (1).) Importantly, SGMA’s sustainability goal definition requires basins to be managed to within their sustainable yield. (Water Code section 10721 (t).) Sustainable yield is defined to be the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus that can be withdrawn annually from a groundwater supply without causing an undesirable result. (Water Code section 10721 (v).) Undesirable impacts include: (1) a chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply; (2) significant and unreasonable reduction of groundwater storage; and (3) significant and unreasonable land subsidence that substantially interferes with surface land uses. (Water Code section 10721 (w).) Thus, GSP’s must show that they will meet the sustainability goals in twenty years and show interim five year milestones to chart their progress.

If GSP’s are failing to accomplish the above there is state intervention to address the deficiencies in the GSP. DWR must periodically review the GSPs and determine whether the plan meets the requirements and is likely to achieve the sustainability goal for the basin. (Water Code section 10733.) DWR also must review the GSP to see if it is achieving the sustainability goals at least every five years and issue an assessment for each basin reporting on the progress in achieving the sustainability goal. (Water Code section 10733.7.) Furthermore, if DWR in consultation with the State Water Resources Board, determines that a GSP is inadequate or not likely to meet the sustainability goal then there may be state intervention. (Water Code section 10735.2(a)(3).) SGMA directed DWR to provide assistance to local agencies, including the preparation of a report “...that presents the department’s best estimate, based on available information, of water available for replenishment of groundwater in the state” (California Water Code section 10729(c)). The Water Available for Replenishment (WAFR) report provides DWR’s estimates of WAFR in the State, which are provided to indicate the scale of planned water development by urban retailers for each region during this decade. GSAs can and should consider the provided information on water available from other methods and estimates of potential water development by urban retailers using other methods (recycled water, desalination, and water conservation).²⁶

²⁵ California Department of Water Resources, 2018. SGMA Groundwater Management. Available: <https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management>. Accessed January 15, 2019.

²⁶ California Department of Water Resources, 2018. Water Available for Replenishment Appendix A: Water Available for Replenishment Information and Estimates. Available: <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Data-and-Tools/Files/Statewide-Reports/WAFR/Final/Appendix-A-for-Water-Available-for-Replenishment---Final-Report.pdf>. Accessed January 15, 2019.

SGMA also established a process for local public agencies to develop an “Alternative in lieu of a GSP” (Water Code Section 10733.6) for evaluation to DWR. The Alternative was required to be submitted to DWR for review no later than January 1, 2017, and every 5 years thereafter.

Local

The project is located on State-owned property and would be implemented by the California State DGS. State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot conflict with these policies and ordinances. As a good faith gesture, local plans, policies, and regulations that are applicable to the project are described herein for reference. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

City of Sacramento 2035 General Plan

The following goals and policies from the City of Sacramento 2035 General Plan are relevant to hydrology and water quality.

Goal ER 1.1: Water Quality Protection. Protect local watersheds, water bodies and groundwater resources, including creeks, reservoirs, the Sacramento and American Rivers, and their shorelines.

Policy ER 1.1.3: Stormwater Quality. The City shall control sources of pollutants and improve and maintain urban runoff water quality through storm water protection measures consistent with the City’s NPDES Permit.

Policy ER 1.1.4: New Development. The City shall require new development to protect the quality of water bodies and natural drainage systems through site design (e.g., cluster development), source controls, storm water treatment, runoff reduction measures, BMPs and Low Impact Development (LID), and hydromodification strategies consistent with the city’s NPDES Permit.

Policy ER 1.1.5: Limit Stormwater Peak Flows. The City shall require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100-year storm event.

Policy ER 1.1.6: Post-Development Runoff. The City shall impose requirements to control the volume, frequency, duration, and peak flow rates and velocities of runoff from development projects to prevent or reduce downstream erosion and protect stream habitat.

Policy ER 1.1.7: Construction Site Impacts. The City shall minimize disturbances of natural water bodies and natural drainage systems caused by development, implement measures to protect areas from erosion and sediment loss, and continue to require construction contractors to comply with the City’s erosion and sediment control ordinance and stormwater management and discharge control ordinance.

Goal ER 4.1: Adequate Stormwater Drainage. Provide adequate stormwater drainage facilities and services that are environmentally sensitive, accommodate growth, and protect residents and property.

Policy U 4.1.1: Adequate Drainage Facilities. The City shall ensure that all drainage facilities are adequately sized and constructed to accommodate stormwater runoff in urbanized areas.

Policy U 4.1.4: Watershed Drainage Plans. The city shall require developers to prepare watershed drainage plans for proposed developments that define needed drainage improvements per city standards, estimate construction costs for these improvements, and comply with the NPDES permit.

Policy U 4.1.6: New Development. The City shall require proponents of new development to submit drainage studies that adhere to City stormwater design requirements and incorporate measures, including “green infrastructure” and Low Impact Development (LID) techniques to prevent on- or off-site flooding.

Stormwater Quality/Urban Runoff Management

The City has coverage under the MS4 Discharge General Permit which is intended to implement the Basin Plan through the effective implementation of BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable. The permittees listed under the permit have the authority to develop, administer, implement, and enforce stormwater management programs within their own jurisdiction.

Urban storm water runoff is defined in the MS4 Discharge General Permit as including stormwater and dry weather flows from a drainage area that reaches a receiving water body or subsurface. The MS4 Discharge General permit regulates the discharge of all wet and dry weather urban storm water runoff within the city and requires the City to implement a stormwater management program to reduce pollutants in stormwater to the maximum extent practicable. In response, the City and the other Permittees created the SQIP to address the MS4 Discharge General Permit requirements and reduce the pollution carried by stormwater into local creeks and rivers. The program includes pollution reduction activities for construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations. The program also includes an extensive public education effort, target pollutant reduction strategy and monitoring program. The SQIP also outlines the priorities, key elements, strategies, and evaluation methods of the program.²⁷

The specific BMPs that are appropriate for a project to meet the requirement of reducing the discharge of pollutants to the maximum extent practicable are site specific. During the design process, the appropriate required measures and LID²⁸ strategies are selected and incorporated into project plans. The County of Sacramento and the cities of Sacramento, Folsom, Citrus Heights, Elk Grove, Rancho Cordova, Galt, and Roseville collaboratively published the Stormwater Quality Design Manual for Sacramento and South Placer Regions (May 2007) to meet MS4

²⁷ County of Sacramento and the Cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova, 2009. *Stormwater Quality Improvement Plan*. November 2009. pp. 1-1 to 1-16.

²⁸ Low Impact Development uses site design and stormwater management to maintain pre-development runoff rates and volumes through the use of decentralized design techniques that infiltrate, filter, store, evaporate, and detain runoff.

Discharge General Permit requirements and to provide clear guidance for project applicants on how to incorporate BMPs that achieve permit compliance.²⁹ The manual provides locally-adapted information for design and selection of three categories of stormwater quality control measures: source control, runoff reduction, and treatment control. The following are required items for each of the local permitting agencies as specified in the new development element provisions of the MS4 Discharge General Permit:

- the types of projects subject to the development standards and thresholds for determining what types of control measures apply to the project;
- maintenance agreements or covenants are required for selected control measures; and
- sizing methodology for water quality flow-based measures (e.g., vegetated swale) and water quality volume-based measures (e.g., water quality detention basin).

In addition, the SWRCB has adopted an Amendment to the State’s Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries that added Part 1 Trash Provisions (the “Trash Amendment”). The City’s stormwater collection system is subject to the requirements set forth in the Trash Amendment. A key central element of the Trash Amendments is a land-use based compliance approach that targets high trash generating areas, such as high density residential (10 units/acre or greater), industrial, commercial, mixed urban, and public transportation land uses (referred to in the Trash Amendment as “Priority Land Uses”). Projects that include Priority Land Uses will be required to comply with the Trash Amendments by implementing appropriate measures and/or controls as determined by the City’s Director of Utilities or designee, which must be included in projects’ approved improvement plans.³⁰

Stormwater runoff from the project site would flow into the Sacramento Area Sewer District’s Separated Sewer System and discharged into the American River. Stormwater runoff from the project site would be subject to a SWPPP as described in the General Construction Permit implemented by the CVRWQCB.

Dewatering

All new groundwater discharges to the separated sewer system are regulated and monitored by the City’s Utilities Department pursuant to Department of Utilities Engineering Services Policy No. 0001, adopted as Resolution No. 92-439 by the Sacramento City Council. Groundwater discharges to the City’s sewer system are defined as construction dewatering discharges, foundation or basement dewatering discharges, treated or untreated contaminated groundwater cleanup, discharges, and uncontaminated groundwater discharges. Dewatering activities associated with the construction of drilled pier foundations are considered “construction dewatering discharges” and are required to sufficiently lower the water table where drilled pier

²⁹ Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, Roseville, Sacramento and Sacramento County, 2007. *Stormwater Quality Design Manual for the Sacramento and South Placer Regions*. May 2007. pp. 1-1 to 1-8.

³⁰ California Water Resources Control Board, 2018. Statewide Water Quality Control Plans for Trash. Available: http://www.waterboards.ca.gov/water_issues/programs/trash_control/. Accessed December 31, 2018.

foundations would be installed to allow for the setline of poured concrete or other such pile materials that may be disrupted by the presence of groundwater.

The City requires that any short-term discharge be permitted, or an approved Memorandum of Understanding (MOU) for long-term discharges be established to ensure capacity of the system. Short-term limited discharges of seven days' duration or less must be approved through the City Department of Utilities by acceptance letter or building permit plan approval. Long-term discharges of greater duration than seven days must be approved through the City Department of Utilities and the Director of the Department of Utilities through a MOU process. The MOU must specify the type of groundwater discharge, flow rates, discharge system design, a City-approved contaminant assessment of the proposed groundwater discharge indicating tested levels of constituents, and a City-approved effluent monitoring plan to ensure contaminant levels remain in compliance with State standards or the Sacramento County Regional Sanitation District (Regional San) and CVRWQCB approved levels. All groundwater discharges to the sewer must be granted a Regional San Discharge Permit (Order R5-2016-0020, NPDES No. CA0077682, effective on June 1, 2016). If the discharge is part of a groundwater cleanup or contains excessive contaminants, CVRWQCB approval is also required.

Construction Site Runoff Management

The City's Grading, Erosion and Sediment Control Ordinance requires project applicants to prepare erosion, sediment and pollution control plans for both during and after construction of a project, and grading plans. The Ordinance applies to projects where 50 cubic yards or more of soil is excavated and/or disposed and requires BMPs that must be approved of by the City's Department of Utilities. In addition, the City's Stormwater Management and Discharge Control Ordinance minimizes or eliminates sediment and pollutants in construction site stormwater discharges.

3.6.3 Analysis, Impacts and Mitigation

Significance Criteria

This Draft EIR assumes implementation of the project would have a significant impact related to hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:
 - i. result in substantial erosion or siltation on- or off-site;

- ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
 - iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - iv. impede or redirect flood flows
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
 - Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Methodology and Assumptions

The State has already approved the Demolition Project. Whether or not the project is approved, the State will relocate the printing plant and all employees and demolish the existing structures. The approved Demolition Project includes a project site with 17.3 acres of pervious surfaces and uncontaminated groundwater as well as site runoff that is managed through post-construction stormwater management issued by the SWRCB. As these actions will occur with or without the approval of the project, the most appropriate baseline from which to compare the true impacts of the project is the future condition of the site once the Demolition Project has been completed. Because of this reason, the impact discussions below will compare the project against a project site with pervious surfaces, uncontaminated groundwater, and site runoff management. The existing pump house and stormwater discharge pipe will also be present in the baseline condition.

Impacts on surface and groundwater quality were analyzed by the applicability of Federal and State regulations, ordinances, and/or standards to surface and groundwater quality of the project site and subsequent receiving waters are assessed. Potential impacts from implementation of the project were determined evaluating whether development of the project would exceed the thresholds of significance outlined above.

Impacts on water quality are assessed as a function of potential pollutant types, concentrations, and load (effect of flow quantity changes). These are evaluated qualitatively because specific design characteristics and land uses could affect the amount, type, and susceptibility to runoff of potential pollutants.

Issues or Potential Impacts Not Discussed Further

The project site is located far from the Pacific Ocean and other large bodies of water and is not located within a tsunami inundation area, and, therefore, would not be affected by tsunami. Additionally, the topography is flat and mudflows are unlikely. The potential for seiche to occur in the Sacramento and American Rivers is considered very low because the river channels are not completely enclosed. Therefore, these issues are not discussed further in this Draft EIR.

Impacts and Mitigation Measures

Impact 3.6-1: Implementation of the project could violate water quality standards or waste discharge requirements and degrade water quality.

The use of construction equipment and other vehicles could result in spills of oil, grease, gasoline, brake fluid, antifreeze, or other vehicle-related fluids and pollutants. Improper handling, storage, or disposal of fuels and materials or improper cleaning of machinery could result in accidental spills or discharges that could degrade water quality. Issues related to storage and disposal of hazardous materials are addressed in Chapter 3.0, Environmental Setting, Impacts, and Mitigation Measures.

As previously discussed in Section 3.6.2, Regulatory Setting, the project would be required to comply with regulations designed to reduce or eliminate construction-related water quality effects, including the General Construction Permit from the CVRWQCB; Grading, Erosion, and Sediment Control Ordinance from the City; and the General Dewatering Permit. Prior to construction, DGS would obtain coverage under the General Construction Permit. Additionally, before initiation of construction, a SWPPP would be developed and an NOI filed with the CVRWQCB. After approvals of coverage under the General Construction Permit, the Erosion and Sediment Control Plan and the SWPPP are developed, construction would commence and include all BMPs outlined in the erosion and sediment control plan and SWPPP. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other non-point source runoff. The general contractor conducting the work would be responsible for implementing all BMPs detailed in the SWPPP.

The SWPPP would identify the grading and erosion-control BMPs and specifications necessary to avoid and minimize water quality impacts. Implementation of standard erosion control measures such as, but not limited to, silt fences, waddles, and mulching material would be installed to prevent sediment from traveling with stormwater runoff beyond the boundary of the project site. Additionally, the SWPPP would contain specific measures for stabilizing soils before the onset of the winter rainfall season. Implementation of these standard erosion control measures would reduce the potential for stormwater runoff and degradation of water quality during construction.

Project construction activities would involve ground disturbance associated with building foundations, utility connections and other site improvements. Excavation of soils for foundations, including pilings, could intersect with shallow groundwater and it is anticipated that dewatering would be necessary. Therefore, the General Dewatering Permit would include a dewatering plan, which would establish measures to treat groundwater pumped from the construction site prior to release into the stormwater separate sewer, and to prevent/minimize sediment and contaminant releases into groundwater during excavation, as well as methods to clean up releases if they occur. Measures may include using temporary berms or dikes to isolate construction activities; using vacuum trucks to capture contaminant release; and maintaining absorbent pads and other contaminant control and clean-up materials onsite to allow an immediate response to contaminant releases if they occur.

Compliance with the Grading, Erosion and Sediment Control Ordinance, General Construction Permit, and General Dewatering Permit would prevent the substantial degradation of surface water and groundwater quality during project construction. These regulatory instruments are designed to ensure that construction projects result in water quality discharges that are not in violation of CVRWQCB or State objectives.

For the above reasons, adherence to applicable regulations and standards would minimize impacts to surface and groundwater quality resulting from project construction to **less than significant**.

Mitigation Measure

None required.

Impact 3.6-2: Implementation of the project could substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

Implementation of the project would result in up to 17.3 additional acres of impervious surface cover compared to baseline conditions. This would reduce the ability for precipitation to percolate to the aquifer, thereby potentially reducing groundwater recharge. Although the project would increase impervious surface from the baseline conditions and reduce groundwater recharge, 17.3 acres of impervious surfaces would be negligible to groundwater recharge in the context of the 248,000-acre South American Subbasin. Additionally, the project site is located in an urban area which is not an important groundwater recharge area due to the extent of impervious surfaces; therefore, this increase in impervious surfaces would not be of a sufficient magnitude to result in a net deficit in the aquifer volume or lowering of the groundwater table. Furthermore, due to the site's proximity to the confluence of the Sacramento and American Rivers, the rivers are the primary source of groundwater recharge in this area of the South American subbasin. Moreover, prior to the Demolition Project, the project site was covered with impervious surfaces and is anticipated to be pervious temporarily for one year prior to construction of the project. For these reasons, impacts relating to groundwater recharge would be **less than significant**.

Mitigation Measure

None required.

Impact 3.6-3: Implementation of the project could result in erosion, sedimentation, and flood flow impacts from changes in site drainage patterns.

The Demolition Project will remove drainage outlets, with the exception of the existing stormwater pipe, and abandon the existing drainage pattern. This project would include capping the 21-inch concrete stormwater pipe that drains the project site and abandoning the pipe in place.

Project storm drainage would be provided through the City's stormwater collection system and would connect to the City's 24-inch storm drain pipe in the North 7th Street right-of-way. Stormwater would continue to be collected by the City's stormwater drainage system and discharged into the American River, subject to the requirements of the current MS4 Discharge General Permit.

Although construction of the site would alter stormwater flows from the existing pattern of drainage from the baseline conditions, the new drainage system would be designed to meet current runoff water quality discharged from the site. The project would incorporate long-term design standards and elements established in the Stormwater Quality Design Manual, which would provide adequate protection against adverse erosion or sedimentation impacts from the project site's drainage patterns.

Regarding the alteration of site drainage that could result in on- or off-site flooding, BMPs implemented in compliance with the NPDES General Permits and project design specifications would control the rate and amount of surface runoff from the project site such that flooding on or off-site would not occur and would be similar to the same amount of runoff conveyed to the existing stormwater system (see Section 3.12, Utilities and Infrastructure for more detail on stormwater system impacts). Additionally, construction of the project would not involve activities that would affect levee maintenance or regional flood management planning, nor would ongoing flood planning and maintenance efforts conflict with the construction of the project.

Accordingly, the project would result in **less-than-significant** impacts relating to drainage and associated erosion, sedimentation, and flood flow impacts.

Mitigation Measure

None required.

Impact 3.6-4: Implementation of the project could conflict with or obstruct implementation of water quality control plans or sustainable groundwater management plans.

Because the project site is located within the Sacramento River Basin, all discharges to surface water or groundwater fall under the CVRWQCB's jurisdiction and are subject to the Basin Plan requirements. The requirements outlined in the NPDES permits that regulate development within the city are based on the Basin Plan requirements. Therefore, because the project is subject to the requirements of the NPDES permits, the project would be required to comply with the Basin Plan, as described in Section 3.6.2, Regulatory Setting. Additionally, as part of permit compliance, the project would be required to adhere to the City's SQIP, as described in Section 3.6.2, Regulatory Setting. Accordingly, the project would have a **less-than-significant** impact and would not conflict with or obstruct water quality control plans or sustainable groundwater management plans.

Mitigation Measure

None required.

Cumulative Impacts

Project effects on water quality and hydrology must be considered in light of other past, present, and future projects that could add to the effects of the project, creating cumulative effects. These effects may be contributed to by development within the Sacramento River watershed, which extends well beyond the city limits. The cumulative context for water quality considers the construction and operation within the geographic scope of the Basin Plan and, therefore, development within the larger Sacramento River watershed and the Delta, as described previously in the environmental setting section. With respect to groundwater, the cumulative context is the Central Sacramento County Groundwater Basin and North American Subbasin of the Sacramento Valley Groundwater Basin.

Impact 3.6-5: Implementation of the project, in combination with other development, would not violate water quality standards or waste discharge requirements and degrade water quality.

Non-point source water pollution from the combination of past, present, and future projects in the Sacramento River watershed and Delta, including: residential, commercial, and industrial land development; agriculture; parks; transit; infrastructure; and other land uses could result in the degradation of water quality in the Sacramento River watershed and Delta. Cumulative land development in the city, in addition to other development in the Sacramento River watershed and Delta, would result in an increase in impervious surfaces and potentially an increase in urban runoff and water pollutants, if not properly mitigated. There are many potential development projects within the Sacramento River watershed and Delta that may contribute to increases in urban runoff volume and pollutants. Older land development that was constructed without BMPs to control the transport of water pollutants continues to represent non-point sources of polluted stormwater runoff. While agricultural runoff is regulated, it is a major non-point source of a variety of water pollutants. New development is less likely to significantly degrade water quality because of existing regulations; However, older development, agriculture, and other non-point sources could impair receiving water quality. This is considered a significant cumulative impact.

The City currently implements the SQIP, which is designed to reduce stormwater pollution to the maximum extent practicable and eliminate prohibited non-stormwater discharges through a MS4 Discharge General Permit. The City also provides direction on post-construction BMPs in the Stormwater Quality Design Manual for the Sacramento and South Placer Regions. The project would be subject to the SQIP; the Stormwater Quality Design Manual for Sacramento and South Placer Regions; and the General Construction Permit, General Dewatering Permit, and MS4 Discharge General Permit, and would meet the State water quality discharge criteria. As discussed in Impact 3.6-1 above, through compliance with these permits and plans, the project would reduce generation of water pollutants to the maximum extent practicable consistent with

the goal of NPDES stormwater regulations through the use of structural and non-structural BMPs as well as measures to meet the requirements for Leadership in Energy and Environmental Design (LEED) certification, as discussed in Section 2.5.1 of the Project Description. Therefore, the project's contribution to the significant cumulative impact would not be cumulatively considerable, and this impact would be **less than significant**.

Mitigation Measure

None required.

Impact 3.6-6: Implementation of the project, in combination with other development, could substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.

The Central Sacramento County Groundwater Management Plan includes groundwater supply and demand projections through 2030. The comparison of supply and demand shows that supplies should be sufficient to meet demands through 2030. The plan acknowledges that there are more factors than just supply and demand that determine whether a groundwater basin is managed sustainably, and groundwater management objectives are identified in the plan.³¹ Supply would be sufficient to meet demand and the groundwater basin would be managed sustainably so as to not exceed the calculated long-term average annual sustainable yield of 273,000 acre-feet per year. Therefore, there is no significant cumulative impact and this impact would be **less than significant**.

Mitigation Measure

None required.

Impact 3.6-7: Implementation of the project, in combination with other development, could result in erosion and sedimentation impacts from changes in site drainage patterns.

The alteration of drainage patterns can lead to increased erosion by changing the permeability or runoff characteristics of the soil, or by modifying or creating new pathways for drainage. Cumulative land development in the city, in addition to other development in the Sacramento River watershed and Delta, would result in an increase in such soil erosion processes if not properly mitigated. This is considered a significant cumulative impact.

To reduce the potential for cumulative erosion impacts, all projects in the watershed are required to be developed in conformance with the provisions of applicable Federal, State, county, and/or

³¹ Sacramento County Water Agency and MWH, 2006. *Central Sacramento County Groundwater Management Plan*. February 2006. pp. 22-23.

City laws and ordinances. Compliance with the City's Grading Ordinance, Chapter 15.88 of the Sacramento Municipal Code, requires that prior to the commencement of grading, an Erosion and Sediment Control Plan be prepared for each project within the city. An erosion control professional, landscape architect, or civil engineer specializing in erosion control must prepare the Erosion and Sediment Control Plan and, during the installation of erosion and sediment control measures, be on the project site to supervise implementation of the installation and maintenance of such facilities throughout the site clearing, grading and construction periods.³²

The project would result in overall modifications of site runoff design. However, the individual contribution of the project to cumulative erosion impacts resulting from changes in site drainage patterns would be subject to State and City regulations as described in Impact 3.6-2. Consequently, project-related impacts regarding erosion from changes in site drainage patterns would be not be cumulatively considerable and impacts would be **less than significant**.

Mitigation Measure

None required.

Impact 3.6-8: Implementation of the project, in combination with other development, could conflict with or obstruct implementation of water quality control plans or sustainable groundwater management plans.

Future development within the city of Sacramento and surrounding communities would be required to comply and be consistent with water quality control plans and sustainable groundwater management plans. Therefore, future growth within the city of Sacramento is anticipated to result in a less than significant impact associated with conflicting with water quality control plans and sustainable groundwater management plans. Additionally, as discussed in Impact 3.6-4, the project would not conflict with applicable water quality control plans and sustainable groundwater management plans. Therefore, the cumulative impact related to water quality control and sustainable groundwater management plans would be **less than significant**.

Mitigation Measure

None required.

³² City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report*. Certified March 3, 2015. p. 4.5-6.

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3.7 Land Use and Planning

This section assesses the potential effects on land use and planning issues that may arise in connection with planning, construction, and operation of the Richards Boulevard Office Complex (RBOC) project (or project). This section includes relevant baseline information, including a description of existing, and planned land uses in and adjacent to the project site, including current land uses, land use designations, and zoning; and anticipated future conditions after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete. A description of the potential impacts resulting from the project is also provided, as well as the identification of feasible mitigation (where applicable) to avoid or lessen the impacts is also included.

One comment letter was received on the notice of preparation (NOP) regarding land use or planning issues, and came from the City of Sacramento. Specifically, the comment letter focused on the overall design of the project for establishing better connectivity to the surrounding communities, and in creating urban character that is safe and attractive to pedestrians and bicyclists. This section addresses these topics throughout with relation to land use and planning, in addition to the discussion covered in Section 3.11, Transportation and Circulation, related to project design and mobility.

The primary sources of data referenced for this section include:

- City of Sacramento 2035 General Plan,
- City of Sacramento 2035 General Plan Master Environmental Impact,
- Sacramento Area Council of Governments (SACOG) Preferred Blueprint Scenario and Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS),
- City of Sacramento’s Central City Specific Plan (CCSP)
- CCSP EIR, and
- River District Specific Plan (RDSP).

The physical environmental effects associated with the project, many of which pertain to issues of land use compatibility (e.g., noise, transportation, air quality) are evaluated in other sections of this EIR.

3.7.1 Environmental Setting

The City of Sacramento is located approximately 80 miles east of San Francisco and 85 miles west of Lake Tahoe in the northern portion of the great Central Valley (Figure 2-1, Regional Location). The City of Sacramento is the largest incorporated city in Sacramento County, and is the seat of government for the County in addition to being the seat of government for the State of California. Sacramento is also a major transportation hub, the point of intersection of major

transportation routes including a number of major freeways, the Union Pacific (UP) Railroad, and the Burlington Northern and Santa Fe Railway (BNSF) Railway.

The RBOC site is located in the central city of Sacramento, within the River District, and would be located at the site of the soon to be demolished State printing plant. The existing City and regional plans and conditions regarding land use and planning for the project are presented below.

Existing Conditions

The RBOC project site consists of approximately 17.3 acres occupying two parcels, which occupy the entire block between Richards Boulevard on the north, North B Street to the south, North 7th Street on the east, and commercial and vacant uses on the west.¹ The RBOC project site is located approximately 1.25 miles north of the State Capitol building and directly north of the Sacramento Railyards redevelopment area, located in the River District of the City of Sacramento. The existing site is located in a largely commercial/industrial area at 344 North 7th Street in Sacramento, Sacramento County, California (Figure 2-3, Project Site). Interstate 5 (I-5) is less than a mile (0.65 mile) west of the site and is directly accessible on Richards Boulevard. State Route (SR) 160 is similarly situated to the east (Figure 2-2, Project Vicinity). The location is also near the confluence of the American and Sacramento rivers, which are approximately 0.4 and 0.6 miles to the north and west of the existing site's perimeter, respectively.

The project site itself is zoned by the City of Sacramento as being an Office Business (OB), Residential Mixed Use Zone (RMX), and a High-rise Residential Zone (R-5) within the River District Special Planning District (SPD). The land use designation for the project site within the City of Sacramento's 2035 General Plan is Urban Center High. The land uses surrounding the existing site are primarily used for commercial/office or industrial, although some existing residences, and state and local offices are located nearby (Figure 2-4, Existing Land Uses). There is currently a Sacramento Regional Transit (SacRT) Light Rail Station that lies directly across from the printing plant to the north on the opposite side of Richards Boulevard.

Baseline Conditions

The approved Demolition Project would result in a project site vacant of everything but a small pump house on the northwest corner, with existing zoning and land use designations unchanged. The environmental baseline would not include a change to the land use and planning assumptions for this EIR from existing conditions.

¹ RBOC project site consists of Assessor's Parcel Numbers 001-0210-010, and 001-0210-054. Sacramento County, 2018. *Assessor Parcel Viewer*. Available: <http://assessorparcelviewer.saccounty.net/JSViewer/assessor.html>. Accessed December 20, 2018.

3.7.2 Regulatory Setting

Federal

No federal plans, policies, regulations, or laws related to land use are applicable to the project.

State

No state plans, policies, regulations, or laws related to land use are applicable to the project.

Local

The project is located on State-owned property and would be implemented by the California State Department of General Services (DGS). State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot conflict with these policies and ordinances. As a good faith gesture, local plans, policies, and regulations that are applicable to the project are described herein for reference. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

City of Sacramento 2035 General Plan

The project site is located within the plan area of the Sacramento 2035 General Plan, which was adopted on March 3, 2015 in compliance with the requirements of California Government Code Section 65300 et seq. The General Plan is a 20-year policy guide for the physical, economic, and environmental growth and renewal of the city, and it is the principal tool for the City to use in evaluating public and private building projects and municipal-service improvements. The 2035 General Plan favors infill development over expanding outward into “greenfields” on the edge of the city, prioritizing reuse of underutilized properties, intensifying development near transit and mixed-use activity centers, increasing opportunities for pedestrian and bicycle use, and locating jobs closer to housing. The Land Use and Urban Design Element of the Sacramento 2035 General Plan² considers the project site to be in an area expected to “experience dramatic change through major development and redevelopment projects” through the year 2035. The following goals and policies in the Land Use and Urban Design Element and the Economic Development Element are relevant to the analysis of land use effects.

Goal LU 1.1: Growth and Change. Support sustainable growth and change through orderly and well-planned development that provides for the needs of existing and future residents and businesses, ensures the effective and equitable provision of public services, and makes efficient use of land and infrastructure.

Policy LU 1.1.4: Leading Infill Growth. The City shall facilitate infill development through active leadership and the strategic provision of infrastructure and services and supporting land uses.

Goal LU 2.1: City of Neighborhoods. Maintain a city of diverse, distinct, and well-structured neighborhoods that meet the community’s needs for complete, sustainable, and

² City of Sacramento, 2015. *City of Sacramento 2035 General Plan. Land Use and Urban Design Element.* Available: <http://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--General-Plan>. Accessed December 18, 2018.

high-quality living environments, from the historic downtown core to well-integrated new growth areas.

Policy LU 2.1.8: Neighborhood Enhancements. The City shall promote infill development, reuse, rehabilitation, and reuse efforts that contribute positively (e.g., architectural design) to existing neighborhoods and surrounding areas.

Goal LU 2.5: City Connected and Accessible. Promote the development of an urban pattern of well-connected, integrated, and accessible neighborhoods corridors, and centers.

Policy LU 2.5.1: Connected Neighborhoods, Corridors, and Centers. The City shall require that new development, both infill and greenfield, maximizes connections and minimizes barriers between neighborhoods, corridors, and centers within the city.

Goal LU 2.6: City Sustained and Renewed. Promote sustainable development and land use practices in both new development, reuse, and reinvestment that provide for the transformation of Sacramento into a sustainable urban city while preserving choices (e.g., where to live, work, and recreate) for future generations.

Policy LU 2.6.2: Transit-Oriented Development. The City shall actively support and facilitate mixed-use retail, employment, and residential development around existing and future transit stations.

Goal LU 5.6: Central Business District. Promote the Central Business District (CBD) as the regional center of the greater Sacramento area for living, commerce, culture, and government.

Policy LU 5.6.6: Central City Development Projects. The City shall work with the Sacramento Housing and Redevelopment Agency (SHRA), the Capitol Area Development Authority (CADA), and private developers to ensure that development efforts in areas surrounding the CBD (e.g., Railyards, River District, Docks Area, R Street) respect and respond to the urban patterns—streets, blocks, building heights, massing—and character established in the CBD, and do not undermine the physical centrality, visual primacy, or land use composition of the CBD.

Goal LU 7.1: Employment Centers. Encourage employee-intensive uses throughout the city in order to strengthen Sacramento’s role as a regional and West Coast employment center and to encourage transit ridership and distribute peak hour commute directions.

Policy LU 7.1.1: Employment Intensive Uses. The City shall encourage employee-intensive uses such as medical and professional offices, light industry, research, and skill training.

General Plan Land Use Designation - Urban Center High

Based on the information provided in the City of Sacramento’s 2035 General Plan, the project site is located in Sacramento’s Urban Center High land use designation. Urban Center High is described in the General Plan as a location that:

“provides thriving areas with concentrations of uses similar to downtown. Each center includes employment-intensive uses, high-density housing, and a wide variety of retail uses including large format retail, local shops, restaurants, and services.”

The Urban Center High designation outlines land use and urban form guidelines and standards for buildings to have heights between two and 24 stories tall; a minimum density of 24 dwelling units per net acre; a maximum density of 250 dwelling units per net acre; a minimum FAR of 0.50; and a maximum FAR of 8.00.

Sacramento Area Council of Governments Preferred Blueprint Scenario

The Sacramento Region Blueprint is a transportation and land-use study that was initiated by SACOG Board of Directors in 2002 and adopted in 2004 by the SACOG Board of Directors. The goal of the plan is to determine alternatives to current and planned transportation and land-use patterns, and is defined as including Sacramento, Sutter, Yolo, Yuba, El Dorado and Placer Counties (the Tahoe area excluded). The plan acts as a vision for growth that promotes compact, mixed-use development and more transit choices as an alternative to low-density development. The Sacramento Region Blueprint depicts a path to regional growth through the year 2050 that is generally consistent with principles of “smart growth,” which encourage a variety of housing close to employment, shopping, and entertainment and provide options for walking, biking, or taking public transit. The following Blueprint Growth Principles are relevant to the analysis of land use effects:³

Compact Development: Creating environments that are more compactly built and use space in an efficient, but more aesthetically pleasing manner can encourage additional walking, biking, and public-transit use, and shorten auto trips.

Mixed-Use Developments: Building homes, shops, entertainment, office, and light-industrial uses near each other can encourage active, vital neighborhoods. This mixture of uses can occur at different scales and be arranged vertically or horizontally. These types of projects can function as local activity centers where people would tend to walk or bike to destinations and interact more with each other.

Use of Existing Assets: In urbanized areas, development on infill or vacant lands, intensification of the use of underutilized parcels, or redevelopment can make better use of existing public infrastructure. This can also include rehabilitation and reuse of historic buildings, denser clustering of buildings in suburban office parks, and joint use of existing public facilities such as schools and parking garages.

Quality of Design: design details of any land use development - such as the relationship to the street, setbacks, placement of garages, sidewalks, landscaping, the aesthetics of building design, and the design of the public right-of-way are all factors that can influence the attractiveness of living in a compact development and facilitate the ease of walking and biking to work or neighborhood services. Good site and architectural design is an important factor in creating a sense of community and a sense of place.

³ Sacramento Area Council of Governments, 2018. *Sacramento Region Blueprint*. Available: <https://www.sacog.org/overview/sacramento-region-blueprint>. Accessed December 31, 2018.

SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)

The MTP/SCS is a long-range plan for transportation in the region following SACOG's adoption of the Blueprint. The 2016 MTP/SCS covers the period from 2012 to 2036. SACOG is required by federal law to update the MTP at least every four years. SACOG uses the MTP/SCS to identify, in collaboration with cities, counties, and transit agencies, growth and transportation investment priorities over a 20-year planning horizon.⁴ The City of Sacramento, as well as the other cities and counties in the region, have been updating its general plan and development code to allow and encourage Blueprint-friendly development and transit districts. The buildout assumptions, population projections, and transportation assumptions of the 2035 General Plan are based largely on information provided by SACOG for the 2012 MTP/SCS. In the city, the Preferred Blueprint Scenario provides for higher densities, and increased infill development.

The guiding principles from the MTP/SCS, adopted by SACOG, are:

Smart Land Use: Design a transportation system to support good growth patterns, including increased housing and transportation options, focusing more growth inward and improving the economic viability of rural areas.

Environmental Quality and Sustainability: Minimize direct and indirect transportation impacts on the environment for cleaner air and natural resource protection.

Financial Stewardship: Manage resources for a transportation system that delivers cost-effective results and is feasible to construct and maintain.

Economic Vitality: Efficiently connect people to jobs and get goods to market.

Access and Mobility: Improve opportunities for businesses and citizens to easily access goods, jobs, services and housing.

Equity and Choice: Provide real, viable travel choices for all people throughout our diverse region.

City of Sacramento Central City Community Plan (CCCP)

The RBOC project site is located within the River District of the Central City Community Plan (CCCP) area, which is to the northwest of the City's central core.⁵ The River District is identified in the 2035 General Plan as being within the Central Business District (CBD) Priority Investment Area (PIA). PIAs are areas of the city that are the highest priority for investment and development through infill, reuse, or redevelopment. The CBD is an urban downtown area that includes State government buildings, corporate offices and businesses, high-rise condominiums,

⁴ Sacramento Area Council of Governments, 2016. *Metropolitan Transportation Plan/Sustainable Communities Strategy*. Available: <https://www.sacog.org/2016-mtpsc>. Accessed December 31, 2018.

⁵ City of Sacramento, 2015. *Central City Community Plan*. Available: <https://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/Long-Range/Community-Plans/Central-City-CP.pdf?la=en>. Page 3-CC-19. Accessed December 31, 2018.

historic neighborhoods, parks and recreational areas, nightlife, restaurants and shops, schools, and industrial and manufacturing complexes all within a tree-lined street grid.⁶

River District Specific Plan

The Land Use Chapter of the RDSP⁷ describes the land use designations and allowable development densities in the RDSP Area and its subareas. Development standards specific to the River District are provided in Section 17.436 of the Sacramento City Code and are also outlined below. These standards of the RDSP take precedent over the base zoning standards unless otherwise noted.

Land use designations applicable to the project are as follows:

- **Office (OB):** This is a zone designed to permit development of business office centers and institutional or professional buildings.
- **Multifamily (R-5):** R-5 is a multifamily residential zone bordering the central business district; this is not entirely a residential zone and may include institutional, office and commercial uses subject to special permit review.
- **Residential Mixed Use (RMX):** This is a mixed use zone. The zone permits multifamily residential, office and limited commercial uses in a mixture established for the area through the special planning district.

The Bannon Street Area within the RDSP, which includes the existing OSP/FMD site, is envisioned as mostly office uses with retail storefronts on Richards Boulevard, with commercial and housing on interior streets. Moving in a southerly direction, the uses would transition from office to residential mixed uses. Along the southern border of this Area is the Railyards development.

Section 3.7 of the RDSP addresses areas of the River District:

Goal LU 3: Encourage Areas to grow as distinct neighborhoods with unique characteristics and atmosphere.

Policy LU 3a: Create a vibrant and active District center at North 7th Street and Richards Boulevard.

Policy LU 3b: Establish North 7th Street as an attractive visual and physical link between the American River and the Central Core.

For purposes of full disclosure, Section 3.11 of the RDSP addresses nonconforming land uses and are provided below. However, as the removal and demolition of the existing structures at the

⁶ City of Sacramento, 2015. *Sacramento 2035 General Plan*. Available: <https://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/General-Plan/2035-GP/Chapter-8-Priority-Investment-Areas.pdf?la=en>. Page 8-99. Accessed December 31, 2018.

⁷ City of Sacramento, 2011. *River District Specific Plan*, Chapter 3 Land Use. Available: http://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/Long-Range/Specific-Plans/RD_SpecPlanFinal3-11.pdf?la=en. Page 15. Accessed December 31, 2018.

project site is assumed to have occurred, for the purposes of this analysis, the removal of these existing facilities would eliminate any nonconforming uses at this site.

Goal LU 5: Allow development in the River District to take place over time, respecting its eclectic nature.

Policy LU 5a: Provide appropriate support to property and business owners as they transition over time from legal, nonconforming uses to those which meet new SPD zoning code requirements. The nonconforming use regulations set forth in Chapter 17.436 of the City Zoning Ordinance apply to nonconforming uses and to the use of nonconforming buildings, structures and lots except as noted within the River District SPD, Section 17.436.050 of the Sacramento City Code.

City of Sacramento Zoning Ordinance

The Zoning Ordinance is a primary tool for implementing the policies of the General Plan, and addresses the physical development standards and criteria for the City of Sacramento. One of the purposes of zoning is to implement the land use designations set forth in the General Plan.

Approximately 70 percent of the project site lies within the City's OB zoning district, and approximately 15 percent of the project site lies within the City's RMX zoning district and the remaining 15 percent of the project site lies within the R-5 zoning district.

River District Special Planning District

As the project site is located within the River District SPD, more specific building standards for each zoning district are further outlined in the River District SPD, and take precedent over the base zoning for the project site.

Office Building (OB)

Sacramento City Code Section 17.216.100 states that the purpose of the OB zoning district is to:

“...provide for a low-rise mixed-use employment zone that is intended to permit business, office, institutional, or professional buildings; the sale of goods and services; and lodging and dwellings. (Ord. 2013-0020 § 1; Ord. 2013-0007 § 1)”

Sacramento City Code Section 17.216.100 states that the development standards of the OB zoning district within the River District SPD have maximum heights between 90 and 150 feet tall; that the densities will be based on those described in the General Plan as a minimum of 24.0 dwelling units per net acre; maximum of 250.0 dwelling units per net acre; and minimum and maximum FARs based on those in the General Plan of 0.50 FAR minimum, and a maximum FAR of 8.00. As the project site is located within the River District SPD, these standards take precedent over the base zoning for the project site. Overall, the uses allowed within the River District SPD are the same as the allowed uses outside of the River District SPD unless otherwise specified in Section 17.436 of the Sacramento City Code. In addition, design review or preservation review conducted at the director or commission level may modify building height and density requirements.

Residential Mixed-Use (RMX) Zoning District

Sacramento City Code Section 17.212.100 states that the purpose of the RMX zoning district is to:

“... allow a mix of residential and commercial uses as a matter of right, and to preserve the residential character of neighborhoods while encouraging the development of neighborhood-oriented ground-floor retail and service uses. (Ord. 2013-0020 § 1; Ord. 2013-0007 § 1)”

Sacramento City Code Section 17.212.100 states that the development standards of the RMX zoning district have maximum heights between 90 and 150 feet tall; that the densities will be based on those described in the General Plan as a minimum of 24.0 dwelling units per net acre; maximum of 250.0 dwelling units per net acre; and minimum and maximum FARs based on those in the General Plan of 0.50 FAR minimum, and a maximum FAR of 8.00. As the project site is located within the RDSP Area, these standards take precedent over the base zoning for the project site. Overall, the uses allowed within the River District SPD are the same as the allowed uses outside of the River District SPD unless otherwise specified in Section 17.436 of the Sacramento City Code. In addition, design review or preservation review conducted at the director or commission level may modify building height and density requirements.

High-Rise Residential (R-5) Zoning District

Sacramento City Code Section 17.208.700 states that the purpose of the R-5 zoning district is to:

“... permit dwellings, institutions, and limited commercial goods and services serving the surrounding neighborhood. (Ord. 2013-0020 § 1; Ord. 2013-0007 § 1)”

Sacramento City Code Section 17.208.700 states that the development standards of the R-5 zoning district have maximum heights of 250 feet tall; that the densities will be based on those described in the General Plan as a minimum of 24.0 dwelling units per net acre; maximum of 250.0 dwelling units per net acre; and minimum and maximum FARs based on those in the General Plan of 0.50 FAR minimum, and a maximum FAR of 8.00. As the project site is located within the RDSP Area, these standards take precedent over the base zoning for the project site. Overall, the uses allowed within the River District SPD are the same as the allowed uses outside of the River District SPD unless otherwise specified in Section 17.436 of the Sacramento City Code. In addition, design review or preservation review conducted at the director or commission level may modify building height and density requirements.

City of Sacramento River District Design Review District

The project site is located within the City of Sacramento’s River District Design Review District. The City’s Design Review procedure, as established in the Sacramento City Code (Section 17.600.210), requires all improvements including new buildings and most alterations be subject to Design Review approval.

- Design guidelines may be adopted for each design review district in accordance with the notice and hearing procedures prescribed in section 17.600.210, except that the council may adopt the design guidelines by resolution.
- Design guidelines for a design review district shall be consistent with the general plan and shall contain all of the following elements:
 1. A statement of the goals for design review within the design review district;
 2. A statement of the standards and criteria to be utilized in determining the appropriateness of any proposed building or structure or alteration thereof within the design review district; and
 3. Any additional material as may be required, in the judgment of the city council, to achieve the purposes stated in section 17.600.200. (Ord. 2013-0020 § 1; Ord. 2013-0007 § 1)

In addition, design review or preservation review conducted at the director or commission level may modify building height and density requirements.

3.7.3 Analysis, Impacts and Mitigation

Significance Criteria

This EIR assumes implementation of the project would have a significant impact related to land use and planning if it would:

- Physically divide an established community;
- 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;

Methodology and Assumptions

The State has already approved the Demolition Project at the project site. Whether or not the project is approved, the State will relocate the printing plant and all employees and demolish the existing structures. The approved Demolition Project would result in a flat project site, with existing zoning and land use designations unchanged.

As these actions will occur with or without the approval of this project, the most appropriate baseline from which to compare the true impacts of the project is the future condition of the site once the Demolition Project has been completed. Because of this reason, the impact discussions below will compare the project against the assumed future conditions for land use and planning. However, as previously discussed, the baseline conditions for land use and planning would be unchanged by the Demolition Project.

Impacts on land use and planning were analyzed by the applicability of federal, state, and local regulations, ordinances, and/or standards for land uses and planning in regards to the project site and surrounding area. Potential impacts from implementation of the project were determined

evaluating whether development of the project would exceed the thresholds of significance outlined above.

Section 15125(d) of the (CEQA Guidelines states that an EIR “shall discuss any inconsistencies between the project and applicable general plans and regional plans” as a part of the discussion of the existing project setting. However, the Guidelines further state that inconsistency with an adopted plan does not necessarily indicate a significant impact by the project. This following impact analysis focuses on potential impacts of the project related to land use and policy conflicts.

Impacts and Mitigation Measures

Impact 3.7-1: Implementation of the project would not physically divide an established community.

For the purpose of this impact analysis, physically dividing an established community means the creation of barriers that prevent or hinder the existing flow of people or goods through an established community, or the placement of a development in such a manner that it physically separates one portion of an established community from the remainder of that community. For example, a freeway or other limited access roadway or a rail line would be considered such a barrier, as could a fence or wall or, potentially, a system of discontinuous streets, depending on wayfinding guidance provided.

The project site is located within an urban area, adjacent to commercial, industrial, and few residential land uses. The project is anticipated to include approximately 1.3 million gross square feet of office and related uses across multiple office buildings. Examples of project elements include a parking garage and surface parking spaces, open space, and pedestrian walkways. The baseline condition would include a temporary fencing to prevent unauthorized access to the site until project construction can begin; temporary fencing was addressed as part of the Demolition Project.

As part of the design, the project would integrate the new State development with the existing neighborhood and support the use of alternative commute modes by designing the project to have easy access to multiple transit modes. When the project is constructed, there would be more access through the site than exists under the baseline condition. Currently, there is no public access through the site. When the complex is complete, there will be pedestrian access through the site. As the baseline condition does not include public access and the buildout of the project would include some pedestrian connectivity through the site and enable better access to transit, impacts related to physical division of an established community would be **less than significant**.

Mitigation Measure

None required.

Impact 3.7-2: Implementation of the project would not 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.

Although the State is not subject to local plans, DGS has considered consistency with the Sacramento Region Blueprint, 2016 MTS/SCS, City of Sacramento 2035 General Plan, and the RDSP.

The common goals in all specified local land use plans call for infill development in Sacramento, intensifying uses on underutilized sites near transit, increased opportunities for pedestrian and bicycle use, prioritizing energy and water-efficient buildings and reduction of carbon emissions, and locating jobs closer to housing. The project would replace a vacant lot with a new State office building to meet present and future space requirements for the State of California within the central city. The project would intensify development on the underutilized site, integrating a new office building into the central city by designing the project to have easy access to multiple transit modes.

The Land Use and Urban Design Element of the Sacramento 2035 General Plan, and the RDSP both state that the River District is in an area expected to “experience dramatic change through major development and redevelopment projects” through the year 2035. The specific location of the project site is closely linked to transit centers and transportation corridors, and no changes would be made to land uses at the project site under the project as they are to remain OB, RMX, and R-5 designations. Further, the City’s Design Review procedures within the River District require all improvements including new buildings and most alterations be subject to Design Review approval.

With the design and site layout not set at this time, it is not possible to know the exact FAR for the new office building. However, it is estimated that with 1.375 million GSF of office and related uses across multiple office buildings (including the Central Plant and garage), the estimated FAR for the RBOC project would be approximately 2.0, which is greater than the City’s minimum FAR of 0.5 and less than the maximum FAR of 8.0 for office uses within the River District.

The RBOC project would include multiple office buildings, including three mid-rise buildings, and one high-rise building, with heights to vary, but the tallest structure would be up to 29 stories and no more than 418 feet tall. This would be taller than the specified building height limits of the General Plan (between two and 24 stories) and local zoning code (up to 250 feet tall). However, it is assumed the building would be visually consistent with other towers in the central city of Sacramento, including the 30-story Wells Fargo Center at 400 Capitol Mall, the 25-story U.S. Bank Tower at 621 Capitol Mall, the 25-story Bank of the West Tower at 500 Capitol Mall, the 18-story Office Buildings 8 and 9 at 744 P Street, and many others. As described above, the State is not subject to City standards.

While it is acknowledged that the potential design for the project could be inconsistent with development standards of the General Plan and local zoning ordinance currently in place within the RDSP, it should be noted that according to the General Plan Guidelines published by the State Office of Planning and Research (OPR), a general rule for consistency determinations can be stated as follows: “An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment.”

To that effect, and consistent with the City’s General Plan policies, the office building would be a Zero Net Energy project through energy-efficient building materials and methods, and SMUD’s Greenergy Program which would provide energy by renewable sources. The building would include water conservation and reuse measures that exceed 2016 Title 24 water efficiency requirements including low-flow/high-efficiency fixtures and potential use of recycled water for outdoor irrigation.

The City Council, as the legislative body of the City of Sacramento, under typical circumstances, would ultimately be responsible for determining whether an activity or project is consistent with the Sacramento General Plan. In those instances of local government review, perfect conformity with a general plan is not required. Instead, the City Council must balance various competing considerations and may find overall consistency with the General Plan despite potential inconsistencies with some individual provisions. Even then, the potential inconsistencies with General Plan goals, objectives, and policies do not themselves create a significant environmental impact under the thresholds established in CEQA Guidelines Appendix G, because not all land use goals and policies at issue are “adopted for the purpose of avoiding or mitigating an environmental effect.” These policies are, instead, expressions of community planning and organization preferences, and the City of Sacramento may modify these preferences without necessarily creating a significant adverse impact on the environment.

In review of these plans and policies, it was determined that the project meets the overall intent of the 2035 General Plan goals and policies, and includes design elements that are in line with specific goals and policies.

In addition, the RBOC project is located on State-owned property and would be implemented by DGS. State agencies are not subject to local or county land-use plans, policies, and zoning regulations. This includes development activities such as construction on state-owned lands. Therefore, impacts related to conflicts with applicable land use plans, policies, or regulations over the project would be **less than significant**.

Mitigation Measure

None required.

Cumulative Impacts

Project effects on land use and planning must be considered in light of other past, present, and future projects that could add to the effects of the project, creating cumulative effects. The geographic scope for the cumulative analysis of land use and planning impacts is the City of Sacramento. The adopted plans that establish and assess the land use pattern and goals for development and growth in the Sacramento include the following:

- City of Sacramento 2035 General Plan and Sacramento Central City Community Plan, adopted March 3, 2015;
- Master EIR, City of Sacramento 2035 General Plan, certified 2015 (SCH No. 2012122006); and
- Sacramento Area Council of Governments (SACOG) MTP/SCS Adopted February 18, 2016 and EIR, certified April 19, 2012 (SCH No. 2011012081).

As discussed above, while the project would be inconsistent with the applicable local plans and policies pertaining to development standards, including the General Plan, the project would still meet the overall intent of the goals established in the same local plans and policies. In addition, the RBOC project is located on State-owned property and would be implemented by DGS. State agencies are not subject to local or county land-use plans, policies, and zoning regulations. This includes development activities such as demolition and/or construction, on state-owned lands.

Impact 3.7-3: Implementation of the project, in combination with other development, would not contribute to cumulative impacts in relation to physically dividing an established community.

As discussed in the impact analysis above, the project would result in less-than-significant impacts with respect to physically dividing an established community. The project site is primarily self-contained, and any potential land use and planning impacts from the project would be local and limited to the project site. The area surrounding the project site is generally built out pursuant to the General Plan with a mix of office, industrial, commercial, and some residential land uses. Although redevelopment of the project site would increase the intensity of office, and mixed uses within the central city, these uses would not combine to result in cumulative impacts related to physical division of an established community. To the contrary, the cumulative effect of the project would be to integrate existing underutilized sites into the larger city fabric, and the project would improve accessibility and land use compatibility compared to existing conditions. There are no significant cumulative impacts related to dividing an established community; therefore, the project would have a **less-than-significant** impact.

Mitigation Measure

None required.

Impact 3.7-4: Implementation of the project, in combination with other development, would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the General Plan and zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Future development within the City of Sacramento and surrounding communities would be required to comply and be consistent with relevant regional and local jurisdictional adopted land use standards, policies, plans and programs. Therefore, there is no cumulative impact related to conflicts with regional and local plans. Therefore, this would be a **less-than-significant** impact.

Mitigation Measure

None required.

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3.8 Noise and Vibration

This section assesses the potential effects from noise and vibration at the project site as a result of constructing the Richards Boulevard Office Complex (RBOC) project (or project). The section includes relevant baseline information including a description of existing ambient; anticipated future conditions after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete; and the federal, State, and regional regulations related to noise and vibration. A description of the potential impacts resulting from the project is also provided, as well as the identification of feasible mitigation (where applicable) to avoid or lessen the impacts.

No comments related to noise or vibration were received on notice of preparation (NOP) for the RBOC project.

The primary sources of data referenced for this section include:

- City of Sacramento 2035 General Plan,¹
- the Federal Transit Administration's (FTA) Transit Noise and Vibration Impact Manual,² and
- the Federal Highway Administration (FHWA) Roadway Construction Noise Model User Guide.³

3.8.1 Environmental Setting

Technical Background and Noise Terminology

Noise can be generally defined as unwanted sound. Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) which is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude (sound power). The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the frequency/sound power level spectrum.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as

¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

² Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Manual*. September 2018.

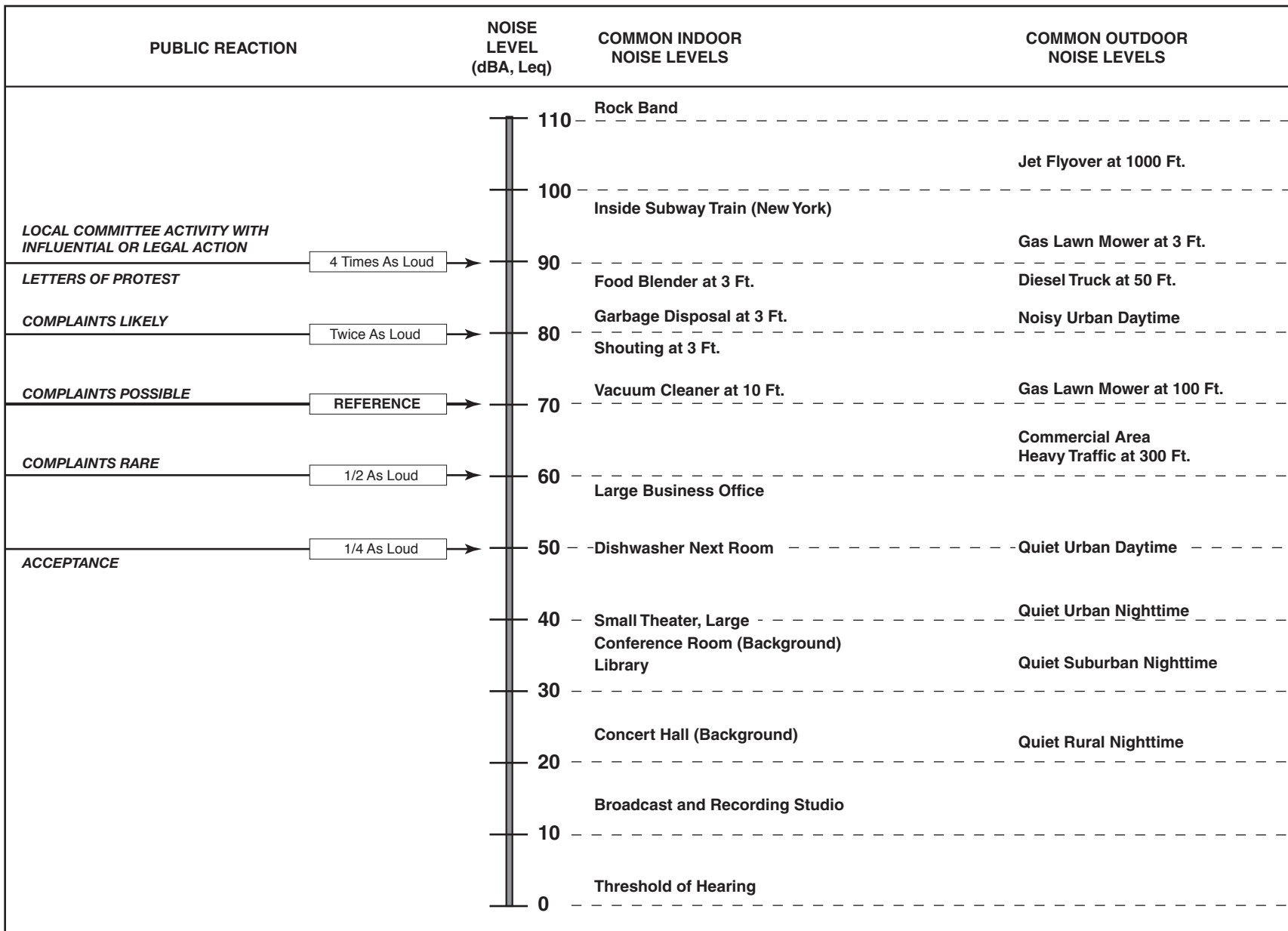
³ Federal Highway Administration, 2006. FHWA Roadway Construction Noise Model. January 2006.

A-weighting and is expressed in units of A-weighted decibels (dBA). Frequency A-weighting follows an international standard methodology of frequency de-emphasis and is typically applied to community noise measurements. Some representative noise sources and their corresponding A-weighted noise levels are shown in **Figure 3.8-1**.

Noise exposure is a measure of noise over a period of time. Noise level is a measure of noise at a given instant in time. Community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic and atmospheric conditions. What makes community noise constantly variable throughout a day, besides the slowly changing background noise, is the addition of short duration single event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual receptor. These successive additions of sound to the community noise environment vary the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts.

This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below:

- L_{eq} : the energy-equivalent sound level is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The L_{eq} is the constant sound level, which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).
- L_{max} : the instantaneous maximum noise level for a specified period of time.
- L_{50} : the noise level that is equaled or exceeded 50 percent of the specified time period. The L_{50} represents the median sound level.
- L_{90} : the noise level that is equaled or exceeded 90 percent of the specific time period. This is considered the background noise level during a given time period.
- L_{dn} : also abbreviated DNL, it is a 24-hour day and night A-weighted noise exposure level which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night (“penalizing” nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted (penalized) by adding 10 dB to take into account the greater annoyance of nighttime noises.
- CNEL: similar to DNL, the Community Noise Equivalent Level (CNEL) adds a 5-dB “penalty” for the evening hours between 7:00 p.m. and 10:00 p.m. in addition to a 10-dB penalty between the hours of 10:00 p.m. and 7:00 a.m.



SOURCE: Caltrans Transportation Laboratory Noise Manual, 1982; and modification by ESA

Richards Boulevard Office Complex

Figure 3.8-1
Typical Noise Levels

As a general rule, in areas where the noise environment is dominated by traffic, the L_{eq} during the peak-hour is generally within one to two decibels of the L_{dn} at that location.⁴

Effects of Noise on People

When a new noise is introduced to an environment, human reaction can be predicted by comparing the new noise to the ambient noise level, which is the existing noise level comprised of all sources of noise in a given location. In general, the more a new noise exceeds the ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- except in carefully controlled laboratory experiments, a change of 1-dB cannot be perceived;
- outside of the laboratory, a 3-dB change is considered a just-perceivable difference;
- a change in level of at least 5-dB is required before any noticeable change in human response would be expected; and
- a 10-dB change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

The perceived increases in noise levels shown above are applicable to both mobile and stationary noise sources. These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion; hence, the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

Noise Attenuation

Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate between 6 dB for hard sites and 7.5 dB for soft sites for each doubling of distance from the reference measurement. Hard sites are those with a reflective surface between the source and the receiver such as parking lots or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the changes in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dB (per doubling distance) is normally assumed for soft sites. Line sources (such as traffic noise from vehicles) attenuate at a rate between 3 dB for hard sites and 4.5 dB for soft sites for each doubling of distance from the reference measurement.

⁴ California Department of Transportation, 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013.

Noise levels may also be reduced by intervening structures, such as a row of buildings, a solid wall, or a berm located between the receptor and the noise source.

Fundamentals of Vibration

As described in the FTA's *Transit Noise and Vibration Impact Assessment*, ground-borne vibration can be a serious concern for nearby neighbors, causing buildings to shake and rumbling sounds to be heard.⁵ In contrast to airborne noise, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses and heavy trucks on rough roads, and construction activities such as blasting, sheet pile-driving and operating heavy earth-moving equipment.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal, which is measured in inches per second. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to express RMS. The decibel notation acts to compress the range of numbers required to describe vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration assessment include structures (especially older masonry structures), people who spend a lot of time indoors (especially residents, students, the elderly and sick), and vibration sensitive equipment such as hospital analytical equipment and equipment used in computer chip manufacturing.

The effects of ground-borne vibration include movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by only a small margin. A vibration level that causes annoyance can be well below the damage threshold for normal buildings.

Existing Conditions

Existing Noise-Sensitive Land Uses

Noise sensitive land uses, where high noise levels from construction, mechanical equipment, or other activities can disrupt sleep, or where long-term exposure can result in health effects, are typically defined as residences, schools, places of worship, hospitals and care centers. Sensitive land uses located near the project site consist of single- and multi-family residences. The nearest sensitive land uses to the RBOC include the Cannery Place Apartments located approximately 795 feet north of the project boundary, and residences located near the intersection of Bannan

⁵ Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Manual*. September 2018.

Street and Water Street located approximately 860 feet east of the project site. All other existing sensitive land uses are located beyond 1,000 feet from the RBOC boundary.

Existing Noise Environment

The ambient noise environment surrounding the project site is primarily the result of vehicle traffic along Richards Boulevard, North 7th Street and North B Street, as well as rail and light rail traffic. Other noise sources in the area include trucks idling to enter and unload materials at the existing onsite printing facility.

To quantify the existing ambient noise levels, ESA conducted a noise survey within and near the project site. The noise survey began on December 18, 2018 and consisted of three 15-minute short-term and one 24-hour long-term noise measurements. The long-term measurements and the measurement at ST-2 were used establish the existing baseline noise levels at the project site. The long-term measurement was then used to calculate the Ldn for the purposes of assessing land use compatibility (see Section 3.8-2). Location ST-1 is the location of the nearest noise-sensitive land use south of the project site, while location ST-3 is the location of the nearest noise-sensitive land use north of the project site. Daytime measurements were conducted for the short-term locations to reflect conditions when construction and daytime operations of the proposed office land use would be most active. The location of the short- and long-term noise measurements are shown in **Figure 3.8-2**. Results of the short- and long-term noise measurements are presented in **Tables 3.8-1** and **3.8-2**, respectively. The three short-term noise measurements were conducted using a Larson Davis 831 sound level meter (SLM) and the one long-term noise measurement was conducted using a Larson Davis LxT SLM. All SLMs were calibrated before and after the noise measurement survey.

**TABLE 3.8-1
 15-MINUTE SHORT-TERM AMBIENT NOISE MONITORING RESULTS**

Monitor	Start time	L _{eq} (dBA)	L _{max} (dBA)	Primary Noise Source(s)
ST-1	11:47 a.m.	57	68	Bannon Street
ST-2	11:20 a.m.	55	65	7 th Street, light rail traffic
ST-3	10:52 a.m.	58	67	7 th Street, idling trucks

SOURCE: ESA, 2018.

**TABLE 3.8-2
 24-HOUR LONG-TERM AMBIENT NOISE MONITORING RESULTS**

Monitor	Start Date & Time	24-hour L _{eq} (dBA)	L _{dn} (dBA)	L _{max} (dBA)
LT-1 ¹	12/18/18 11:00 a.m.	63	67	96

NOTES:

1. The primary noise sources at LT-1 consisted of vehicular and light rail traffic along 7th Street, as well as haul truck trips to the project site.

SOURCE: ESA, 2018.



SOURCE: Google Earth Pro, basemap, 2018; ESA, 2019

Richards Boulevard Office Complex

Figure 3.8-2
Short- and Long-Term Noise Measurements

Baseline Conditions

The State has already approved the Demolition Project at the project site. Whether or not the project is approved, the State will relocate the printing plant and all employees and demolish the existing structures. Although baseline conditions would not include any onsite operational activities, the noise environment and sources (e.g., vehicular and rail traffic) in the vicinity of the RBOC would remain the same as under the existing conditions described above in Table 3.8-1 and Table 3.8-2.

As relocation of the existing use and demolition of the existing structures will occur with or without the approval of this project, the appropriate baseline from which to compare the impacts of the project is the future condition of the site once the Demolition Project has been completed. Consequently, the impact discussions below will compare the project against the assumed future conditions for noise.

3.8.2 Regulatory Setting

Federal

No federal plans, policies, regulations, or laws related to noise or vibration are applicable to the project.

State

The State of California establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the State pass-by standard is consistent with the federal limit of 80 dBA. The State pass-by standard for light trucks and passenger cars (less than 4.8 tons, gross vehicle rating) is also 80 dBA at 15 meters from the roadway centerline. These standards are implemented through controls on vehicle manufacturers and by legal sanction of vehicle operators by State and local law enforcement officials.

State regulations include requirements for the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings that are intended to limit the extent of noise transmitted into habitable spaces. These requirements are collectively known as the California Noise Insulation Standards and are found in Title 24 of the California Code of Regulations (CCR).

The State of California updated its Building Code requirements with respect to sound transmission, effective January 2014. Section 1207 of the California Building Code (CCR, Title 24) establishes material requirements in terms of sound transmission class (STC)⁶ rating of 50 for all common interior walls and floor/ceiling assemblies between adjacent dwelling units or between dwelling units and adjacent public area. The previous code requirements (before 2014)

⁶ The STC is used as a measure of a materials ability to reduce sound. The STC is equal to the number of decibels a sound is reduced as it passes through a material.

set an interior performance standard of 45 dBA from exterior noise sources. This requirement was reinstated in July of 2015.

Local

The project is located on State-owned property and would be implemented by the California State Department of General Services (DGS). State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot conflict with these policies and ordinances. As a good faith gesture, local plans, policies, and regulations that are applicable to the project are described herein for reference. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

City of Sacramento 2035 General Plan

The following noise and vibration-related goals and policies identified in the Environmental Constraints Element of the *City of Sacramento 2035 General Plan*⁷ are relevant to the project.

Goal EC 3.1: Noise Reduction. Minimize noise impacts on human activity to ensure the health and safety of the community.

Policy EC 3.1.1: Exterior Noise Standards. The City shall require noise mitigation for all development where the projected exterior noise levels exceed those shown in **Table 3.8-3** (Table EC 1 in the General Plan), to the extent feasible.

**TABLE 3.8-3
EXTERIOR NOISE COMPATIBILITY STANDARDS FOR VARIOUS LAND USES**

Land Use Type	Highest Level of Noise Exposure that is Regarded as "Normally Acceptable" ^a (L _{dn} ^b or CNEL ^c)
Residential—Low Density Single Family, Duplex, Mobile Homes	60 dBA ^{d,e}
Residential—Multi-family	65 dBA
Urban Residential Infill ^f and Mixed-Use Projects ^g	70 dBA
Transient Lodging—Motels, Hotels	65 dBA
Schools, Libraries, Churches, Hospitals, Nursing Homes	70 dBA
Auditoriums, Concert Halls, Amphitheaters	Mitigation based on site-specific study
Sports Arena, Outdoor Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70 dBA
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75 dBA
Office Buildings—Business, Commercial and Professional	70 dBA
Industrial, Manufacturing, Utilities, Agriculture	75 dBA

NOTES:

- As defined in the *State of California General Plan Guidelines*, "Normally Acceptable" means that the "specified land use is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements."
- L_{dn} or Day Night Average Level is an average 24-hour noise measurement that factors in day and night noise levels.
- CNEL or Community Noise Equivalent Level measurements are a weighted average of sound levels gathered throughout a 24-hour period.
- dBA or A-weighted decibel scale is a measurement of noise levels.
- The exterior noise standard for the residential area west of McClellan Airport known as McClellan Heights/Parker Homes is 65 dBA.

⁷ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

**TABLE 3.8-3
 EXTERIOR NOISE COMPATIBILITY STANDARDS FOR VARIOUS LAND USES**

Land Use Type	Highest Level of Noise Exposure that is Regarded as “Normally Acceptable” ^a (L _{dn} ^b or CNEL ^c)
f. With land use designations of Central Business District, Urban Neighborhood (Low, Medium, or High) Urban Center (Low or High), Urban Corridor (Low or High).	
g. All mixed-use projects located anywhere in the City of Sacramento.	
SOURCE: City of Sacramento, 2015. <i>City of Sacramento 2035 General Plan</i> . Adopted March 3, 2015. p. 2-350.	

Policy EC 3.1.2: Exterior Incremental Noise Standards. The City shall require noise mitigation for all development that increases existing noise levels by more than the allowable increment shown in **Table 3.8-4** (Table EC 2 in the General Plan), to the extent feasible.

**TABLE 3.8-4
 EXTERIOR INCREMENTAL NOISE IMPACT STANDARDS FOR NOISE-SENSITIVE USES (DBA)**

Residences and Buildings where People Normally Sleep ^a		Institutional Land Uses with Primarily Daytime and Evening Uses ^b	
Existing L _{dn}	Allowable Noise Increment	Existing Peak Hour L _{eq}	Allowable Noise Increment
45	8	45	12
50	5	50	9
55	3	55	6
60	2	60	5
65	1	65	3
70	1	70	3
75	0	75	1
80	0	80	0

NOTES:

- a. This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
- b. This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material.

SOURCE: City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015. p. 2-351.

Policy EC 3.1.3: Interior Noise Standards. The City shall require new development to include noise mitigation to assure acceptable interior noise levels appropriate to the land use type: 45 dBA L_{dn} for residential, transient lodgings, hospitals, nursing homes, and other uses where people normally sleep; and 45 dBA L_{eq} (peak hour) for office buildings and similar uses.

Policy EC 3.1.4: Interior Noise Review for Multiple, Loud Short-Term Events. In cases where new development is proposed in areas subject to frequent, high-noise events (such as aircraft over-flights, or train and truck pass-by events), the City shall evaluate noise impacts on any sensitive receptors from such events when considering whether to approve the development proposal, taking into account potential for sleep disturbance, undue annoyance, and interruption in conversation, to ensure that the proposed development is compatible within the context of its surroundings.

Policy EC 3.1.5: Interior Vibration Standards. The City shall require construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.

Policy EC 3.1.6: Effects of Vibration. The City shall consider potential effects of vibration when reviewing new residential and commercial projects that are proposed in the vicinity of rail lines or light rail lines.

Policy EC 3.1.7: Vibration. The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and archaeological sites and require all feasible measures be implemented to ensure no damage would occur.

Policy EC 3.1.8: Operational Noise. The City shall require mixed-use, commercial, and industrial projects to mitigate operational noise impacts to adjoining sensitive uses when operational noise thresholds are exceeded.

Policy EC 3.1.9: Compatibility with Park and Recreation Uses. The City shall limit the hours of operation for parks and active recreation areas in residential areas to minimize disturbance to residences.

Policy EC 3.1.10: Construction Noise. The City shall require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on these uses, to the extent feasible.

City of Sacramento Municipal Code (Noise Control Ordinance)

The Sacramento Municipal Code includes noise regulations in Title 8 – Health and Safety, Chapter 8.68 – Noise Control (referred to generally as the Noise Control Ordinance). Of the regulations in Chapter 8.68, the following regulations would be applicable to the project:

- Section 8.68.080 exempts certain activities from Chapter 8.68, including “noise sources due to the erection (including excavation), demolition, alteration, or repair of any building or structure” as long as these activities are limited to between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday, and between the hours of 9:00 a.m. and 6:00 p.m. on Sunday. The use of exhaust and intake silencers for internal combustion engines is also required. Construction work can occur outside of the designated hours if the work is of urgent necessity and in the interest of public health and welfare for a period not to exceed 3 days. Section 8.68.080 also exempts noise from any mechanical device, apparatus, or equipment related to or connected with emergency activities or emergency work from Chapter 8.68 requirements.
- Section 8.68.060 sets standards for cumulative exterior noise levels at residential and agricultural properties, including exterior noise standards of 55 dBA from 7:00 a.m. to 10:00 p.m., and 50 dBA from 10:00 p.m. to 7:00 a.m. Per Section 8.68.060(b), the allowable decibel increase above the exterior noise standards in any one hour are:
 1. 0 dB for cumulative period of 30 minutes per hour;
 2. 5 dB for cumulative period of 15 minutes per hour;
 3. 10 dB for cumulative period of 5 minutes per hour;

4. 15 dB for cumulative period of 1 minutes per hour; or
5. 20 dB not to be exceeded for any time per hour.

In addition, per Section 8.68.060(c), each of the noise limits above shall be reduced by 5 dB for impulsive or simple tone noises, or for noises consisting of speech or music. If the ambient noise level exceeds that permitted by any of the first four noise limit categories specified in subsection (b) above, the allowable noise limit shall be increased in 5 dB increments in each category to encompass the ambient noise level. If the ambient noise level exceeds the fifth noise level category, the maximum ambient noise level shall be the noise limit for that category.

3.8.3 Analysis, Impacts and Mitigation

Significance Criteria

Although State projects are exempt from local ordinances and standards, City noise standards are reasonable and appropriate thresholds for determination of significance. Therefore, a noise impact is considered significant if implementation of the project would result in any of the following:

- Construction activities would occur outside of the construction exempt hours found in Section 8.68.080 of the City of Sacramento Municipal Code;
- Construction noise levels would result in a substantial temporary increase in ambient noise levels in the project vicinity above levels existing without the project;
- A substantial permanent increase in ambient exterior noise levels in the project vicinity that exceed standards in the City's 2035 General Plan or Noise Control Ordinance;
- Residential interior noise levels of 45 dBA L_{dn} or greater caused by project operation;
- Sensitive land uses exposed to operational noise levels in excess of the noise standards found in the Section 8.68.060 of the City of Sacramento Municipal Code;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- 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, the project expose would people residing or working in the project area to excessive noise levels; or,
- For a project located in the vicinity of a private airstrip, the project would expose people residing or working in the project area to excessive noise levels.

Methods and Assumptions

Construction noise impacts are assessed relative to the increase in noise levels that could result from the operation of specified construction equipment compared to existing noise level conditions. Analysis of the project's temporary construction noise effects is based on specific estimates of construction equipment and duration of use from the project applicant. In all cases, the analyses accounted for attenuation of noise levels due to distances between the construction activity and the sensitive land uses in the site vicinity. Construction noise levels at nearby

sensitive land uses that would be associated with the project were estimated using the FHWA's *Roadway Construction Noise Model* (RCNM).⁸ The FTA's *Transit Noise and Vibration Impact Manual* provides guidelines for reasonable criteria for assessment of construction noise.

For the purposes of the assessment of potential vibration impacts, the methodology described in the Caltrans' *Transportation and Construction Vibration Guidance Manual* was used to evaluate project-related vibration effects to nearby sensitive land uses.⁹ The Caltrans guidance manual focuses entirely on addressing vibration from construction activities. Impact pile driving is considered a continuous/frequent intermittent source.¹⁰ According to Caltrans' guidance, vibration threshold where vibration level increases are considered result in a server human response is 0.4 PPV (in/sec) for continuous/frequent intermittent sources. As for structural damage, an older residential and modern industrial building expose to vibration level of 0.3 PPV (in/sec) and 0.5 PPV (in/sec), respectively, could result in building damage.¹¹ There are no historic structures located within 500 feet of the project site. Off-site sensitive receptors exposed to construction vibration levels that would exceed the later of these thresholds would be considered to result in a significant impact. Buildings that would be exposed to construction vibration levels that would exceed the former of these thresholds would also be considered to result in a significant impact.

Non-transportation operational activities at the project site including operation of heating, ventilation and air-conditioning systems (HVAC) units, onsite testing of consumer products and loading docks were also evaluated. Referenced noise levels generated during these operations (i.e., HVAC, loading docks) were used to calculate a L_{eq} at the nearest sensitive receptor.

Issues or Potential Impacts Not Discussed Further

The project site is not located within an airport land use plan, or within two miles of a public airport or public use airport. Additionally, the RBOC is not located within two miles of a private airstrip; Sacramento Executive Airport is the closest airport and is located approximately 5 miles south of the project site. Thus, the RBOC would not result in noise impacts related to the exposure of people residing or working in the project area to excessive aircraft-related noise levels, and there would be no impact. This issue is not discussed further.

⁸ Federal Highway Administration, 2006. *FHWA Roadway Construction Noise Model User's Guide*. January 2006.

⁹ California Department of Transportation, 2013. *Transportation and Construction Vibration Guidance Manual*. September 2013.

¹⁰ California Department of Transportation, 2013. *Transportation and Construction Vibration Guidance Manual*. September 2013.

¹¹ California Department of Transportation, 2013. *Transportation and Construction Vibration Guidance Manual*. September 2013.

Impacts and Mitigation Measures

Impact 3.8-1: Construction of the project could generate noise that would conflict with City of Sacramento's noise standards.

Construction of the RBOC would occur entirely within the City of Sacramento. Section 8.68.080 of the City of Sacramento Municipal Code exempts construction activities provided all construction equipment are equipped with the appropriate exhaust and intake silencers for internal combustion engines and activities occur between the hours of 7:00 a.m. and 6:00 p.m. Monday through Saturday, and between the hours of 9:00 a.m. and 6:00 p.m. on Sunday. Since the construction schedule for the RBOC has not yet been finalized, construction activities associated with site preparation, building construction or paving could occur beyond the allowed hours specified in the City of Sacramento Municipal Code. Therefore, RBOC-related construction activities during nighttime hours could conflict with the City of Sacramento Municipal Code. The project is not subject to the restrictions of local jurisdictions, including Section 8.68.080 of the City of Sacramento Municipal Code, which would include submittal of a conditional work application for any required nighttime work. As a practical matter, the State would not apply for such a permit from a local jurisdiction. The significance criteria for this analysis applies the standards of the City Noise Ordinance and, as the State would not apply for a local permit to engage in nighttime construction activity, the potential for nighttime construction work is conservatively identified as significant and unavoidable.

As discussed in Impact 3.8-2 below, construction work would result in noise levels of approximately 59 dBA L_{eq} at the nearest receptors. The City of Sacramento does not have established noise level standards that are applicable to short-term construction activities in its general plan and municipal code. Although there are no applicable local policies or standards available to judge the significance of short-term daytime construction noise levels, the FTA's Transit Noise and Vibration Impact Manual has identified a nighttime 1-hour L_{eq} level of 80 dBA as a noise level where adverse community reaction could start to occur at residential land uses during nighttime hours.¹² Notwithstanding the fact that construction noise levels would be relatively modest, because construction activity could occur during nighttime hours normally restricted by the City of Sacramento Municipal Code without a City permit, this impact is conservatively identified as **significant and unavoidable**.

Mitigation Measure

None available.

¹² Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Manual*. September 2018, p. 179.

Impact 3.8-2: Construction of the project would not result in a substantial temporary or periodic increase in ambient noise levels in the RBOC vicinity above levels existing without the RBOC.

Noise levels from construction activity at nearby sensitive receptors would fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. Construction-related material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips made and types of vehicles used. In addition, certain types of construction equipment generate impulsive noises (such as pile driving), which can be disruptive. **Table 3.8-5** shows typical noise levels produced by the types of construction equipment that would likely be used during the construction of the project.

**TABLE 3.8-5
 REFERENCE CONSTRUCTION EQUIPMENT NOISE LEVELS
 (50 FEET FROM SOURCE)**

Type of Equipment	L _{max} , dBA	Hourly L _{eq} , dBA/% Use ¹
Backhoe	80	76/40%
Grader	85	81/40%
Scraper	85	81/40%
Crane	85	73/16%
Dozer	85	81/40%
Forklift	85	78/20%
Generator	82	79/50%
Paver	85	82/50%
Roller	85	78/20%
Loader	80	76/40%
Air Compressor	80	76/40%
Impact Pile Driver	95	88/20%
Excavator	85	81/40%

NOTES:

1 Percent used during the given time period (usually an hour – hourly L_{eq}) were obtained from the FHWA Roadway Construction Noise Model User's Guide.

SOURCE: Federal Highway Administration, 2006. *FHWA Roadway Construction Noise Model*. January 2006.

The operation of each piece of equipment would not be constant throughout the day, as equipment would be turned off when not in use. Over a typical workday, the equipment would be operating at different locations and all the equipment would not operate concurrently at the same location of the project. To quantify construction-related noise exposure that would occur at the nearest sensitive receptors, it was assumed that the two loudest pieces of construction equipment would operate at the closest location of the project to the nearest off-site sensitive receptors.

The City of Sacramento does not contain noise level standards that are applicable to short-term construction activities in its general plan and municipal code. Although there are no applicable

local policies or standards available to judge the significance of short-term daytime construction noise levels, the FTA's Transit Noise and Vibration Impact Manual has identified a daytime 1-hour L_{eq} level of 90 dBA as a noise level where adverse community reaction could occur at residential land uses. This noise level is used here to assess whether construction-related noise levels would cause a substantial temporary or periodic increase in ambient noise levels at sensitive receptor locations.

As previously discussed, residences are located approximately 795 feet north of the project boundary. Assuming an impact pile driver and excavator operating at the closest point to this residence and an attenuation rate of 7.5 dB per doubling of distance, the closest residence to the project would be exposed to a noise level of 59 dBA L_{eq} , below the applied 90 dBA L_{eq} threshold. Therefore, the temporary increase in ambient noise levels would result in a **less-than-significant** impact.

Mitigation Measure

None required.

Impact 3.8-3: Operation of project could increase local traffic that could result in a substantial permanent increase in ambient exterior noise levels in the project vicinity or conflict with the City of Sacramento noise standards.

Most of the long-term noise that would result due to the implementation of the project would primarily be traffic-generated. The project would contribute to an increase in local traffic volumes, resulting in higher traffic noise levels along local roadways. Using algorithms from the FHWA's *Traffic Noise Model Technical Manual* and the estimated project traffic volumes provided by the 2019 Fehr & Peers traffic study, traffic noise levels were estimated for roadway segments near the project site under Baseline and Baseline plus project conditions. See **Appendix F** for noise modeling details. Roadway segments were selected based on the presence of existing or future sensitive receptors or because they would be primary access routes to the project site. The segments analyzed and the associated results of the modeling are shown in **Table 3.8-6**. According to the City of Sacramento General Plan Policy EC 3.1.2, exposure of residences to future traffic noise levels that exceed the allowable incremental noise increases detailed in Table 3.8-4 would be considered significant.

As shown in Table 3.8-6, none of the sensitive land uses along roadway segments analysis would be exposed to an increase in traffic noise that would exceed the City of Sacramento General Plan Policy EC 3.1.2 threshold. Therefore, the increase in vehicular traffic along local roadways would result in the exposure of adjacent existing sensitive land uses to traffic noise that would result in a **less-than-significant** impact.

Mitigation Measure

None required.

**TABLE 3.8-6
BASELINE AND PROJECTED L_{EQ} TRAFFIC NOISE LEVELS ALONG STREETS
SACRAMENTO CONVENTION CENTER**

Roadway Segment	Traffic Noise Level, dBA, Leq ¹				
	Baseline	Allowable Increase Increment ²	Baseline plus Project	Incremental Increase	Existing Land uses Exposed to a Significant Increase in Traffic Noise? (Yes or No) ²
N 7th Street					
Richards Boulevard to Vine Street (Residential)	60	2	60	0	No
Richards Boulevard to North B Street (non-residential)	63	3	65	2	No
Water Street to Railyards Boulevard (non-residential)	65	3	66	1	No
N 5th Street					
Richards Boulevard to Riverfront Drive (non-residential)	56	6	56	0	No
Richards Boulevard					
I-5 to Sequoia Pacific Boulevard (non-residential)	70	3	72	2	No
Sequoia Pacific Boulevard to N 7 th Street (non-residential)	70	3	72	2	No
Dos Rios Street to N 16 th Street (non-residential)	70	3	71	1	No
Dos Rios Street					
Richards Boulevard to Vine Street (School)	61	5	61	0	No
Richards Boulevard to N D Street (Residential)	57	2	57	0	No

NOTES:

- Noise levels were determined using methodology described in FHWA Traffic Noise Model Technical Manual. See Appendix F for details of assumptions.
- Existing land uses exposed to traffic noise that result in a noise increase greater than what is allowed in the City of Sacramento General Plan Policy EC 3.1.2 is considered a significant impact.

SOURCE: ESA, 2019

Impact 3.8-4: Operation of the project could introduce new stationary noise sources that could conflict with the City of Sacramento noise standards.

Loading Docks

The RBOC may include loading docks along either Richards Boulevard or North 7th Street. Since the final design of the RBOC has not yet been finalized, the exact location and number of loading

docks are currently unknown. For this analysis, the loading docks are conservatively assumed to be located within the project area closest to the nearest offsite sensitive receptor located approximately 795 feet north of the RBOC boundary. Truck deliveries at loading docks generate noise as a result of truck arrivals and departures from the unloading area, trucks backing into the docks (including backup beepers), air brakes, and other truck unloading-related noise. These activities would be a source of elevated noise levels at nearby sensitive receptors. Noise levels of 60 dBA L_{eq} at a distance of 50 feet can be generated during loading dock activities.¹³

Since the operating hours of the potential loading docks are currently unknown, it is conservatively assumed that truck deliveries would occur during both the daytime and nighttime hours. Assuming a 7.5 dB per doubling attenuation rate, the nearest sensitive receptor to the project site would be exposed to a noise level of 30 dBA L_{eq} , below the City of Sacramento nighttime noise standard of 50 dBA L_{eq} . Therefore, operation of loading docks at the RBOC would expose nearby sensitive land uses to noise levels that would result in a **less-than-significant** impact.

Central Plant

The RBOC would include a Central Plant. The Central Plant would provide heating, cooling and power to the proposed office buildings. The primary new sources of noise generated by the Central Plant would be from boilers and potentially from cooling towers. Although the noise generated by the boiler could result in generation of noise within the proposed office buildings, because the boilers would be completely enclosed, the exterior noise levels outside of the proposed office buildings is not expected to result in a substantial noise increase at nearby existing sensitive land uses. Cooling towers often can emit high levels of noise that range between approximately 70 to 85 dBA at a distance of 50 feet. Preliminary project details do not show cooling tower locations. However, given the substantial distance to the nearest sensitive receptors (approximately 800 feet) noise levels at the nearest sensitive receptor would be reduced to existing monitored ambient levels monitored at locations ST-1 and ST-3. Therefore, Central Plant operations would result in a **less-than-significant** impact.

Mitigation Measure

None required.

Impact 3.8-5: The project could result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to RBOC operation.

Operational traffic as a result of the project would increase traffic noise levels at existing land uses in the projects' vicinity, as described above in Impact 3.8-3. Typical building construction techniques such as insulation and double-paned windows can reduce noise levels by

¹³ ESA, 2008. *Fresh & Easy Distribution Truck Noise Study*. November 2008.

approximately 25 dB with the windows closed.¹⁴ Assuming an outdoor to indoor attention of 25 dB, residential buildings exposed to exterior noise level of 70 dBA L_{dn} or less would result in interior noise levels of 45 dBA L_{dn} or less. As shown in Table 3.8-6, the total roadway noise under baseline plus project conditions would not exceed the 70 dBA L_{dn} standard at existing residential uses. The project-generated traffic volumes along roadways within the project area would not exceed the City of Sacramento's exterior noise standard to the extent that interior noise levels at existing residential uses adjacent to these roadway segments would increase above 45 dBA L_{dn} . Nor would operational noise associated with loading dock operations exceed 70 dBA L_{dn} at nearby sensitive receptors, thereby maintaining interior noise levels at or below the 45 dBA interior noise threshold. Therefore, the project would not result in residential interior noise levels of 45 dBA L_{dn} or greater and interior residential noise would be result in a **less-than-significant** impact.

Mitigation Measure

None required.

Impact 3.8-6: Construction of the project could expose existing and/or planned buildings, and persons within, to vibration that could disturb people and damage buildings.

Since the operation of the RBOC would not include any activities that generate significant levels of vibration, it is not anticipated that the operation of the RBOC would expose the nearest sensitive receptor or structure to vibration levels that would result in human annoyance or building damage. Therefore, only vibration impacts from onsite construction activities are evaluated.

The construction of the RBOC would require the use of equipment or vehicles that could expose nearby sensitive receptors to vibrations levels that may result in an annoyance or building damage. According to the Caltrans' *Transportation and Construction Vibration Guidance Manual*, an exposure of vibration level of 0.4 "severe" human response PPV (in/sec) would result in a severe human response.¹⁵ As for structural damage, an older residential and modern industrial building expose to vibration level of 0.3 PPV (in/sec) and 0.5 PPV (in/sec), respectively, could result in building damage.¹⁶ Since there are no historic structures located within 500 feet of the RBOC, historic structures near the RBOC would not be affected by construction vibration.

¹⁴ U.S. Environmental Protection Agency, 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. March 1974.

¹⁵ California Department of Transportation, 2013. *Transportation and Construction Vibration Guidance Manual*. September 2013.

¹⁶ California Department of Transportation, 2013. *Transportation and Construction Vibration Guidance Manual*. September 2013.

Ground-borne vibration from onsite impact pile driving activities and the potential use of a large bulldozer during the building construction phase could produce substantial vibration at nearby sensitive receptors, including structures themselves. Typical reference vibration levels for an impact pile driver and bulldozer are listed below in **Table 3.8-7**. As shown in Table 3.8-7, the use of an impact pile driver would generate the highest vibration levels. Based on site visits, the nearest residence is located approximately 795 feet north of the RBOC and the nearest building is located approximately 80 feet west of the project. Attenuated vibration levels at these receptors are shown in **Table 3.8-8**. As shown in Table 3.8-8, the nearest residences and building would not be exposed to vibration levels that would result in either server human reaction or building damage; resulting in a **less-than-significant** impact.

**TABLE 3.8-7
 VIBRATION VELOCITIES FOR CONSTRUCTION EQUIPMENT**

Equipment/Activity	PPV at 25 ft (inches/second) ^a
Large Bulldozer	0.089
Pile Driver (Impact)	0.644

SOURCE: Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Manual*. September 2018.

**TABLE 3.8-8
 SUMMARY OF VIBRATION LEVELS AT SENSITIVE RECEPTORS DURING CONSTRUCTION**

Receptor Type	Highest Vibration Source	PPV a 25 feet (inch/second) ¹	Distance to nearest Sensitive Receptor (feet)	Attenuated Vibration Level (PPV inch/second)
Closest Residence	Impact Pile Driver	0.644	795	0.003
Closest Building	Impact Pile Driver	0.644	80	0.113

SOURCE: Federal Transit Administration, 2018. *Transit Noise and Vibration Impact Manual*. September 2018.

Mitigation Measure

None required.

Cumulative Impacts

The geographic context for changes in the noise and vibration environment due to development of the RBOC would be localized in an urban area of the City of Sacramento, as well as along roadways that would serve the project. In order to contribute to a cumulative construction noise impact, another project in close proximity would have to be constructed at the same time as the RBOC. There are numerous development projects in several locations near the RBOC, currently in the planning stages that could be constructed and operational in the foreseeable future. The

largest project near the RBOC is the development of the Sacramento Railyards Specific Plan, which is located immediately south of the project site.

Impact 3.8-7: The project, in conjunction with other planned projects, could result in exposure of people to cumulative increases in construction noise levels.

The project area could experience concurrent construction of multiple projects in the vicinity of the RBOC project site, including construction in the Railyards. Construction activities would be expected to occur during daytime hours, consistent with the City's Municipal Code requirements. However, as previously discussed in Impact 3.8-2, due to the large distance between the RBOC and nearest sensitive land use, RBOC-related construction noise would not result in a substantial temporary increase in the existing ambient noise levels. Since the RBOC would not result in a significant contribution to cumulative construction noise in the City of Sacramento, the RBOC would not have a cumulative considerable contribution to the impact, and the cumulative impact would be **less than significant**.

Mitigation Measure

None required.

Impact 3.8-8: The project, in conjunction with other planned projects, could contribute to cumulative construction that could expose existing and/or planned buildings, and persons within, to significant vibration.

As previously discussed under Impact 3.8-5, the construction activities within the RBOC area could require the use of an impact pile driver during building construction. As shown in Table 3.8-8, the nearest residences and building to the RBOC area would not be exposed to high vibration levels during RBOC construction. If RBOC construction were to coincide with another development (e.g., Sacramento Railyards Specific Plan) in close physical proximity, the combined effect could result in the exposure of sensitive receptors and buildings to higher vibration levels than what was predicted for the RBOC. For this cumulative impact to occur, the nearest cumulative project would have to be located approximately 50 feet from the residences or building exposed to vibration by project construction. Since there are no cumulative projects located within 50 feet of any of any residences or buildings nearest to the RBOC, the project would not have a cumulative considerable contribution to the impact, and the cumulative impact would be **less than significant**.

Mitigation Measure

None required.

Impact 3.8-9: The project, in conjunction with other planned projects, could contribute to cumulative increases in traffic noise levels.

On-road traffic associated with the full build-out of the proposed RBOC would be the primary source that would contribute to the cumulative noise environment. Noise projections were made using traffic noise prediction equations found in the FHWA’s *Traffic Noise Model Technical Manual* for Existing, Cumulative and Cumulative plus RBOC project conditions using roadway traffic volumes.¹⁷ The segments analyzed and results of the modeling are shown in **Table 3.8-9**.

**TABLE 3.8-9
 CUMULATIVE L_{EQ} TRAFFIC NOISE LEVELS ALONG STREETS IN THE PROJECT VICINITY**

Roadway Segment	Traffic Noise Level 50 feet from Center of Roadway, dBA, L _{eq} ¹						
	Baseline	Cumulative without Project	Cumulative with Project	Cumulative with Project incremental increase above Baseline Conditions	Cumulative with Project incremental increase above Cumulative without Project Conditions	Cumulatively Significant? (Yes or No) ²	Project's Contribution Significant? (Yes or No) ²
N 7th Street							
Richards Boulevard to Vine Street (Residential)	60	64	64	4	0	Yes	No
Richards Boulevard to North B Street (non-residential)	63	66	67	4	1	No	No
Water Street to Railyards Boulevard (non-residential)	65	69	69	4	0	Yes	No
N 5th Street							
Richards Boulevard to Riverfront Drive (non-residential)	56	62	64	8	2	Yes	No
Richards Boulevard							
I-5 to Sequoia Pacific Boulevard (non-residential)	70	72	72	2	0	No	No
Sequoia Pacific Boulevard to N 7 th Street (non-residential)	70	71	72	2	1	No	No
Dos Rios Street to N 16 th Street (non-residential)	70	74	74	4	0	Yes	No
Dos Rios Street							
Richards Boulevard to Vine Street (School)	61	63	63	2	0	No	No
Richards Boulevard to N D Street (Residential)	57	66	66	9	0	Yes	No

NOTES:

- Noise levels were determine using methodology described in FHWA Traffic Noise Model Technical Manual.
- Existing sensitive land uses exposed to traffic noise that result in a noise increase greater than what is allowed in the City of Sacramento General Plan Policy EC 3.1.2 is considered a significant impact.

SOURCE: ESA, 2019

¹⁷ Fehr & Peers, 2019. *Traffic Report*. February 2019.

Cumulative traffic noise level significance is determined by a two-step process. First, a comparison is made of the increase in noise levels between cumulative conditions with the project and baseline conditions to incremental threshold established in the City of Sacramento's General Plan Policy EC 3.1.2 (Table 3.8-4). If the roadside noise levels would exceed this incremental threshold, a cumulative noise impact would be identified.

The second step of the cumulative roadside noise analysis (if a cumulative noise impact is predicted) is to evaluate if the contribution of the project to roadside noise levels is cumulatively considerable. This second step (if necessary) involves assessing whether the project contribution to roadside noise levels (i.e., the difference between cumulative conditions and cumulative plus project conditions) would exceed the incremental threshold established in the City of Sacramento's General Plan Policy EC 3.1.2 (Table 3.8-4). The roadway segments analyzed and the results of the noise increases resulting from modeling are shown in Table 3.8-9. As can be seen in Table 3.8-9, five of the roadway segments analyzed under Cumulative plus Project conditions would experience an increase in traffic noise levels over baseline conditions that would exceed the incremental threshold established in the City of Sacramento's General Plan Policy EC 3.1.2 (Table 3.8-4) and result in a cumulative roadway noise impact. However, the contribution of the project to these cumulative roadway noise impact along four of these roadways is less than 1-dBA. The contribution of the project to the cumulative roadway noise impact along North 5th Street would be a 2-dBA increase for a street with no residential receptors and resulting noise levels would still be within the "normally acceptable" category for commercial land use exposure. Consequently, while there would be a significant cumulative increase in roadway noise in the project vicinity, because the contribution of the project would not be cumulatively considerable, the cumulative noise impact of the project would be **less than significant**.

Mitigation Measure

None required.

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3.9 Population and Housing

This section assesses the potential effects on population and housing issues that may arise in connection with planning, construction, and operation of the Richards Boulevard Office Complex (RBOC) project (or project). This section includes relevant baseline information, including existing population and housing conditions in the city and Sacramento region and anticipated future conditions after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete. A description of the potential impacts resulting from the project is also provided, as well as the identification of feasible mitigation (where applicable) to avoid or lessen the impacts is also included.

No comments were received on the notice of preparation (NOP) regarding population or housing issues.

The primary sources of data referenced for this section include:

- U.S. Census Bureau's (US Census) American Fact Finder,
- California Department of Finance (DOF) Population and Housing Estimates,
- Sacramento Area Council of Government's (SACOG's) 2013-2021 Regional Housing Needs Assessment Plan,
- City of Sacramento 2035 General Plan Housing Element,
- City of Sacramento 2035 General Plan Master Environmental Impact Report,
- River District Specific Plan (RDSP), and
- 2010 RDSP EIR.

3.9.1 Environmental Setting

The project site is located in central Sacramento, within the River District. The existing citywide and countywide data and future trends regarding population, housing, and employment are presented below.

Existing Conditions

The project site is located in the Central City Community Plan area of Sacramento, which is generally defined as an approximately 6.9-square mile area, and the project site is located in the River District of the City of Sacramento, which is generally defined as an approximately 1.2-square mile area. The River District in Sacramento can be found within US Census Tract 53.01 which, as of 2010, had a population of approximately 1,823 persons living in approximately 310 households, with 91.3 percent of the units listed as renter-occupied. Based on 2017 American Community Survey (ACS) data, Census tract 53.01 had an estimated population of approximately 1,354 persons living in approximately 450 occupied housing units, with 97.6 percent of the units listed as renter-occupied. The median income for a household in Census Tract 53.01 according to

ACS data for 2017 was \$13,429 per year and the labor force comprised approximately 202 workers.¹

Population

The SACOG 2016 MTP/SCS projections estimate that the region’s population will reach over 3 million by 2036, resulting in the addition of approximately 810,000 new residents (37 percent) more than the region’s population in 2010 (2,190,000). The region includes Sacramento, Sutter, Yolo, Yuba, El Dorado and Placer counties (Tahoe area excluded).²

Over the 10-year period from 2000 to 2010, the population of the city of Sacramento increased from 407,018 to 466,488, or 12.7 percent.³ As shown in **Table 3.9-1**, between 2010 and 2020, population is anticipated to more than double in the central city area of Sacramento. based on the population projections provided in the City of Sacramento’s Housing Element document.

**TABLE 3.9-1
 POPULATION ESTIMATES FOR THE CITY OF SACRAMENTO, SACRAMENTO COUNTY, AND REGION**

Area/Jurisdiction	2010	2020	2010-2020 Growth (%)	2036	2030-2036 Growth (%)	2010-2036 Growth (%)
Central City ¹	32,367	71,436	120.7	109,312 ⁴	53.0	237.7
City of Sacramento ¹	466,488	528,866 ³	13.4	630,597 ³	19.2	35.2
Sacramento County ²	1,418,788	1,567,037	10.4	1,771,013	13.0	24.8
Region ³	2,268,138	2,472,567	9.0	3,078,772	24.5	35.7

NOTES:

- ¹ Provided by the City of Sacramento 2013–2021 Housing Element Page H 3-3 through H 3-6.
- ² Provided by the Department of Finance State and Department of Transportation County Population Projections
- ³ Provided by the 2016 MTP/SCS
- ⁴ Data for Central City available for 2035 only.

SOURCES: City of Sacramento, 2013. Sacramento 2035 General Plan Housing Element, Table H 3-2 Population 2000-2010, and Table H 3-3 Population Projections 2008-2035. Available: www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--General-Plan. Accessed January 2, 2018; California Department of Finance, 2018. Population Estimates for Cities, Counties and State, 2001-2010. Available: www.dof.ca.gov/Forecasting/Demographics/Estimates/E-4/2001-10/. Accessed January 3, 2019; Sacramento Area Council of Governments, 2016. Metropolitan Transportation Plan/Sustainable Communities Strategy. Available: <https://www.sacog.org/2016-mtpscs>. Accessed December 31, 2018; ESA, 2018.

Population growth in the city is projected to continue between 2020 and 2035, and most growth is expected to occur in the central city. The City of Sacramento population projections indicate that the city may have approximately 640,000 residents by 2035, an increase of approximately 174,000 residents. The City’s Housing Element estimated that the Central City Community Plan

¹ U.S. Census, 2017. ACS 2017 5-year data for Census Tract 53.01, Sacramento, CA, Census American Fact Finder. Available: <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>. Accessed January 2, 2019.
² Sacramento Area Council of Governments, 2016. Metropolitan Transportation Plan/Sustainable Communities Strategy. Available: <https://www.sacog.org/2016-mtpscs>. Accessed December 31, 2018.
³ California Department of Finance, 2018. Population Estimates for Cities, Counties and State, 2001-2010. Available: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-4/2001-10/>. Accessed January 3, 2019.

area had approximately 32,367 residents in 2010, and projected that, by 2035, the Central City Community Plan area would have a total of 109,312 residents.⁴

Housing

Long-term projections for the city of Sacramento by SACOG indicate substantial growth of housing, households, and population, as shown in **Table 3.9-2**, at rates exceeding those of the forecasted growth in Sacramento county and the region overall. The SACOG MTP/SCS projections and growth forecast reflects a 2012 base year estimate with projections to 2020 and 2036 for household population, housing units, and employment. The discussion and goals in the SACOG MTP/SCS incorporate market factors as well as regional and local policies that can influence regional development that occurs in the major cities, and higher-density urban locations of the Sacramento region.

**TABLE 3.9-2
 CITY OF SACRAMENTO HOUSING PROJECTIONS**

Topic	2012	2020	2036	Percent Change 2012-2036
Housing Units	191,749	201,810	263,609	37.5

SOURCE: Sacramento Area Council of Governments, 2016. Metropolitan Transportation Plan/Sustainable Communities Strategy. Available: <https://www.sacog.org/2016-mtpscs>. Accessed December 31, 2018.

As stated in the City of Sacramento’s Housing Element, the common understanding regarding housing vacancy rates is that 5 percent is considered balanced, and a vacancy rate below 5 percent indicates a housing shortage in a community. The US Census Bureau reports that the city had a vacancy rate of 1.2 percent for homeowner vacancies and 4.4 for rental vacancies in 2017.⁵ Similarly, the county had a vacancy rate of 1.3 for homeowner vacancies and 4.3 for rental vacancies in 2017. These rates indicate that both the city and county have a tight housing market and a housing shortage.

The 2013-2021 Regional Housing Needs Plan (RHNP) anticipates that 24,101 additional housing units would need to be developed in the city between 2013 and 2021 to meet regional housing needs.⁶ To meet projected housing demand for the city and the region, over 71,860 new housing units would need to be constructed between 2012 and 2036 (about 3,000 new units per year), which is a greater pace of housing growth than the 4,000 units built in total between 2010 and 2017, an eight-year span.

⁴ City of Sacramento, 2013. Sacramento 2035 General Plan Housing Element, Table H 3-2 Population 2000-2010, and Table H 3-3 Population Projections 2008-2035. Available: <http://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--General-Plan>. Accessed January 2, 2018.
⁵ U.S. Census, 2017. ACS 2017 5-year data for City of Sacramento, Census American Fact Finder. Available: <https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml>. Accessed January 3, 2019.
⁶ Sacramento Area Council of Governments, 2012. *Regional Housing Needs Plan*. Table 1 - 2013-2021 Regional Housing Needs Allocation Final Allocations – Total Projected Growth. Available: <https://www.sacog.org/post/regional-housing-needs-allocation>. Accessed January 3, 2018.

Employment

Just as with population and housing growth, employment is expected to increase, with an estimated 29 percent growth in employment from 2012 to 2035 (**Table 3.9-3**). The City of Sacramento projects an increase of approximately 86,483 employees by 2035, bringing the total estimated amount of employees in the city of Sacramento to 386,215.

**TABLE 3.9-3
 CITY OF SACRAMENTO POPULATION, HOUSING, AND JOBS PROJECTIONS**

Topic	2012	2035	Percent Change 2012-2036
Employees	299,732	386,215	29.0

NOTES:

As of February 2016, Total Household Population, Dwelling Units and Employment estimates for base year 2012, and projections to 2020 and 2036 were used. These static data are based on the Sacramento City jurisdictional estimates.

SOURCES: Sacramento Area Council of Governments, 2016. Metropolitan Transportation Plan/Sustainable Communities Strategy. Available: <https://www.sacog.org/2016-mtpscscs>. Accessed December 31, 2018; City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report*. Certified March 3, 2015; California Employment Development Department, 2018. *Labor Force and Unemployment Rate for Cities and Census Designated Places*. Available: <https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html>. Accessed January 4, 2019; California Department of Finance, 2018. *Population Estimates for Cities, Counties and State, 2001-2010*. Available: <http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-4/2001-10/>. Accessed on January 3, 2019.

According to the latest (2017) labor data available from the State of California Employment Development Department (EDD), there are 35,500 residents in the county that are employed in the construction industry (see **Table 3.9-4**). The unemployment rate countywide has decreased from 2012 to 2017 to 4.7 percent.

**TABLE 3.9-4
 EMPLOYMENT BY SELECTED INDUSTRY, SACRAMENTO COUNTY 2000 TO 2015**

Category	2000	2012	2017
State Government	81,600	82,400	89,600
Local Government	62,500	64,000	65,200
Federal Government	11,300	10,000	10,300
Professional & Business Services	81,300	83,900	95,400
Construction	32,400	23,600	35,500
Total for All Other Industries (not listed), and Including those listed above	564,000	576,600	647,700
Unemployment Rate	4.3%	10.5%	4.7%

NOTES:

- 1 Employment is by place of work; excludes self-employed individuals, unpaid family workers, household domestic workers, and workers on strike.
- 2 EDD notes that the employee totals from the industry totals reflected herein are not directly comparable to the EDD employment totals in Table 3.9-3.

SOURCE: California Employment Development Department, 2018. *Labor Force and Unemployment Rate for Cities and Census Designated Places*. Available: <https://www.labormarketinfo.edd.ca.gov/data/labor-force-and-unemployment-for-cities-and-census-areas.html>. Accessed January 4, 2019.

Baseline Conditions

The approved Demolition Project would result in a cleared project site, with no population-generating uses onsite. The only structure remaining would be a small pump house on the northwest corner,

3.9.2 Regulatory Setting

Federal

No federal plans, policies, regulations, or laws related to population and housing are applicable to the project.

State

No state plans, policies, regulations, or laws related to population and housing are applicable to the project.

Local

The project is located on State-owned property and would be implemented by the California State Department of General Services (DGS). State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot conflict with these policies and ordinances. As a good faith gesture, local plans, policies, and regulations that are applicable to the project are described herein for reference. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

Sacramento Area Council of Governments Preferred Blueprint Scenario

The Sacramento Region Blueprint is a transportation and land-use study that was initiated by the SACOG Board of Directors in 2002 and adopted in 2004 by the SACOG Board of Directors. The goal of the plan is to determine alternatives to current and planned transportation and land-use patterns, and is defined as including Sacramento, Sutter, Yolo, Yuba, El Dorado and Placer Counties (the Tahoe area excluded). The plan acts as a vision for growth that promotes compact, mixed-use development and more transit choices as an alternative to low-density development. The Sacramento Region Blueprint depicts a path to regional growth through the year 2050 that is generally consistent with principles of “smart growth,” which encourage a variety of housing close to employment, shopping, and entertainment and provide options for walking, biking, or taking public transit. The following Blueprint Growth Principles are relevant to the analysis of population and housing:⁷

Compact Development: Creating environments that are more compactly built and use space in an efficient, but more aesthetically pleasing manner can encourage additional walking, biking, and public-transit use, and shorten auto trips.

⁷ Sacramento Area Council of Governments, 2018. *Sacramento Region Blueprint*. Available: <https://www.sacog.org/overview/sacramento-region-blueprint>. Accessed December 31, 2018.

Mixed-Use Developments: Building homes, shops, entertainment, office, and light-industrial uses near each other can encourage active, vital neighborhoods. This mixture of uses can occur at different scales and be arranged vertically or horizontally. These types of projects can function as local activity centers where people would tend to walk or bike to destinations and interact more with each other.

Housing Choice and Diversity. Providing a variety of places where people can live- apartments, townhomes, condominiums and single-family detached homes of varying lot sizes- creates opportunities for the variety of people who need them: families, singles, seniors and people with special needs.

Use of Existing Assets: In urbanized areas, development on infill or vacant lands, intensification of the use of underutilized parcels, or redevelopment can make better use of existing public infrastructure. This can also include rehabilitation and reuse of historic buildings, denser clustering of buildings in suburban office parks, and joint use of existing public facilities such as schools and parking garages.

SACOG 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)

The SACOG 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. Additionally, the 2016 MTP/SCS plans for focusing new growth around transit and transportation options in the region following SACOG's adoption of the Blueprint, and planning for additional housing and jobs near transit while also planning for changing demand in the types of housing.

The 2016 MTP/SCS covers the period from 2012 to 2036. SACOG is required by federal law to update the MTP at least every four years. SACOG uses the MTP/SCS to identify, in collaboration with cities, counties, and transit agencies, growth and transportation investment priorities over a 20-year planning horizon. The city of Sacramento, as well as the other cities and counties in the region, have been updating its general plan and development code to allow and encourage Blueprint-friendly development and transit districts. The buildout assumptions, population projections, and transportation assumptions of the 2035 General Plan are based largely on information provided by SACOG for the 2012 MTP/SCS. In the city, the Preferred Blueprint Scenario provides for higher densities, and increased infill development.

The guiding principles from the MTP/SCS, adopted by SACOG, relevant to the population and housing are listed below:

Smart Land Use: Design a transportation system to support good growth patterns, including increased housing and transportation options, focusing more growth inward and improving the economic viability of rural areas.

Economic Vitality: Efficiently connect people to jobs and get goods to market.

Access and Mobility: Improve opportunities for businesses and citizens to easily access goods, jobs, services and housing.

The SACOG MTP/SCS also includes the regions existing and projected housing allocations to help meet the statewide housing need. As part of the periodic process of updating local housing elements for General Plans, the need for housing within each jurisdiction is quantified and provided within the General Plan. Communities use this information in land use planning to prioritize local resource allocation, and in deciding how to address identified existing and future housing needs resulting from population, employment, and household growth. This information was included within the MTP/SCS and allows the region to anticipate growth, and use this information to improve access to jobs, and promote fair share housing needs.

SACOG Regional Housing Needs Assessment Plan 2013-2021

State law requires that local jurisdictions provide their fair share of regional housing needs. The California Department of Housing and Community Development (HCD) is mandated to determine the statewide housing need. In cooperation with HCD, local governments and councils of government are charged with determining the cities or regions existing and projected housing needs as their share of the statewide housing need.

The RHNP was the final stage in adopting the 2013-21 Regional Housing Needs Allocation (RHNA), which is the State requirement mentioned above that determines the number of housing units that cities and counties must plan for in their housing element updates. The most important component of the RHNP is that it distributes the allocations of housing units in each of the four specified income categories to each city and county in the six county region, including the Tahoe Basin portions in El Dorado and Placer Counties. The region's total housing allocation is 104,970 units for the plan period which covers January 1, 2013 through October 31, 2021.⁸ Of this, the city of Sacramento must accommodate 24,101 new housing units between 2013 and 2021.

City of Sacramento 2013–2021 Housing Element of the General Plan

The Housing Element of the General Plan establishes goals, policies, and implementation measures to specifically identify ways in which the housing needs of the existing and future resident population can be met. The Housing Element is updated every 4 years, and identifies strategies and programs that focus on conserving and improving existing affordable housing, providing adequate housing sites, assisting the development of affordable housing, and promoting equal housing opportunities.

The 2013–2021 Housing Element relies entirely on both existing designations and zoning for residential and mixed-use properties, as well as an identified inventory of vacant land to accommodate the city's required RHNA. As previously discussed, Sacramento's RHNA for 2013-2021 is 24,101 units. The City has prepared an inventory of vacant sites, which can accommodate approximately 21,216 units. Through existing land use designations and zoning,

⁸ Sacramento Area Council of Governments, 2012. *Sacramento Regional Housing Needs Plan 2013-2021*. Available: <https://www.sacog.org/regional-housing-needs-assessment>. Accessed January 4, 2019.

the city would then be able to accommodate 2,885 units on infill sites. Additionally, the inventory includes planned and approved projects that will provide an additional 7,924 housing units, for a total residential capacity of 29,140 units, which is more than enough capacity to meet the 2013-2021 RHNA. At this time, no land use changes, rezoning, or upzoning are assumed as being necessary to provide adequate sites to accommodate the RHNA. The project site has not been directly identified by the Housing Element as a key housing site for the city to meet RHNA requirements.

3.9.3 Analysis, Impacts and Mitigation

Significance Criteria

This EIR assumes implementation of the project would have a significant impact related to population and housing if it would:

- 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);
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere;

Methodology and Assumptions

Impacts on population and housing were analyzed by the applicability of federal, state, and local regulations, ordinances, and/or standards for land uses and planning in regards to the project site and surrounding area. Potential impacts from implementation of the project were determined evaluating whether development of the project would exceed the thresholds of significance outlined above.

The State has already approved the Demolition Project at the project site. Whether or not the project is approved, the State will relocate the printing plant and all employees and demolish the existing structures. The approved Demolition Project would result in a flat project site, with existing zoning and land use designations unchanged. This is also true for the population and housing assumptions contained within the regional planning documents and local General Plan. The population and housing growth assumptions in the SACOG MTP/SCS and Sacramento 2035 General Plan would remain the same under project construction and operation.

As the actions of the Demolition Project will occur with, or without, the approval of this project, the most appropriate baseline from which to compare the true impacts of the project is the future condition of the site once the Demolition Project has been completed. For this reason, the impact discussions below will compare the project against the assumed future conditions for population and housing, as established in the SACOG MTP/SCS and Sacramento 2035 General Plan, for the project site.

Impacts associated with population and housing are determined regarding the degree to which the project would cause unanticipated growth (i.e., new housing or employment generators),

accelerate development in an undeveloped area that exceeds projected/planned levels for the year of project occupancy, or whether the development of the project would either directly or indirectly substantially increase the population in the area. If it is determined the project would induce substantial population growth to the area, the thresholds discussed below address whether there would be any additional physical impacts on the environment from the construction of new facilities that have not already been addressed as part of the project. Further, impacts associated with population, and housing are determined regarding the degree to which the project would cause or induce, either directly or indirectly, substantial population growth to the area through the introduction of new businesses on the project site by the creation of jobs. However, for the purposes of this analysis, it was assumed that the project fits within the anticipated growth projections analyzed in the City of Sacramento's 2035 General Plan EIR, as the analysis provided in the General Plan EIR states that adequate land is designated in the General Plan to accommodate the increase in projected employment slated to occur over the next 20 years. The degree to which the project would exceed adopted population or housing projections for the planning sub-region containing the project site was evaluated by review of the forecasts found in the City of Sacramento's General Plan Housing Element and SACOG RHNA.

Issues or Potential Impacts Not Discussed Further

There are no existing residences located at the project site; therefore, the project would have no impact related to the displacement of substantial numbers of existing housing and/or people that would necessitate the construction of replacement housing elsewhere. As there would be no displacement of existing housing and/or people, this topic is not discussed further in this EIR.

Impacts and Mitigation Measures

Impact 3.9-1: Implementation of the project would not 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).

The project would include the design and construction of a new office complex on the 17-acre State-owned site located between Richards Blvd and North 7th Street. The project includes up to 1.375 million gross square feet (GSF) of office space for up to 6,000 State employees. The RBOC project does not include the development of residential units. Therefore, the project would not generate a new residential population at the project site. However, the project would include the development of office building uses which would generate additional employment in the area.

The project would generate a temporary increase in employment in the city from approximately 20 workers during initial phases and up to approximately 700 workers during the peak of construction. As discussed in the environmental setting, labor data from 2017 provided by EDD, stated that there are 35,500 residents in the county that are employed in the construction industry (see Table 3.9-3). Based on applying the 2017 unemployment rate of 4.7 percent in the county of Sacramento to the construction sector, approximately 1,600 construction employees could be available in the county to work on the project. With the existing number of residents in the construction labor force, coupled with those of other areas within commute distance (e.g., Yolo,

Placer, and El Dorado counties), would be sufficient to meet the demand for construction workers that would be generated by the project. This would mean that the number of existing construction personnel in the region is sufficient to meet the demand associated with the project; therefore, this temporary increase in employment would not generate any substantial new population growth in the area or generate the need for substantial additional housing for construction workers. This impact during construction would be less than significant.

The project is anticipated to accommodate up to 6,000 employees during operation. The project would include relocating staff from 28 different locations throughout Sacramento. The project would contribute to consolidating State office space and addressing State office space deficiencies in downtown Sacramento, with the majority of the employees relocating from offices already within the City of Sacramento, and only 2.6 percent anticipated to be relocated from offices outside of the city. This is based on Table 2-1 in Chapter 2, Project Description, that shows the current addresses of potential tenants at the project site, and review of Figure 2-7 which shows the possible locations of employees to be relocated. The project would increase the number of employees during operation on the project site from a baseline condition of zero employees, after relocation and demolition, to being able to accommodate up to 6,000 employees in total.

While the project would involve an increase in employment at the project site, it would not represent an increase in employment overall. Given the project's location within a well-established urban community, with a large existing population base, future housing stock anticipated in close proximity to the project site, already established infrastructure, and existing labor pool being consolidated into the area from other State-owned offices, it would not induce substantial unanticipated population growth in the area and is not anticipated to result in any physical impacts that have not already been accounted for in the other regional planning documents, the 2035 General Plan, or the 2035 General Plan EIR.

It is expected that a majority of the employees on the project site could be drawn from the State of California's existing employees being relocated to the RBOC, or from within the city's and region's existing labor force, and the project is anticipated to provide employment opportunities for the local economy. With existing State tenants anticipated to relocate from various existing State office buildings, there is potential for the vacated office buildings to be filled/leased by other employment sectors. Relocation is assumed to be from 28 different locations throughout Sacramento and include staff from the following departments. Table 2-1 (and Figure 2-7) shows the current estimate of employees with the locations from which these departments and boards would move.

- Business, Consumer Services and Housing (BCSH) Agency and its departments;
- Housing and Community Development;
- Business Oversight;
- Department of Consumer Affairs;

- Board of Chiropractic Examiners;
- Alcoholic Beverage Control consolidated from 2 locations;
- California Department of Tax and Fee Administration; and
- Board of Equalization

In addition, specific vacated buildings have been assumed as part of the DGS Ten Year Sequencing Plan for renovation of State owned buildings. These include the Paul Bonderson Building at 901 P Street currently with 21 employees from the Board of chiropractic Examiners, and the Board of Equalization Headquarters Building with 1,970 employees working for the California Department of Tax and Fee Administration at 450 N Street. With a total of approximately 2,000 employees assumed to be relocated during the renovation portion of the Ten Year Sequencing Plan, it can be assumed that those employees would therefore be in need of a new office space. With the project anticipated to hold up to 6,000 staff occupying the new buildings, it can be assumed that 4,000 of these staff would be coming from buildings not anticipated for renovation. Therefore, the 4,000 vacated office spaces could be used and leased to other employment sectors.

The tenants of the RBOC site would be State employees transferred from other State-owned or leased buildings in the Sacramento area. This would lead to the potential for new growth as the current spaces become available in the leased buildings. It is unlikely that the vacated spaces would be filled immediately. Rather, the growth and filling of commercial spaces would be tied to overall regional growth that was already anticipated and disclosed in other planning documents, including the City of Sacramento's 2035 General Plan. Therefore, the project would not generate new employment that would induce population growth such that there would be additional demand for housing that could not be met by existing supply or by planned housing development. This impact during operations would be less than significant.

Therefore, the project would not have an adverse impact on population or housing in the area, resulting in a **less-than-significant** impact.

Mitigation Measure

None required.

Cumulative Impacts

Project effects on population and housing must be considered in light of other past, present, and future projects that could add to the effects of the project, creating cumulative effects. The geographic scope for the cumulative analysis of population and housing impacts is the city of Sacramento. As the project site is located within the River District of the Central City Community Plan area, and in a Priority Investment Area (PIA) within the 2035 General Plan, the area most relevant to cumulative impacts is the Central City and River District area of Sacramento.

Therefore, the cumulative context for the project is based on the City of Sacramento's 2035 General Plan, and how the growth pattern from the General Plan focuses on infilling and reusing underutilized properties, intensifying development near transit and mixed-use activity centers, and locating jobs closer to housing.

The adopted plans that establish and assess the land use pattern and goals for housing development, population growth, and employment in the Sacramento include the following:

- SACOG MTP/SCS Adopted February 18, 2016 and EIR, certified April 19, 2012 (SCH No. 2011012081).
- SACOG RHNP, Adopted September 20, 2012.
- City of Sacramento 2035 General Plan and General Plan Housing Element, adopted December 17, 2013;
- City of Sacramento 2035 General Plan and Sacramento Central City Community Plan, adopted March 3, 2015, and River District Specific Plan Adopted February 15, 2011.
- Master EIR, City of Sacramento 2035 General Plan, certified 2015 (SCH No. 2012122006); and the River District Specific Plan, certified 2011 (2009062023).

These documents were relied upon in preparing the cumulative impact analysis. The documents are available for review at the California Department of General Services, Real Estate Services Division, Environmental Services Section, 707 Third Street, Third Floor, West Sacramento, CA 95605.

As discussed above, the project would be consistent with the growth projections used in the SACOG 2016-2036 MTP/SCS. These same growth projections were assumed for the cumulative analysis in this EIR and account for the population and housing development framework contemplated in the City's General Plan. To reiterate, the growth projections are derived from the SACOG 2016-2036 MTP/SCS, for the surrounding cities in the counties of Sacramento, Sutter, Yolo, Yuba, El Dorado and Placer County (the Tahoe area excluded).

Impact 3.9-2: Development facilitated by the project, in conjunction with potential past, present, and future development in the surrounding region, would not result in substantial unplanned population, housing, or employment growth, or the displacement of existing residents or housing units on a regional level.

Development of the project, present projects, and reasonably foreseeable future projects, when added to past development in the City, would result in population, housing, and employment growth. "Substantial" growth is defined as unplanned growth, for which infrastructure, services, and housing have not been planned. So long as the cumulative project scenario generates cumulative population, housing, and employment conditions that are within the projections of the City and SACOG, there would be no significant adverse growth impact related to population, housing, or employment.

The increase in housing and population associated with the project would not have a significant cumulative impact on population, housing or employment growth. The City of Sacramento routinely prepares growth projections to inform the planning and environmental review process; these projections are based on regional estimates provided by SACOG that reflect growth in the Sacramento area as a whole. These projections inform the policies of the General Plan to ensure infrastructure and government services are expanded accordingly. The General Plan currently assumes that office, residential, or mixed uses will be developed at the project site, within the surrounding River District Specific Plan area, in addition to other locations throughout the City. This growth is anticipated at a regional level by SACOG, which envisions the population within the City reaching 630,597 by 2036, an increase of 136,331 people from 2017.

As such, the project does not include a residential component, and therefore would not generate a new residential population at the project site. Any indirect population and housing impacts induced by employment at the project site would still likely fall within Sacramento's growth estimates for the city of Sacramento, and for the region as a whole. While The project would not directly result in the construction of new housing in the Sacramento area, further housing development within the city of Sacramento is expected to occur. Regionally, housing growth is outpaced by job and population growth, resulting in a housing shortage. As such, the project would not adversely impact the jobs/housing imbalance at a regional level, and could potentially help consolidate future housing development to areas near employment centers, thus fulfilling the vision of Sacramento's 2035 General Plan.

With the population from the project, plus related projects, being assumed as within SACOG's projections, any potential new population generated by the project has already been anticipated by the various utilities and public service providers and other agencies that rely on SACOG's population projections for anticipating future impacts on various resources. The project, in accordance with the City's General Plan, and in combination with the development of cumulative projects in the area, would accommodate planned growth, rather than induce unplanned growth.

As discussed in the impact analysis above, the project would result in less-than-significant impacts with respect to substantial unanticipated population growth in an area, either directly or indirectly both during construction and operation at the project site. In line with this analysis, the Sacramento 2035 General Plan anticipates continued growth in jobs and includes policies, such as Policy LU 2.8.6, that promote the designation of sufficient land and development potential for housing and employment opportunities for a range of incomes and household types throughout the city, and that encourage a balance between job type, workforce, and housing development. For these reasons, substantial population growth or increases in housing demand in the region is not anticipated to occur as a result of the construction jobs or relocated staff from other State offices. Any potential population or housing growth to occur from the project would have already been accounted for within the 2035 General Plan.

Therefore, the project, in combination with other past, present, and reasonably probable future projects, would not generate the need for substantial additional housing. While there may be a

cumulatively considerable significant impact related to unplanned growth, the project would not have a substantial contribution. Therefore, this impact would be **less than significant**.

Mitigation Measure

None required.

3.10 Public Services

This section assesses the potential effects on public services as a result of constructing the Richards Boulevard Office Complex (RBOC) project (or project). The section includes relevant baseline information including a description of existing fire protection, police protection, public schools, and parks and recreation facilities in the city and in the project vicinity; anticipates future conditions after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete; and assesses how the project would affect these public services. A description of the potential impacts resulting from the project is also provided, as well as the identification of feasible mitigation (where applicable) to avoid or lessen those impacts.

The Facilities Section of the California Highway Patrol (CHP) provided one comment on the notice of preparation (NOP), stating that CHP does not anticipate that the project to impact to the day-to-day operations and/or public safety at their CHP Headquarter campus.

The primary sources of data referenced for this section include:

- City of Sacramento 2035 General Plan and Background Report,¹
- City of Sacramento 2035 General Plan EIR,²
- Central City Specific Plan,³
- River District Specific Plan (RDSP),⁴
- the City of Sacramento Parks and Recreation Master Plan 2005-2010: 2009 Technical Update,⁵
- State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration,⁶
- Sacramento Railyards Specific Plan Update, KP Medical Center, MLS Stadium, & Stormwater Outfall Draft Subsequent Environmental Impact Report,⁷
- City of Sacramento Fire Department (SFD) Annual Report 2016,⁸ and
- Sacramento Police Department 2016 Annual Report.⁹

¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Background Report*. Adopted March 3, 2015.

² City of Sacramento, 2015. *City of Sacramento 2035 General Plan Draft Master Environmental Impact Report*.

³ City of Sacramento, 2018. *City of Sacramento Central City Specific Plan*. Adopted April 19, 2018.

⁴ City of Sacramento, 2011. *River District Specific Plan*. Adopted February 15, 2011.

⁵ City of Sacramento, 2009. *Parks and Recreation Master Plan 2005-2010: 2009 Technical Update*. Adopted April 21, 2009.

⁶ Department of General Services, 2018. *State Printing Plant and Textbook Warehouse Relocation and Demolition Project Initial Study/Mitigated Negative Declaration*. March 2018.

⁷ City of Sacramento, 2016. *Railyards Specific Plan Update, KP Medical Center, MLS Stadium, & Stormwater Outfall Subsequent Environmental Impact Report*. Certified November 10, 2016.

⁸ City of Sacramento Fire Department, no date. *Annual Report 2016*.

⁹ City of Sacramento Police Department, no date. *Sacramento Police Department 2016 Annual Report*.

3.10.1 Environmental Setting

Existing Conditions

Law Enforcement

California Highway Patrol

The Capitol Protection Section (CPS) of the CHP provides “law enforcement and safety services to the occupants and visitors of the State Capitol building and grounds, as well as the hundreds of state facilities in the Sacramento region.”¹⁰ CPS operations are based out of 1801 9th Street, approximately 1.50 miles from the project site. CPS staff are operational at the State Capitol 24-hours per day, each day of the year.¹¹ CPS currently provides law enforcement services to the project site; as the property is State-owned, CPS would continue to provide those services regardless of the status of any buildings or facilities on the site.¹²

Sacramento Police Department

The Sacramento Police Department provides police protection and law enforcement services to the City of Sacramento. The Department is divided into four area commands within the city limits: the North Command, Central Command, East Command, and South Command.¹³

The Sacramento Police Department has not adopted a standard officer-to-resident ratio, but upholds an unofficial goal of 2.0 to 2.5 sworn police officers per 1,000 population and one civilian support staff per two sworn officers.¹⁴ Approximately 663 sworn officers and 315 civilian staff are employed by the City of Sacramento in affiliation with the Sacramento Police Department,¹⁵ generating ratios of 1.32 sworn officers per 1,000 population and one civilian staff per 2.10 sworn officers according to 2017 population counts.¹⁶ The Sacramento Police Department does not employ a standard or unofficial time response goal.

Sworn officers of the Sacramento Police Department work in cooperation with Sacramento Regional Transit (SacRT), patrolling the SacRT system by car.¹⁷ The SacRT Green Line travels along North 7th Street, adjacent to the project site, and currently terminates at the 7th & Richards/

¹⁰ California Highway Patrol, 2019. Capitol Protection Section. Available: www.chp.ca.gov/find-an-office/headquarters/assistant-commissioner-field/protective-services-division/capitol-protection-section. Accessed January 2, 2019.

¹¹ California Highway Patrol, 2019. Capitol Protection Section. Available: www.chp.ca.gov/find-an-office/headquarters/assistant-commissioner-field/protective-services-division/capitol-protection-section. Accessed January 2, 2019.

¹² Norris, Jack, Sergeant, California Highway Patrol, telephone communication, January 11, 2019.

¹³ City of Sacramento Police Department, no date. *Sacramento Police Department 2016 Annual Report*. p. 8.

¹⁴ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Background Report*. Adopted March 3, 2015. p. 5-5.

¹⁵ Ellis, Teresa, Senior Police Records Supervisor, City of Sacramento Police Department Government Affairs Unit, email communication with Natasha Eulberg of ESA, January 29, 2019.

¹⁶ U.S. Census Bureau, 2017. Quick Facts: Sacramento City, California; United States. Available: www.census.gov/quickfacts/fact/table/sacramentocalifornia,US/PST045218. Accessed January 9, 2019.

¹⁷ Sacramento Regional Transit, 2018. Sacramento Regional Transit District Police Services. Available: www.sacrt.com/safety/rtpolice.aspx. Accessed January 2, 2019.

Township 9 Light Rail Station, directly opposite the project site across Richards Boulevard. The Sacramento Police Department provides police protection along this line.

Fire Protection

Sacramento Fire Department (SFD) is a full-service fire department that offers fire protection services to the City of Sacramento. SFD is also contracted by the Pacific/Fruitridge and Natomas Fire Protection Districts (FPD) to provide fire protection services to 50,000 residents throughout approximately 46 miles within those Districts.¹⁸

In addition to fire protection services, which includes fire prevention, fire investigation, fire code enforcement, and fire suppression, SFD provides “a range of additional services, including emergency medical services, paramedic care, ambulance transportation, hazardous materials response, special and technical rescue, [and] urban search and rescue.”¹⁹ These various services are structured under three broad divisions within the SFD: Emergency Medical Services (EMS), Special Operations, and Suppression.

Fire suppression services are intended to “protect life, property, and the environment”²⁰ from fire damage, particularly in emergency situations. This division currently consists of 24 active fire stations, which operate 24 fire engines, nine ladder trucks, three battalion chiefs, and one heavy rescue apparatus. Staffing for the 34 operational suppression companies includes one company officer (captain), one engineer, and two firefighters. In 2016, SFD responded to 88,235 calls for service.²¹ SFD also operates 15 Advanced Life Support (ALS) ambulances, each staffed with two firefighter paramedics or a team of one firefighter paramedic and one firefighter.²² EMS services responded to roughly 51,000 EMS calls in 2016.²³

SFD participates in mutual aid agreements for all agencies which participate in the Sacramento Regional Fire/EMS Communications Center (SRFECC), a Joint Powers Authority (JPA) consisting of the Sacramento Police Department and multiple neighboring fire protection and public service agencies.²⁴ SFD is also active within the State mutual aid response system on behalf of the California Office of Emergency Services (CALOES).²⁵

The project site is served by multiple stations within the City of Sacramento, including:

- Station 14 at 1341 North C Street (approximately 0.50 miles east of the project site);
- Station 2 at 1229 I Street (approximately 0.85 miles southeast of the project site);

¹⁸ City of Sacramento Fire Department, no date. *Annual Report 2016*. p. 4.

¹⁹ City of Sacramento Fire Department, no date. *Annual Report 2016*. p. 6.

²⁰ City of Sacramento, 2018. Fire Suppression. Available: <http://www.cityofsacramento.org/Fire/Operations/Fire-Suppression>. Accessed December 26, 2018.

²¹ City of Sacramento Fire Department, no date. *Annual Report 2016*. p. 8.

²² City of Sacramento Fire Department, no date. *Annual Report 2016*. p. 8.

²³ City of Sacramento Fire Department, no date. *Annual Report 2016*. p. 12.

²⁴ Sacramento Regional Fire/EMS Communications Center, 2019. Agencies/SOGs. Available: www.srfecc.ca.gov/agencies-sogs/. Accessed January 3, 2019.

²⁵ City of Sacramento Fire Department, no date. *Annual Report 2016*. p. 4.

- Station 15 at 1591 Newborough Drive (approximately 1.35 miles north of the project site);
- Station 1 at 624 Q Street (approximately 1.40 miles southwest of the project site).

Station 14 would serve as the “first-in” responders for the project site.²⁶ The station responded to 3,800 calls for service in 2016.²⁷

SFD does not have an official staffing ratio goal; rather, the Department determines the need for fire protection services through a variety of thresholds, including: one station for every 1.5-mile service radius; one station per every 1,000 population; and one station where a company experiences call volumes in excess of 3,500 calls per year.²⁸

Schools

The project site falls within two public school districts: Twin Rivers Unified School District (TRUSD) and Sacramento City Unified School District (SCUSD). While a portion of the project site is overlapped by SCUSD boundaries, the site itself does not fall within an attendance area for any of the public schools that SCUSD comprises.²⁹ Rather, the proposed site is served by the TRUSD, which covers 120 square miles and enrolled 32,538 students in the 2017-2018 school year.³⁰

The proposed site is situated within the attendance areas for: Woodlake Elementary School (ES) (grades K-6), located at 700 Southgate Road; Rio Tierra Junior High School (JHS) (grades 6-8), located at 3201 Northstead Drive; and Grant Union High School (HS) (grades 9-12), located at 1400 Grand Avenue.³¹ **Table 3.10-1** compares the capacities of these facilities against enrollment values from the 2017-2018 school year to illustrate available capacity.

Parks and Recreation

Parks

The City of Sacramento Department of Parks and Recreation (Sacramento DPR) is responsible for the management of more than 226 parks and recreational facilities within the City of Sacramento, along with approximately 3,200 acres of developed parkland.³² Parks are classified according to function and targeted service areas as one of the following:

- **Neighborhood Parks:** Small parks up to ten acres in size, serving residents and employees within a half-mile radius. Typical facilities include youth play equipment or areas, unlighted sports fields or courts, and group picnic areas;

²⁶ City of Sacramento Fire Department, 2012. *Engine Company First-In Districts and Response Zones – BARB Configuration*.

²⁷ City of Sacramento Fire Department, no date. *Annual Report 2016*. p. 10.

²⁸ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Draft Master Environmental Impact Report*. p. 4.10-5.

²⁹ Sacramento City Unified School District, 2018. School Locator. Available: <http://saccityusd.maps.arcgis.com/apps/webappviewer/index.html?id=65299203ccef4df4969dc9169f61a424>. Accessed January 1, 2019.

³⁰ Ed-Data Education Data Partnership, 2019. Twin Rivers Unified. Available: www.ed-data.org/district/Sacramento/Twin-Rivers-Unified. Accessed January 1, 2019.

³¹ Twin Rivers Unified School District, 2018. Twin Rivers Unified School District: My School Locator. Available: <http://locator.decisioninsite.com/?StudyID=206231#>. Accessed January 1, 2019.

³² City of Sacramento, 2018. *Sacramento Central City Specific Plan*. Adopted April 19, 2018. p. 65.

**TABLE 3.10-1
 AVAILABLE ENROLLMENT CAPACITY FOR TRUSD SCHOOLS RELEVANT TO THE PROJECT**

School	Enrollment Capacity (Students) ^a	Current Enrollment (Students) ^b	Available Enrollment Capacity (Students)
Woodlake ES	674	439 ^c	235
Rio Tierra JHS	762	493 ^d	269
Grant Union HS	2,684	1,934 ^e	1,019

SOURCES:

- ^a City of Sacramento, 2016. Railyards Specific Plan Update, KP Medical Center, MLS Stadium, & Stormwater Outfall Draft Subsequent Environmental Impact Report, Chapter 4.11, p. 4.11-29.
- ^b Data collected by the California Department of Education (CDE) through the California Longitudinal Pupil Achievement Data System (CALPADS).
- ^c Ed-Data Education Data Partnership, Woodlake ES 2017-2018 Enrollment Data. Available: www.ed-data.org/school/Sacramento/Twin-Rivers-Unified/Woodlake-Elementary.
- ^d Ed-Data Education Data Partnership, Rio Tierra JHS 2017-2018 Enrollment Data. Available: www.ed-data.org/school/Sacramento/Twin-Rivers-Unified/Rio-Tierra-Junior-High.
- ^e Ed-Data Education Data Partnership, Grant Union HS 2017-2018 Enrollment Data. Available: www.ed-data.org/school/Sacramento/Twin-Rivers-Unified/Grant-Union-High.

- **Community Parks:** Mid-size parks ranging from ten to 60 acres in size, serving residents and employees within a two- to three-mile radius. Typical facilities include those found in neighborhood parks, as well as community centers, large picnic areas, community gardens, nature areas, dog parks, skate parks, water elements, restrooms, and onsite parking;
- **Regional Parks:** Parks which vary in size but tend to be larger than community parks, and serve residents, employees, and visitors from throughout and beyond the city. Typical facilities include regional open spaces or recreational amenities, such as sports complexes, golf courses, and zoos.

Per the City of Sacramento Parks and Recreation Master Plan 2005-2010, Sacramento DPR’s established goal for parkland service levels within the city is 5.0 acres per 1,000 population.³³

There are currently two parks managed by the City of Sacramento within the River District: Robert T. Matsui Waterfront Park, located approximately 0.60 miles west of the project site at 450 Jibboom Street; and Tiscornia Park, located approximately 0.70 miles west of the project site at 195 Jibboom Street. The approximately eight-acre Robert T. Matsui Waterfront Park includes the Water Intake Facility, grassy spaces, pedestrian walkways, and benches. Tiscornia Park incorporates nearly ten acres near the confluence of the Sacramento and American Rivers, and features a sandy beach, picnic area, and boat access.³⁴

The two parks nearest the project site are Zapata Park (0.94 acres) and Johnson Park (1.17 acres), neighborhood parks located approximately 0.50 miles south of the project site. Sutter’s Landing Regional Park (2.60 acres) is situated approximately 1.40 miles east of the project site.

³³ City of Sacramento, 2009. *Parks and Recreation Master Plan 2005-2010: 2009 Technical Update*. Adopted April 21, 2009. p. Policy - 5.

³⁴ City of Sacramento, 2011. *River District Specific Plan*. Adopted February 15, 2011. p. 58.

Open Space

“Open spaces are natural areas that are set aside primarily to enhance or protect the city’s environmental amenities.”³⁵ Recreational use of these spaces is typically passive in nature and may facilitate interaction with the natural features of the space. Parkway, which are generally used as non-motorized transportation corridors, tend to be linear in nature, and facilitate limited but broadly active recreational use. Parkway may also be classified as regional parks.

Two parkways—the American River Parkway and the Sacramento River Parkway—occur in proximity to the project site. The American River Parkway extends from the confluence of the American and Sacramento Rivers northeast to Folsom Dam and includes the Two Rivers Trail in the portion of the parkway that intersects the River District. Considered an open space greenbelt, the parkway is maintained primarily by the Sacramento County Regional Parks Department.³⁶ The Sacramento River Parkway incorporates roughly 17 miles and 820 acres in its length, which stretches along the eastern bank of the Sacramento River within Sacramento city limits.³⁷ The parkway is a major recreational and open space resource, which is also intended to protect the natural riparian habitat along the Sacramento River. The Sacramento River Bike Trail is accessible within the portion of the parkway encompassed by the River District, and turns into the Two Rivers Trail east of the confluence.

Baseline Conditions

The approved Demolition Project would result in a project site vacant of everything but a small pump house on the northwest corner. As a result, no demands for public services, including police protection, fire protection, schools, or parks and recreation facilities, would occur. Under baseline conditions, the demand for public services would be less than under existing conditions because there would be only the one small structure and no employees on site.

3.10.2 Regulatory Setting

Federal

No federal regulations, plans, policies, or laws associated with public services and recreational resources are applicable to the project.

State

California Health and Safety Code

Division 12, Sections 13000-13263 of the California Health and Safety Code (CHSC) establishes state fire protection regulations pertaining to a range of factors, including: portable fire extinguishers, automatic fire extinguisher systems, clothes cleaning establishments, high rise

³⁵ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Background Report*. Adopted March 3, 2015. p. 5-30.

³⁶ City of Sacramento, 2011. *River District Specific Plan*. Adopted February 15, 2011. p. 61.

³⁷ City of Sacramento Department of Neighborhoods, Planning, and Department Services, 1997. *Sacramento River Parkway Plan*. p. 3.

structures, emergency procedure information, building certification, fire safety inspections of care facilities, propane storage and handling, fire hazard abatement, and carbon monoxide poisoning. Division 12, Sections 13800-14868 codify the provisions of fire protection district formation, implementation, and operation, as well as the roles of fire companies in unincorporated towns and the privately-contracted private fire prevention resources.³⁸

California Code of Regulations

California Code of Regulations, Title 8, Sections 1270 (“Fire Prevention”) and 6773 (“Fire Protection and Fire Fighting Equipment”) establish guidelines for the safe inspection, maintenance, use, and storage of fire prevention and protection and fire-fighting equipment in compliance with applicable fire protection requirements of General Industry Safety Orders.³⁹

California Building Standards Code

The California Green Building Standards Code (CALGreen) represents Part 11 of The California Building Standards Code under Title 24 of the California Code of Regulations. CALGreen is intended to promote sustainable construction practices by reducing negative impacts associated with construction, applying design and methodology to encourage positive environmental impacts. The code is the state’s first green building code, and applies to “the planning design, operation, construction, use, and occupancy of every newly-constructed building or structure on a statewide basis unless otherwise indicated.”⁴⁰

California Fire Code

The 2016 California Fire Code regulates conditions, including the storage, handling, and use of hazardous materials and devices, which may prove hazardous to human life and property given the occurrence of fire or explosive events. Topics considered within the Code include fire department access, fire protection and utility equipment, and fire protection water supplies, such as required water supply, fire flow, and fire hydrant systems. The goal of these regulations is to safeguard human life and property. The California Fire Code represents the official adoption of enforceable regulations pertaining to fire and hazards prevention, as adapted from the International Fire Code by the State of California.

The International Fire Code regulates fire prevention and protection, health and safety, and the safe storage and use of hazardous materials, establishing minimum fire safety requirements for new and existing buildings, facilities, and development. In establishing these requirements, consideration is given primarily to the safety of building occupants and emergency and protection

³⁸ California Legislative Information, 2018. Health and Safety Code: Division 12. Fires and Fire Protection. Available: http://leginfo.legislature.ca.gov/faces/codes_displayexpandedbranch.xhtml?tocCode=HSC&division=12.&title=&part=&chapter=&article=. Accessed December 26, 2018.

³⁹ California Code of Regulations, 2018. Title 8, Subchapter 15, Article 5, Section 6773. Available: www.dir.ca.gov/title8/6773.html. Accessed December 26, 2018.

⁴⁰ California Department of Housing and Community Development, 2018. CALGreen Compliance. Available: www.hcd.ca.gov/building-standards/calgreen/index.shtml. Accessed January 2, 2019.

personnel, as well as to the restriction of physical damage to the building, in the event of a fire, explosions, or unauthorized hazardous material incident.⁴¹

Local

The project is located on State-owned property and would be implemented by the California State Department of General Services (DGS). State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot conflict with these policies and ordinances. As a good faith gesture, local plans, policies, and regulations that are applicable to the project are described herein for reference. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

City of Sacramento 2035 General Plan

The following goals and policies included in the Sacramento 2035 General Plan are relevant to the project.

Public Health and Safety Element

Goal PHS 1.1: Crime and Law Enforcement. Work cooperatively with the community, regional law enforcement agencies, local government and other entities to provide quality police service that protects the long-term health, safety, and well-being of our city, reduce current and future criminal activity, and incorporate design strategies into new development.

PHS 1.1.2: Response Time Standards. The City shall strive to achieve and maintain optimal response times for all call priority levels to provide adequate police services for the safety of all city residents and visitors.

PHS 1.1.3: Staffing Standards. The City shall maintain optimum staffing levels for both sworn police officers and civilian support staff in order to provide quality police services to the community.

PHS 1.1.4: Timing of Services. The City shall ensure that development of police facilities and delivery of services keeps pace with development and growth in the city.

PHS 1.1.7: Development Review. The City shall continue to include the Police Department in the review of development proposals to ensure that projects adequately address crime and safety, and promote the implementation of Crime Prevention through Environmental Design principles.

PHS 1.1.12: Cooperative Delivery of Services. The City shall work with local, State, and Federal criminal justice agencies to promote regional cooperation in the delivery of services.

Goal PHS 2.1: Fire Protection and Emergency Medical Services. Provide coordinated fire protection and emergency medical services that address the needs of Sacramento residents and businesses and maintain a safe and healthy community.

⁴¹ California Building Standards Commission, 2016. *2016 California Fire Code: California Code of Regulations Title 24, Part 9.* pp. xii – xxv.

PHS 2.1.2: Response Time Standards. The City shall strive to maintain emergency response times that provide optimal fire protection and emergency medical services to the community.

PHS 2.1.3: Staffing Standards. The City shall maintain optimum staffing levels for sworn, civilian, and support staff, in order to provide quality fire protection and emergency medical services to the community.

PHS 2.1.4: Response Units and Facilities. The City shall provide additional response units, staffing, and related capital improvements, including constructing new fire stations, as necessary, in areas where a fire company experiences call volumes exceeding 3,500 in a year to prevent compromising emergency response and ensure optimum service to the community.

PHS 2.1.5: Timing of Services. The City shall ensure that the development of fire facilities and delivery of services keeps pace with development and growth of the city.

PHS 2.1.10: Regional Cooperative Delivery. The City shall work with the various fire protection districts and other agencies to promote regional cooperative delivery of fire protection and emergency medical services.

Goal PHS 2.2: Fire Prevention Programs and Suppression. The City shall deliver fire prevention programs that protect the public through education, adequate inspection of existing development, and incorporation of fire safety features in new development.

PHS 2.2.2: Development Review. The City shall continue to include the Fire Department in the review of development proposals to ensure projects adequately address safe design and on-site fire protection and comply with applicable fire and building codes.

PHS 2.2.3: Fire Sprinkler Systems. The City shall promote installation of fire sprinkler systems in new commercial and residential development, and shall encourage the installation of sprinklers in existing structures when it is reasonable and not cost prohibitive.

PHS 2.2.4: Water Supply for Fire Suppression. The City shall ensure that adequate water supplies are available for fire-suppression throughout the city, and shall require development to construct all necessary fire suppression infrastructure and equipment.

PHS 2.2.5: High-Rise Development. The City shall require that high rise structures include sprinkler systems and on-site fire suppression equipment and materials, and be served by fire stations containing truck companies with specialized equipment for high-rise fire and/or emergency incidents.

Goal PHS 4.1: Response to Natural and Human-Made Disasters. Promote public safety through planning, preparedness, and emergency response to natural and human-made disasters.

PHS 4.1.5: Mutual Aid Agreements. The City shall continue to participate in mutual aid agreements to ensure adequate resources, facilities, and other support for emergency response.

Education, Recreation, and Culture Element

Goal ERC 1.1: Efficient and Equitable Distribution of Facilities. Provide efficient and equitable distribution of quality educational facilities for life-long learning and development of a highly skilled workforce that will strengthen Sacramento's economic prosperity.

ERC 1.1.1: School Locations. The City shall work with school districts at the earliest possible opportunity to provide school sites and facilities that are located in the neighborhoods they serve.

ERC 1.1.3: Schools in Urban Areas. The City shall work with school districts in urban areas to explore the use of existing smaller sites to accommodate lower enrollments, and/or higher intensity facilities (e.g., multi-story buildings, underground parking, and playgrounds on roofs).

Goal ERC 2.2: Parks, Community and Recreation Facilities and Services. Plan and develop parks, community and recreation facilities, and services that enhance community livability; improve public health and safety; are equitably distributed throughout the city; and are responsive to the needs and interests of residents, employees, and visitors.

ERC 2.2.2: Timing of Services. The City shall ensure that the development of parks and community and recreation facilities and services keeps pace with development and growth within the city.

ERC 2.2.3: Service Level Radius. The City shall strive to provide accessible public park or recreational open space within one-half mile of all residences.

ERC 2.2.4: Park Acreage Service Level Goal. The City shall strive to develop and maintain 5 acres of neighborhood and community parks and other recreational facilities/sites per 1,000 population.

ERC 2.2.18: Private Commercial Recreational Facilities. The City shall encourage the development of private commercial recreational facilities to help meet recreational interests of Sacramento's residents, workforce, and visitors.

River District Specific Plan

The following goals and policies included in the RDSP are relevant to the project.

Public Services and Community Facilities Element

Goal CS1: Provide for appropriate levels of public safety within the River District.

Policy CS1a: Encourage property owners and businesses to implement Crime Prevention Through Environmental Design (CPTED) standards.

Parks and Open Space Element

Goal POS3: Provide parks, open spaces, and public gathering areas easily accessible to the employees working in the District.

Policy POS3a: Provide walking areas, picnic benches, and other amenities attractive to employees.

Goal POS10: Create safe parks and riverfront environments.

Policy POS10c: Provide lighting for paths and walkways that provide safety without glare and intrusion into the natural landscape.

City of Sacramento Parks and Recreation Master Plan 2005-2010: 2009 Technical Update

The 2009 Technical Update to the City of Sacramento Parks and Recreation Master Plan 2005-2010 was adopted by the City of Sacramento on April 21, 2009. The Plan addresses, among other things: the planning, development, operation, and maintenance of parks; community outreach and agency partnerships; youth programming; recreation; marketing and special events; sustainability; and department-wide services.⁴² The following policies included in the 2009 Technical Update to the Master Plan are relevant to the project.

Policy 3.5: Encourage integration of park and recreational amenities into the design of commercial, infill, employment, redevelopment, and transit oriented development.

Policy 8.3: Conserve water use in maintenance activities (i.e., turf management, irrigation design, and scheduling) while maintaining healthy turf, landscaping, and trees.

Policy 10.12: Utilize environmentally friendly landscape practices, such as integrated pest management (IPM), to reduce the amount of pesticides and other pollutants in our local waterways.

Policy 12.1: Achieve Park Acreage Service Level Goals to provide public recreational opportunities within a reasonable distance of all residences and work places as follows:

- a) 5.0 acres per 1,000 population consisting of two park categories:
 - 1) Neighborhood Serving: 2.5 acres per 1,000 population with a service area guideline of 0.50 mile.
 - 2) Community Serving: 2.5 acres per 1,000 population with a service area guideline of three miles, portions of which may also serve neighborhood needs.
- b) Citywide/Regionally Serving: 8.0 acres per 1,000 population, portions of which may also serve either neighborhood or community needs.
- c) Linear Parks/Parkways and Trails/Bikeways: 0.5 linear miles/1,000 population of trails/bikeways implemented per adopted City Bikeway and Pedestrian Master Plans.

Policy 12.9: Take an active role in ensuring sufficient parks, open space, parkways, and trails by participation in the land use planning and development processes of the City and other agencies.

Policy 12.10: Through the development conditioning process, encourage provision of private open space and recreation facilities in high density residential projects, mixed use projects, and employment centers in the vicinity of transit corridors to meet a portion of

⁴² City of Sacramento, 2018. City of Sacramento Park Project Programming Guide and Master Plan. Available: www.cityofsacramento.org/ParksandRec/Parks/Park-Planning-Development/MasterPlan-PRPG. Accessed December 27, 2018.

the open space and recreational needs of residents, employees, and visitors that will be generated by that development.

Policy 12.30: Develop and implement “sustainable design” policies and standards for the planting and care of trees, turf, and other vegetation for the reduction of water and energy use (e.g., river-friendly landscape guidelines).

Policy 12.31: Ensure plant selections and management practices are appropriate for the proposed park or open space types, site conditions, water conservation, and maintenance considerations.

Policy 18.3: Encourage multi-modal circulation through construction and improvement of multi-use and bicycle trails for recreational, commuting, and sustainability purposes.

3.10.3 Analysis, Impacts and Mitigation

Significance Criteria

For the purposes of this EIR, an impact to public services would be considered significant if implementation of the project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government 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 following public services: fire protection, police protection, schools, parks, or other public facilities;
- 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;
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Methodology and Assumptions

The State has already approved the Demolition Project at the project site. Whether or not the project is approved, the State will relocate the printing plant and all employees and demolish the existing structures. The approved Demolition Project would not change the baseline conditions as regards public services.

Impacts and Mitigation Measures

Impact 3.10-1: Implementation of the project could result in the provision of or need for increased demand for law enforcement resources.

The project site is State-owned, and the RBOC would be State-owned and –operated; therefore, the CPS division of CHP would provide law enforcement and safety services to construction workers, employees, and visitors of the RBOC upon project implementation.

There are two CHP facilities in the vicinity of the project site: CHP Headquarters, located at 601 North 7th Street, approximately 0.10 miles northeast of the project site; and the CHP office out of which CPS operates, located at 1801 9th Street approximately 1.50 miles south of the project site. As CPS already serves the project site and operates in conjunction with the Sacramento Police Department to provide patrol services in the project vicinity, implementation of the project would not have a substantial adverse effect on the demand for law enforcement resources. The relocation of existing State employees to the project site would not increase the number of employees requiring protection. Therefore, this effect is **less than significant**.

Police services provided to the project site would also be implemented in conjunction with the Sacramento Police Department, as the project site falls within the jurisdiction of the Department. The project site is served by the Richards Police Facility located at 300 Richards Boulevard, approximately 0.25 miles west of the project site.

Under the Sacramento 2035 General Plan, projected population under buildout would require an additional 1,280 to 1,604 new sworn officers and 640 to 802 additional civilian staff in order to meet the unofficial capacity threshold utilized by the Plan. The Sacramento 2035 General Plan projects a population of 640,000 residents by 2035 given buildout of the Plan. Application of the unofficially-adopted ratios onto this anticipated population would result in a demand for 1,280 to 1,604 new sworn officers, in addition to 640 to 802 additional civilian staff. However, that ratio is applied to all development, including non-residential projects. The project does not anticipate the construction of any residential units; therefore, the RBOC would not result in residential population growth at the project site. However, employees involved in both the construction and occupation of the RBOC could potentially increase the residential population in the vicinity of the project site, resulting in increased demand for police protection services.

Per Chapter 2, Project Description, approximately 20 to 700 construction workers are anticipated for the project, depending on the phase of construction and the complexity of the final project design. As discussed in Chapter 3.11, Population and Housing, the project could draw upon approximately 1,600 construction workers in Sacramento County to aid in construction, in addition to workers in other counties within reasonable commuting distance. Since a sufficient workforce for construction of this project exists within the region, employment during development would not generate the need for substantial new housing.

The majority of tenants of the potential project would be State workers relocated from other State buildings within the Sacramento area. As noted in Chapter 3.11, Population and Housing, the project would not generate an increased demand for housing within the City. Since the Sacramento Police Department already serves the project site and surrounding area and no substantial numbers of new residents are anticipated as a result of the project, the impact of this project upon the Sacramento Police Department resources would be **less than significant**.

Mitigation Measure

None required.

Impact 3.10-2: Implementation of the project could result in the provision of or need for increased demand for fire protection resources.

Final project design would ensure adequate capacity for fire protection and suppression requirements, particularly those concerning water supply, fire flow, and fire hydrant system placement, would comply with the standards established in the California Fire Code. California Building Code also requires that buildings taller than 75 feet in height include fire protection and suppression measures such as sprinkler systems; as the RBOC project would result in at least one building greater than 75 feet in height, sprinkler systems would be installed within the complex.

SFD contains 24 active fire stations; in 2016, the Department received 88,242 calls for service, which represented a five percent increased call volume from 2015.⁴³ Assuming a similar growth trend in 2017 and 2018, SFD received approximately 97,287 total calls for service in 2018, averaging 4,054 calls per active fire station, which is greater than the suggested threshold of 3,500 annual calls to any one fire station. While this call volume could potentially suggest the need for increased fire protection resources or facilities in and of itself, taken in context the project would not necessarily have a substantial adverse effect on SFD services.

The Fire and Life Safety Division of the Office of the State Fire Marshal manages code compliance inspections and plan review processes for State-owned and –occupied facilities,⁴⁴ and would work in cooperation with SFD to suggest appropriate additional fire prevention safety and design measures specific to individual project sites. SFD regularly conducts inspections of both residential and non-residential buildings in accordance with State and local mandates. These comprehensive inspections are conducted for multiple reasons, including: new and repaired fire protection systems; occupancies requiring operational, annually-renewed fire permits; fire and safety code violations; and all major fires.⁴⁵ Fire safety during construction of the project would be supported through site access inspection and plan checks for emergency equipment. SFD is involved in the review of project design plans and would be able to suggest appropriate measures of fire prevention and protection to the RBOC. SFD would also be able to ensure minimum necessary compliance with relevant fire protection and safety measures addressed in the California Fire Code, California Building Standards Code, and other applicable regulations. Additionally, SFD participates in automatic aid agreements for all agencies which participate in SRFECC as well as CALOES, the State mutual aid response system, thereby assuring that there would be no substantial impact on SFD resources resulting from the project.

The project site is located within an urban area already served by SFD, and, as discussed in Section 3.9, Population and Housing, is not anticipated to generate a need for additional housing during construction or operation. Compliance with requisite standards and regulations would be

⁴³ City of Sacramento Fire Department, no date. *Annual Report 2016*. p. 9.

⁴⁴ California Department of Forestry and Fire Protection, 2013. Fire and Life Safety Division. Available: <http://osfm.fire.ca.gov/firelifesafety/firelifesafety>. Accessed January 14, 2019.

⁴⁵ City of Sacramento Fire Department, no date. *Annual Report 2016*. p. 18.

ensured through SFD review of the final project design plan. As such, implementation of the RBOC would not have a substantial adverse effect of fire protection services that would result in the provision of or need for increased demand for those resources. For this reason, the impact to fire protection resources would be **less than significant**.

Mitigation Measure

None required.

Impact 3.10-3: Implementation of the project could result in the provision of or need for increased demand for public school services.

The project does not incorporate any residential development, but anticipates the employment of 20 to 700 workers during construction and an influx to the project site of up to 6,000 employees associated with RBOC operations. This influx could potentially increase the number of residents within the Sacramento area, leading to a rise in the number of school-age children living in the vicinity of the project and attending TRUSD schools. However, as addressed in Chapter 3.11, Population and Housing, the majority of tenants for the RBOC project would be State employees relocated from various facilities throughout the Sacramento area. While there could be some residential growth related to employment growth within the vacated commercial space, the project is unlikely to affect the amount of growth anticipated and planned for within the City of Sacramento 2035 General Plan.

The most recent available enrollment data for Woodlake ES, Rio Tierra JHS, and Grant Union HS, which serve the project site, suggests a combined available capacity of 1,523 students, as shown in Table 3.10-1. The increase in employment which would result from implementation of the project is not expected to result in an influx of new families with school age children to the TRUSD area, such that current available enrollment capacities are exceeded at these three schools or elsewhere in TRUSD. It is not likely that the project will result in a substantial number of additional students at TRUSD schools, and as schools within TRUSD have adequate capacity to serve new students which may arise from planned growth in the City, no new school facilities would be required. Therefore, the RBOC would not result in any substantial adverse effects associated with the provision of or need for new public school facilities, or the expansion or alteration of existing public school facilities. The impact is considered **less than significant**.

Mitigation Measure

None required.

Impact 3.10-4: Implementation of the project could result in the provision of or need for increased demand for parks and recreational resources and facilities.

The project would accommodate up to 6,000 employees following construction of the facility. As the majority of these State employees already work in State buildings, many of them located within the city of Sacramento and in proximity to the downtown Sacramento area, they would likely utilize some of the same parks as at their prior place of employment. While the majority of parks and open spaces within downtown Sacramento are located within three miles of the project site, daytime park use by RBOC employees would likely be concentrated in the River District and the northwestern portion of the central city area to parks located within easier walking distance.

Zapata Park, Johnson Park, Sutter's Landing Regional Park, the Robert T. Matsui Waterfront Park, and Tiscornia Park provide approximately 22.71 acres of accessible parkland in the vicinity of the proposed BROC site. In conjunction with the 42.19 other acres of parkland⁴⁶ and 21 other parks planned within in the Central City Specific Plan (CCSP) area⁴⁷ and therefore falling within a three-mile radius of the project site, new employees of the RBOC would have access to approximately 64.90 acres of parkland within a walkable distance of the project site. This acreage would adequately meet the 5.0 acres per 1,000 population threshold established by Sacramento DPR. Therefore, the proposed BROC would not require the construction or expansion of parks and recreation facilities beyond build-out that is already planned and, in applicable cases, mitigated for under adopted City of Sacramento plans and EIRs. As a result, the project would not necessitate the construction or expansion of parks and recreation facilities which could cause substantial adverse physical effects.

As many parks within the City of Sacramento are extensively used by a variety of individuals, including residents, tourists, and visitors, and employees working in the downtown area, it would be difficult to attribute adverse effects causing substantial deterioration directly to one individual project, particularly since much of the park and open space land in proximity to the project includes parkways with popular, regular, and active recreational uses, such as biking, hiking, and jogging. Additionally, it is highly unlikely that all or even a majority of employees associated with the project would regularly use the same parks, on the same days, or at the same time. Rather, it could reasonably be anticipated that given daily personal availability, personal park preference, and preference for hours of access (before work, during lunchtime, after work, etc.), only a portion of the anticipated employees under at the RBOC would utilize nearby parks on any standard day. Therefore, the project would not cause substantial physical deterioration of those facilities, and the impact may be considered **less than significant**.

Mitigation Measure

None required.

⁴⁶ City of Sacramento, 2018. *City Park Directory*. Available: www.cityofsacramento.org/ParksandRec/Parks/Park-Directory. Accessed January 9, 2019.

⁴⁷ City of Sacramento, 2018. *City of Sacramento Central City Specific Plan*. Adopted April 19, 2018. p. 65.

Cumulative Impacts

The impact of the project on public services must be analyzed in conjunction with past, present, and future development projects which could contribute to the impacts of the RBOC project and create cumulative impacts. The geographic context for the cumulative analysis of the public services discussed in this technical section depends on the service in question.

The geographic contexts of law enforcement and fire protection impacts are the boundaries of the Sacramento Police Department and SFD, respectively. These boundaries are consistent with the City of Sacramento. Cumulative analysis of these services will focus on the portions of the city which are represented by the CCSP area and RDSP area.

The geographic context of impacts to schools is the City of Sacramento, and specifically those areas which TRUSD serves.

The geographic context of impacts to parks, open spaces, and recreation is the City of Sacramento. Cumulative analysis of these services will focus on the portions of the city which are represented by the CCSP area and RDSP area.

Impact 3.10-5: Implementation of the project, in conjunction with other development, could result in the provision of or need for increased demand for law enforcement resources.

The up-to-6,000 new employees which could potentially be added through the project, in addition to buildout of the Sacramento 2035 General Plan and other proposed State-operated projects such as the proposed Resources Building Replacement Project, would result in increased demand for public services like law enforcement within the downtown Sacramento area. Current needs with regard to police facilities include the renovation of existing facilities as well as the projected need for additional staff to maintain unofficial goals for adequate levels of service throughout the General Plan area as buildout occurs. The Sacramento 2035 General Plan EIR projects the need for 495 to 620 new employees of the Sacramento Police Department, made up of both sworn officers and civilian staff.⁴⁸ These addition of this number of staff may require the construction of new facilities as growth continues.

Increased need for patrol and protection services offered to State facilities would be accounted for by CPS in conjunction with the Capitol Area Committee, which advises the California Department of General Services on how best to implement development under the Capitol Area Plan.⁴⁹ Cooperation with the Committee alerts CPS to changing needs to staff, equipment, or facilities and allows the unit to plan accordingly.

Policies PHS 1.1.1 through PHS 1.1.7, PHS 1.1.10, and PHS 1.1.12 are included in the Sacramento 2035 General Plan to ensure that adequate provision of service goals is provided and

⁴⁸ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Draft Master Environmental Impact Report*. p. 4.10-3.

⁴⁹ California Department of General Services Real Estate Services Division, 2018. Capitol Area Committee (CAC). Available: www.dgs.ca.gov/resd/Programs/AssetManagement/CapAreaCommittee.aspx. Accessed January 8, 2019.

that service goal thresholds are met, even as growth resulting from Plan buildout increases the demand for police protection resources. These policies pertain to staffing and facility adequacy needs, service adequacy requirements, the use of design in helping prevent crime, identification of opportunities sites for new facilities, and interagency cooperation to reduce crime and ensure public safety.⁵⁰ Potential sites for the placement of required new facilities are identified in the Sacramento 2035 General Plan and analyzed under the Sacramento 2035 General Plan EIR. No additional impacts relating to the construction of these new facilities are anticipated beyond those analyzed and found to be broadly consistent with other forms of urban development in the Sacramento 2035 General Plan EIR. For these reasons, and because future growth under the Sacramento 2035 General Plan would be required to comply with Plan policies, the contribution of the project would not be cumulatively considerable, and the cumulative impact would be **less than significant**.

Mitigation Measure

None required.

Impact 3.10-6: Implementation of the project, in conjunction with other development, could result in the provision of or need for increased demand for fire protection resources.

As was discussed in Impact 3.10-5, the project could potentially contribute up to 6,000 new employees to anticipated buildout under the Sacramento 2035 General Plan and proposed State-operated projects like the proposed Resources Building Replacement Project. This increased population would result in a similarly increased demand for public services like fire protection. Investigation of the current state of SFD facilities suggest the need to relocate three active stations and to renovate three other stations. In addition to the work on these stations, the Sacramento 2035 General Plan also indicates that SFD intends to construct new administrative, logistics, and training facilities, as well as five additional fire stations situated in various locations throughout the City, although the Department has not identified potential sources of funding for these efforts.⁵¹

Based on complete buildout of the Sacramento 2035 Sacramento General Plan and the subsequent projected population increase of 165,000 people, 12 new, renovated, and relocated fire stations and various administrative, logistical, and training facilities – as well as additional employees to staff those facilities – would be required to ensure that SFD can adequately provide fire protection services and meet service threshold goals.⁵²

⁵⁰ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Draft Master Environmental Impact Report*. p. 4.10-2.

⁵¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Background Report*. Adopted March 3, 2015. p. 5-17.

⁵² City of Sacramento, 2015. *City of Sacramento 2035 General Plan Draft Master Environmental Impact Report*. p. 4.10-7.

Policies PHS 2.2.1 through 2.2.8 within the Sacramento 2035 General Plan require staffing, resource and supplies access, and response times adequate to meet adequacy threshold goals commensurate with future growth anticipated under the Plan. The policies also require the provision of land for future fire protection facilities and the assurance that fire protection resources are adequate to meet project needs prior to new development. Policy 2.1.10 calls for interagency cooperation to facilitate fire protection services throughout the City of Sacramento. As compliance with these policies will be required for future buildout under the Sacramento 2035 General Plan to ensure the adequacy of fire protection services, the RBOC's contribution would not be cumulatively considerable, resulting in a **less-than-significant** cumulative impact.

Mitigation Measure

None required.

Impact 3.10-7: Implementation of the project, in conjunction with other development, could result in the provision of or need for increased demand for public school services.

Discussion of Impact 3.10-3, above, concluded that the impact of the RBOC upon schools would be less than significant and that there was available substantial available capacity at the three TRUSD schools which serve the project site. However, the Sacramento 2035 General Plan identified two of 35 schools to which the Sacramento 2035 General Plan policies are applicable which are overcrowded.⁵³ Additionally, it is anticipated that TSUSD will require the additional substantial additional or expansion of its school facilities in order to meet projected future enrollment for the 2022-2023 school year under buildout of the Sacramento 2035 General Plan. These facilities include three new elementary schools and 27 new high school classrooms in the Grant Union High School attendance area, and four new elementary schools 15 new middle school classrooms, and one new high school within the Rio Linda High School attendance area.⁵⁴ Other new facilities are anticipated within the Elk Grove Unified School District (EGUSD), the Natomas Unified School District, and potentially the Robla School District.

Policies ERC 1.1.1, ERC 1.1.2, and 1.1.3 within the Sacramento 2035 General Plan pertain to efficient and equitable distribution of school facilities, and seek to guarantee that the General Plan area contains adequate school facilities to match pace with the city's anticipated student growth. Additionally, the California Department of Education Development Fee process as described in Government Code Section 65995 allows school districts to set fees on residential, commercial, or industrial development projects that fall within their borders as a mechanism of generating funding for the construction, expansion, and improvement of school facilities. Under current CEQA Guidelines, payment of Development Fees, in addition the implementation of the policies

⁵³ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Background Report*. Adopted March 3, 2015. p. 5-79.

⁵⁴ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Background Report*. Adopted March 3, 2015. p. 5-74.

previously mentioned, constitutes a less-than-significant impact to schools. Therefore, the contribution of the project would not cumulatively considerable, and cumulative impacts resulting from the provision of or need for increased demand for public school services would be **less than significant**.

Mitigation Measure

None required.

Impact 3.10-8: Implementation of the project, in conjunction with other development, could result in the provision of or need for increased demand for parks and recreational resources and facilities.

Although the project does not incorporate any residential units, implementation of the project would still contribute as many as 6,000 new employees to the use of Sacramento parklands. Although the analysis of this potential effect was determined to be less than significant in discussion of Impact 3.10-4, cumulative effects in conjunction with other development under the Sacramento 2035 General Plan would result in increased usage of and diminished service adequacy of Sacramento parks.

Policies ERC 2.2.2 through ERC 2.2.5 address requirements for ensuring acceptable thresholds of park service adequacy pertaining to timing, radius, acreage, and new development. Policies ERC 2.2.9, ERC 2.2.11, ERC 2.2.13, and ERC 2.2.18 address potential options for the acquisition or use of alternative and private spaces in order to meet adequate service levels under buildout of the Sacramento 2035 General Plan.⁵⁵ A Park Development Impact Fee, enacted within Sacramento City Code Chapter 18.44, levies a park development fee on both residential and non-residential development within City limits. These funds are used in the construction of facilities for neighborhood and community parks.⁵⁶ Implementation Programs 2 and 3 in the Sacramento 2035 General Plan constitute the review and updating of the Park Development Impact Fee Program to accurately reflect park service adequacy and needs under future growth.⁵⁷

As discussed in analysis of Impact 3.10-4, several parks within the City of Sacramento are extensively used by a variety of individuals, making it difficult to identify adverse effects causing substantial deterioration resulting from an individual project. Furthermore, it could reasonably be anticipated that given daily personal availability, personal park preference, and preference for hours of access (before work, during lunchtime, after work, etc.), only a portion of the anticipated employees under an implemented RBOC would utilize nearby parks on any standard day.

⁵⁵ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Draft Master Environmental Impact Report*. pp. 4.9-4 to 4.9-5.

⁵⁶ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Background Report*. Adopted March 3, 2015. p. 5-40.

⁵⁷ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Draft Master Environmental Impact Report*. p. 4.9-8.

The policies outlined in the Sacramento 2035 General Plan require the maintenance and growth of parklands and the funding to achieve this goal as future development occurs; the implementation programs referenced in the Plan provide a means for that future development to mitigate their impact on parks and recreation facilities. Adoption of these policies and programs, as well as payment of fees or in-lieu land transfers by development projects, would mitigate the impacts of future development on parks and recreation facilities. As such, the project's contribution would not be considerable, and the cumulative impact would be **less than significant**.

Mitigation Measure

None required.

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3.11 Transportation and Circulation

This section assesses the potential effects on transportation and circulation as a result of constructing and operating the Richards Boulevard Office Complex (RBOC) project (or project). The section includes relevant baseline information, including a description of the project's anticipated travel characteristics and relevant local, regional, state, and federal regulations. Project impacts to the roadway, bicycle, pedestrian, and transit systems in the study area are analyzed for baseline and cumulative (year 2036) conditions. Feasible mitigation measures (where applicable) are then identified to avoid or lessen the impacts.

A number of agencies provided transportation-related comments on the notice of preparation (NOP) including the California Department of Transportation (Caltrans), the City of Sacramento, and the California Public Utilities Commission (CPUC). Comments related to a variety of topics including recommendations to analyze portions of Interstate 5 (I-5) and State Route (SR) 160, impacts to at-grade rail crossings, parking, mitigation for vehicle miles of travel (VMT), and adherence to the River District Specific Plan and Design Guidelines. To the extent the comments were relevant to the analysis contained herein, they are addressed in this chapter.

This chapter relies on a variety of data sources and/or publicly available information to support the technical analysis. This information includes, but is not limited, to:

- Data from the City of Sacramento 2035 General Plan and several project-level EIR documents available on the City's website,¹
- Data from the Sacramento Area Council of Governments (SACOG) 2016 MTP/SCS;
- Caltrans planning documents for I-5 and SR 160;
- Travel survey data of DGS employees;²

This chapter presents a comprehensive, multi-modal analysis of the project's impacts under baseline and cumulative conditions.

3.11.1 Environmental Setting

This section describes the environmental setting, which is the baseline scenario upon which project-specific impacts are evaluated. This section describes the existing condition of the roadway, bicycle, pedestrian, and transit networks.

Roadway Network

The roadway network includes local streets and intersections, plus State and federal highways and freeways.

¹ City of Sacramento, 2015. *Sacramento 2035 General Plan*. Adopted March 3, 2015.

² A survey of DGS employees that are expected to relocate to the RBOC was conducted in December 2018 – January 2019. The results of that survey, which are described in detail in this section, are relied upon for the impact analysis presented in this section.

Study Area

Figure 3.11-1 displays the 14 existing intersections selected for analysis. The study intersections extend from the I-5/Richards Boulevard interchange easterly to 12th Street/16th Street intersection including all key intersections along this 1.5-mile corridor. The study area also extends southerly from Richards Boulevard along North 7th Street to Railyards Boulevard. This study area was developed based on the project's expected travel characteristics (including number of vehicle trips and directionality of those trips), primary travel routes to/from the project vicinity, anticipated parking locations, mode split, and other considerations (e.g., current/projected intersection congestion).

Surface Street System

Figure 3.11-2 displays the existing roadway network in the study area (including directionality and number of lanes) by functional class (per the City of Sacramento General Plan). Key existing roadways within the study area include:

- Richards Boulevard – extends from its interchange at I-5 as a four-lane arterial, terminating at the 12th Street/16th Street/SR 160 at-grade signalized intersection. This facility provides access into downtown (via 7th Street), while also serving a variety of industrial, office, and residential uses in the area. Its posted speed limit ranges from 35 to 40 miles per hour (mph) depending on location. In June 2015, the segment east of Bercut Drive was observed to carry 26,200 average daily traffic (ADT), while the segment east of North 7th Street carried 22,300 ADT.
- 7th Street/North 7th Street – extends northerly from the downtown grid, terminating north of Richards Boulevard. North of North B Street, 7th Street is known as North 7th Street and consists of two northbound lanes and one southbound lane. In June 2015, this segment was observed to carry 4,200 ADT. South of North B Street, it is known as 7th Street and has one lane in each direction with a posted speed limit of 35 mph. Light rail trains operate along this roadway between G Street and Richards Boulevard. Refer to the transit system discussion for more information.
- North B Street – is an east-west street that begins west of North 7th Street and extends easterly beyond 16th Street. West of 7th Street, it is a two-lane undivided street with a posted speed limit of 35 mph. East of 7th Street, it consists of two westbound lanes and one eastbound lane, widening to a four-lane undivided street from west of 10th Street to 12th Street. It has a posted speed limit of 35 mph.
- 12th Street/16th Street – form a one-way couplet that extends into and out of downtown from SR 160. 12th Street accommodates inbound (southbound) travel, while 16th Street accommodates outbound (northbound) travel. Both streets have four travel lanes between Richards Boulevard and C Street. Light rail trains operate along 12th Street. Both streets have 35 mph speed limits within the study area.



SOURCE: Fehr & Peers, 2018

Richards Boulevard Office Complex

Figure 3.11-1
Study Area





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SOURCE: Fehr & Peers, 2018

Richards Boulevard Office Complex

Figure 3.11-2
Existing Roadway Network



Data Collection

Traffic counts were collected at the majority of the study intersections on Wednesday, November 7, 2018. Counts from 2014 were used for the North B Street/12th Street/Dos Rios Street intersection, and then factored based on differences in segment link volumes with adjacent intersections. During the counts, weather conditions were dry, schools were in session, and no unusual traffic patterns were observed. The traffic data collection also included bicycles and pedestrians.

Intersections

Each study intersection was analyzed using the concept of Level of Service (LOS). LOS is a qualitative measure of traffic operating conditions whereby a letter grade from A to F is assigned based on the average delay per vehicle. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents severe congestion and delay under stop-and-go conditions.

Table 3.11-1 displays the delay range associated with each LOS category for signalized and unsignalized intersections. At all study intersections (signalized or side-street stop), the reported delay and LOS is the weighted average of all vehicles passing through the intersection.

**TABLE 3.11-1
 INTERSECTION LEVEL OF SERVICE DEFINITIONS**

Level of Service	Signalized Intersections	Unsignalized Intersections
A	0 – 10.0 secs/veh	0 – 10.0 secs/veh
B	10.1 – 20.0 secs/veh	10.1 – 15.0 secs/veh
C	20.1 – 35.0 secs/veh	15.1 – 25.0 secs/veh
D	35.1 – 55.0 secs/veh	25.1 – 35.0 secs/veh
E	55.1 – 80.0 secs/veh	35.1 – 50.0 secs/veh
F	> 80.0 secs/veh	> 50.0 secs/veh

NOTE:
 Control delay includes initial deceleration delay, queue move-up time, stopped delay, and acceleration delay.
 SOURCE: Transportation Research Board, 2016. *Highway Capacity Manual, 6th Edition*.

The SimTraffic micro-simulation model was used to analyze all study intersections. The use of SimTraffic is appropriate given the coordinated signal timing plans, spacing of intersections, and existing/projected levels of traffic in the study area. Per standard practice, reported results are based on an average of 10 runs. SimTraffic provides outputs consistent with the *Highway Capacity Manual, 6th Edition* (HCM).³ Per City of Sacramento Traffic Impact Study guidelines, a peak hour factor of 1.0 was used.

³ Transportation Research Board, 2016. *Highway Capacity Manual, 6th Edition*.

It should be noted that micro-simulation models such as SimTraffic account for the effects of queue spillbacks on upstream intersections. If traffic spills back from a congested location to a nearby upstream intersection, any delays occurring at the upstream intersection (even though they were caused by the downstream location) are attributed to the upstream intersection. So, a severely over-saturated intersection may cause LOS E or F operations at several upstream intersections, which if not for that downstream bottleneck, would otherwise operate with much lower delays.

The SimTraffic models for AM and PM peak hour conditions were built so that the effects of light rail pre-emptions along North 7th Street and North 12th Street would be captured. The models also account for the effects of ramp metering on the on-ramps at the I-5/Richards Boulevard interchange.

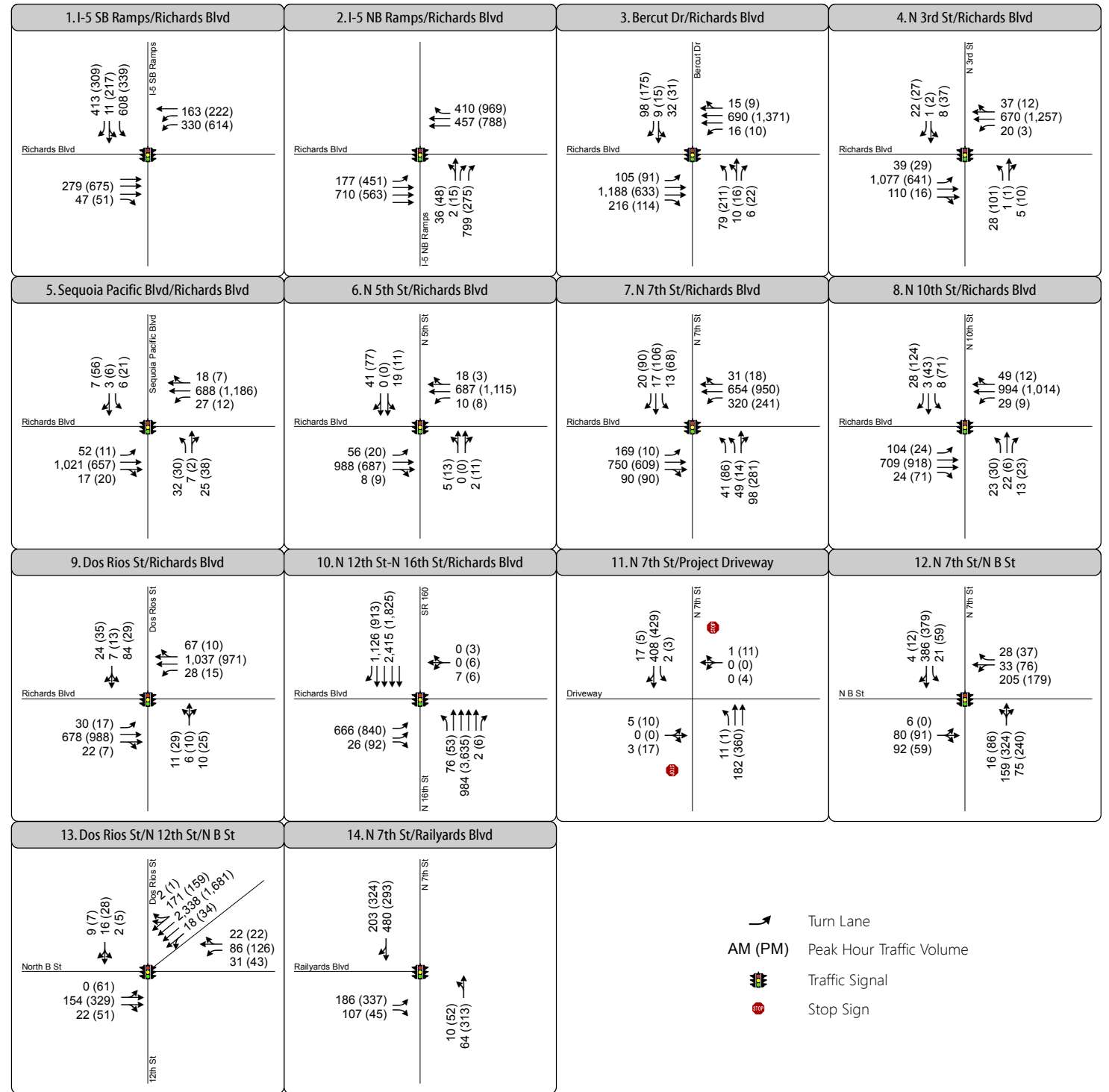
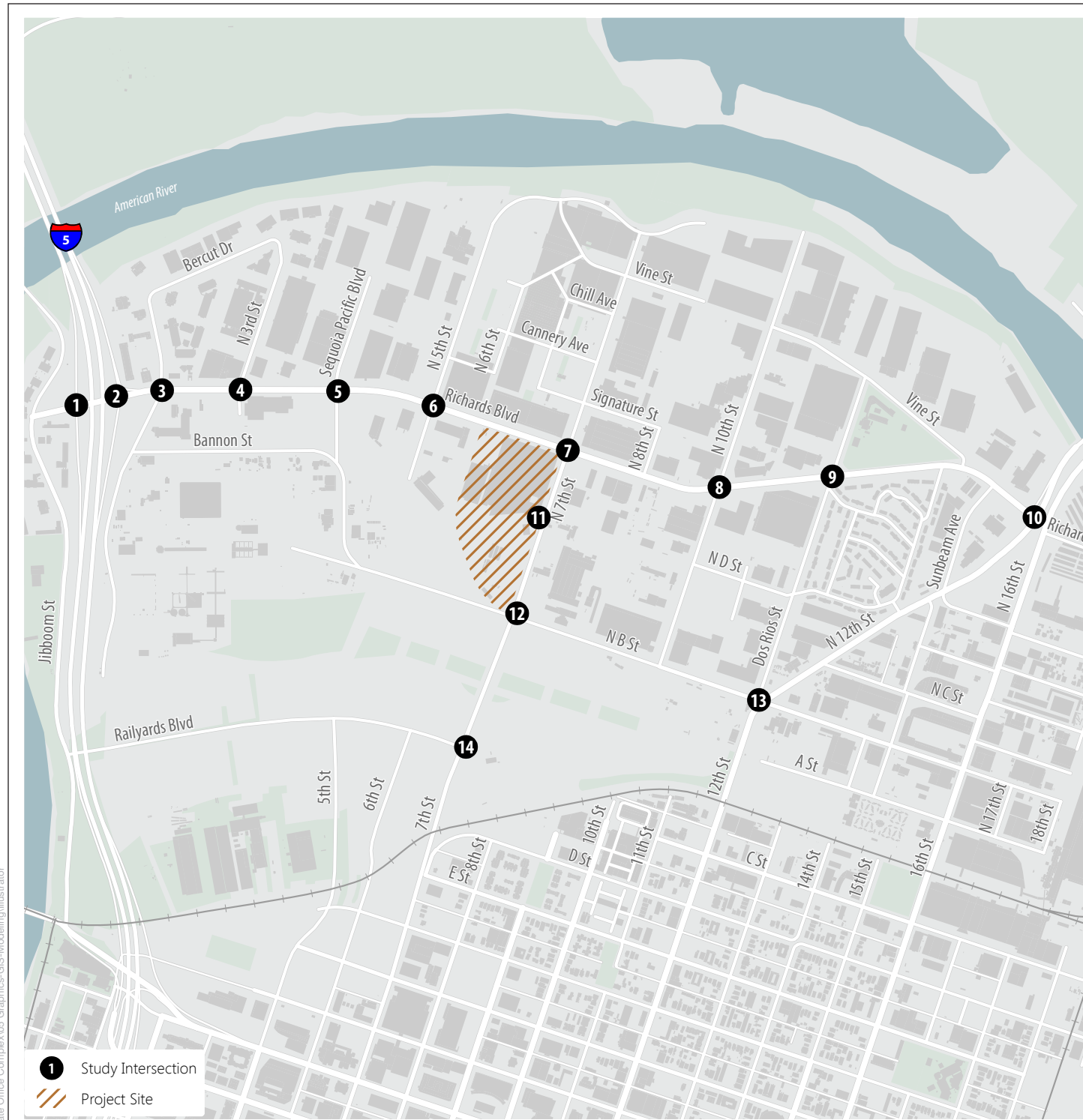
Figure 3.11-3 displays the existing AM and PM peak hour traffic volumes, controls, and lane configurations at the study intersections. The peak hours of travel differed slightly depending on the location within the study area. Near I-5/Richards Boulevard, peak hours of travel occurred from 7:15 to 8:15 AM and from 4:30 to 5:30 PM. Near Richards Boulevard and SR 160, peak hours of travel occurred from 7:30 to 8:30 AM and from 4:45 to 5:45 PM. These differences are likely associated with different commute characteristics, nearby businesses, and other conditions in these areas. For SimTraffic analysis, a global peak hour was selected based on the overall busiest hour of travel during each peak period.

Table 3.11-2 displays the LOS and average delay at each study intersection for each peak hour (see **Appendix G** for technical calculations).

During the AM peak hour, all intersections operate at LOS C or better with the exception of the 12th Street/16th Street/Richards Boulevard intersection, which operates at LOS F. This complex intersection surrounds a light rail track for the Sacramento Regional Transit (SacRT) Blue Line, which causes frequent signal pre-emptions. The intersection accommodates a substantial amount of traffic (3,540 vehicles) into downtown during the AM peak hour, which causes lengthy queues in the westbound direction of SR 160. Refer to the image on the following page for an illustration of this queue.

During the PM peak hour, several intersections operate at LOS D or worse including: I-5 SB Ramps/Richards Boulevard (LOS D), North 3rd Street/Richards Boulevard (LOS D), North 7th Street/Richards Boulevard (LOS E), 12th Street/16th Street/Richards Boulevard (LOS F), North 7th Street/North B Street (LOS F), and North 7th Street/Railyards Boulevard (LOS D).

Table 3.11-3 displays the maximum vehicle queues on the I-5 off-ramps at Richards Boulevard (refer to Appendix G for technical calculations).



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Not to scale

SOURCE: Fehr & Peers, 2018

Richards Boulevard State Office Complex

Figure 3.11-3
Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions



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**TABLE 3.11-2
INTERSECTION OPERATIONS – EXISTING CONDITIONS**

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		Avg Delay ¹	LOS	Avg Delay ¹	LOS
1 I-5 SB Ramps/Richards Boulevard	Signal	19	B	35	D
2 I-5 NB Ramps/Richards Boulevard	Signal	12	B	12	B
3 Bercut Drive/Richards Boulevard	Signal	12	B	35	C
4 N 3rd Street/Richards Boulevard	Signal	12	B	39	D
5 Sequoia Pacific Boulevard/Richards Boulevard	Signal	10	A	31	C
6 N 5th Street/Richards Boulevard	Signal	9	A	23	C
7 N 7th Street/Richards Boulevard	Signal	35	C	71	E
8 N 10th Street/Richards Boulevard	Signal	12	B	11	B
9 Dos Rios Street/Richards Boulevard	Signal	11	B	10	A
10 N 12th St/N 16th St/Richards Boulevard	Signal	109	F	81	F
11 N 7th Street/Project Driveway	SSSC	2 (5)	A (A)	7 (15)	A (B)
12 N 7th Street/N B Street	Signal	33	C	81	F
13 Dos Rios Street/N B Street/N 12th Street	Signal	18	B	20	B
14 N 7th Street/Railyards Boulevard	Signal	22	C	40	D

NOTES:

1 For signalized intersections, average intersection delay is reported in seconds per vehicle for all approaches. For SSSC intersections, the LOS and control delay for the worst movement is shown in parentheses next to the average intersection LOS and delay. Impacts to intersections are determined based on the overall LOS and average delay. Intersection LOS and delay is calculated based on the procedures and methodology contained in the Highway Capacity Manual, 6th Edition. All intersections were analyzed in SimTraffic.

SOURCE: Fehr & Peers, 2019; Transportation Research Board, 2016. *Highway Capacity Manual, 6th Edition.*

**TABLE 3.11-3
MAXIMUM FREEWAY OFF-RAMP QUEUE LENGTHS – EXISTING CONDITIONS**

Location	Available Storage ¹	Peak Hour	Maximum Queue ²
1 I-5 SB Off-Ramp at Richards Boulevard	1,350 feet	AM PM	250 feet 325 feet
2 I-5 NB off-Ramp at Richards Boulevard	1,100 feet	AM PM	275 feet 125 feet

NOTES:

1 The available storage length for off-ramp queuing is measured from the noted off-ramp terminal intersection to the freeway off-ramp gore point.

2 Maximum queue length is based upon output from SimTraffic microsimulation software. Field observations were conducted during the count day and revealed queuing similar to these estimates.

SOURCE: Fehr & Peers 2019.

Poor operations in the study area during the PM peak hour are the result of a number of different factors including:

1. Substantial traffic growth – In June 2015, North 7th Street south of Richards Boulevard carried 430 vehicles (both directions). The November 2018 count revealed 820 vehicles, nearly a doubling of traffic. This has likely occurred as a result of congestion on 16th Street and I-5, as well as overall background growth in travel. Additionally, more frequent use of wayfinding mobile apps may be contributing to use of alternate routes.
2. Ramp Metering at I-5 Northbound On-Ramp – field observations indicated that the I-5 northbound on-ramp ramp meter causes traffic to spill back to Richards Boulevard. The effect of this condition is lengthy westbound queuing and imbalanced lane utilization (see image on following page). On the day of the counts, the westbound queue extended beyond Sequoia Pacific Boulevard.
3. Limited Capacity Intersections along North 7th Street – the North 7th Street/North B Street intersection operates with inefficient split-phase signal timing on the north/south approaches (due to the lack of a dedicated northbound left-turn pocket). This causes lengthy north/south vehicle queuing. Similarly, congestion also occurs at the North 7th Street/Railyards Boulevard intersection due to signal phasing, lanes, and traffic volumes.



Image 1: View of vehicle queue on westbound SR 160 during the AM peak hour. Photo taken is just upstream of the Del Paso Boulevard on-ramp.



Image 2: View of vehicle queue (and imbalanced lane use) on westbound Richards Boulevard during the PM peak hour. Photo taken at 3rd Street (looking east).

Freeways

The following segments of I-5 were chosen for analysis given their anticipated use by the project.

- NB I-5 from I Street to Richards Boulevard
- NB I-5 from Richards Boulevard to Garden Highway
- SB I-5 from Garden Highway to Richards Boulevard
- SB I-5 from Richards Boulevard to J Street

Each of these segments are classified as weaving areas because they include auxiliary (weave) lanes that connect the on-ramps and off-ramps with successive interchanges along I-5.

Accordingly, consistent with Caltrans preferences, these segments were analyzed using the Leisch Method, which is described in the latest version of the *Highway Design Manual*.⁴ The Leisch Method provides a LOS result, but not an associated performance metric such as vehicle speed or density.

Segments of SR 160 were not analyzed because congestion and reduced speeds along this facility (particularly inbound/westbound in the morning) are the result of delays caused at the Richards Boulevard/12th Street/16th Street intersection. Similarly, outbound/eastbound PM peak hour traffic flows on SR 160 are ‘metered’ by the Richards Boulevard/12th Street/16th Street intersection. Thus, operations at this intersection provide a more meaningful assessment of conditions on SR 160 within the study area.

Table 3.11-4 displays existing AM and PM peak hour operations on the I-5 freeway study facilities (refer to Appendix G for technical calculations).

⁴ California Department of Transportation, 2016. *Highway Design Manual*. Available: www.dot.ca.gov/design/manuals/hdm.html. Accessed February 13, 2019.

**TABLE 3.11-4
 I-5 FREEWAY OPERATIONS – EXISTING CONDITIONS**

Study Segment		Peak Hour	Level of Service
1	NB I-5 from I Street to Richards Boulevard	AM PM	D E
2	NB I-5 from Richards Boulevard to Garden Highway	AM PM	D F
3	SB I-5 from Garden Highway to Richards Boulevard	AM PM	E D
4	I SB I-5 from Richards Boulevard to J Street	AM PM	D D

NOTE:

1 Freeway facilities analyzed using Leisch Method in accordance with the *Highway Design Manual*.

SOURCES: Fehr & Peers, 2019; California Department of Transportation, 2016. *Highway Design Manual*. Available: www.dot.ca.gov/design/manuals/hdm.html. Accessed February 13, 2019.

Truck Routes

All federal and State highways within the City of Sacramento have been designated as truck routes by Caltrans and are included in the National Network for Service Transportation Assistance Act (STAA) of 1982. Within the study area, the following roadway segments are classified as City STAA routes:

- Richards Boulevard between I-5 and SR 160
- North B Street between 7th Street and 16th Street
- North 7th Street between North B Street and Richards Boulevard
- 12th Street/16th Street between North B Street and Richards Boulevard

In addition, Jibboom Street between Richards Boulevard and I Street, is classified as a City truck route. A variety of businesses that involve truck deliveries are located in the project vicinity. However, the number of trucks, as an overall percentage of the total traffic stream, is fairly modest. For example, trucks represent about four percent of AM peak hour traffic and two percent of PM peak hour traffic at the Richards Boulevard/North 7th Street intersection, which is known to carry some of the higher volumes of trucks in the area.

Bicycle Network

The following types of bicycle facilities exist within the City of Sacramento:

- Class I Multi-use Off-Street paths – are paved trails that are separated from roadways, and allow for shared use by both cyclists and pedestrians.
- Class II On-Street Bike Lanes – are designated for use by bicycles by striping, pavement legends, and signs.
- Class III On-Street Bike Routes – are designated by signage for shared bicycle use with vehicles but do not necessarily include any additional pavement width for bicyclists.

- Class IV Protected Bikeways – are generally located within or adjacent to a roadway, but are barrier-separated from vehicular travel lanes. They may be one-way or two-way.

Figure 3.11-4 displays existing bicycle facilities within the study area. As shown, Class I, II, and III bike facilities are present on a variety of roadways within the study area.

Pedestrian Network

Figure 3.11-5 displays existing pedestrian facilities within the project vicinity. Sidewalks are present on many, but not all of the streets within the project vicinity. Gaps exist along portions of North 7th Street (on east side of street south of North B Street) and North B Street. Crosswalks are present at most signalized study intersections.

Transit Network

SacRT provides bus and light rail transit (LRT) service to the study area. SacRT operates the following transit services within the project vicinity (see **Figure 3.11-6** for illustration of existing routes, stops, and stations).

Light Rail Transit - The area is served by the following light rail lines:

- Green Line – operates along North 7th Street with a north terminus at Richards Boulevard/Township 9 Station. It also stops at 7th Street/H Street (Southbound) and 8th Street/H Street (Northbound). The Richards Boulevard/Township 9 station is directly across the street from the project. This line operates on 30-minute headways on weekdays between 6 AM and 9 PM. The Green Line does not operate on Saturdays or Sundays.
- Blue Line – operates along 12th Street with the nearest stop to the project site approximately a mile away at 12th Street/D Street (Alkali Flat) station. This line operates on 15-minute headways on weekdays during the majority of the day. After 6 PM, this line operates on 30-minute headways. A new station is planned on 12th Street near Richards Boulevard (about ¾-mile from site), and is expected to open about the same time as the project.

As is shown in **Table 3.11-5**, the Green Line is substantially under capacity, with ridership during peak hours at less than 10 percent of capacity. Image 3 below shows a Green Line train turning from Richards Boulevard onto southbound 7th Street.

Fixed Route Bus Service – Several SacRT bus routes operate within ¼ mile of the project site, including Routes 11, 15, and 33. Routes 11 and 15 have 30-minute headways, and Route 33 runs on 20-minute headways during the peak hour. Routes 11 and 15 serve portions of Natomas, Rio Linda, and the I-80/Watt Blue Line light rail station. Route 33 operates between the project site and downtown.



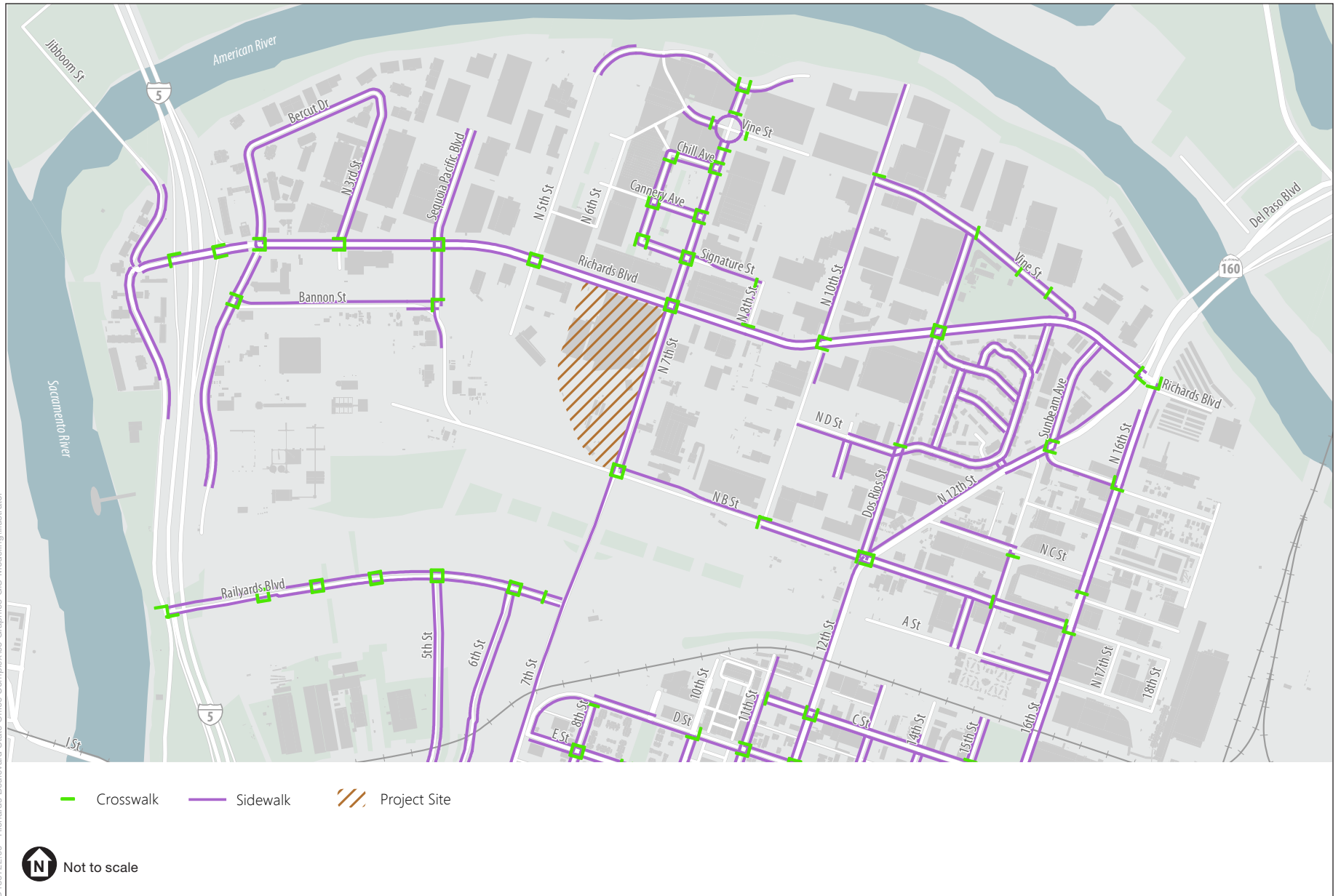
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SOURCE: Fehr & Peers, 2018

Richards Boulevard Office Complex

Figure 3.11-4
Existing Bicycle Network





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SOURCE: Fehr & Peers, 2018

Richards Boulevard Office Complex

Figure 3.11-5
Existing Pedestrian Network





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SOURCE: Fehr & Peers, 2018

Richards Boulevard Office Complex

Figure 3.11-6
Existing Transit Network



**TABLE 3.11-5
 GREEN LINE LIGHT RAIL RIDERSHIP— EXISTING CONDITIONS**

LRT Line	Line Segment ¹	Data Type ²	AM Peak Hour		PM Peak Hour		
			Hourly	Busiest Train	Hourly	Busiest Train	
Green Line (to/from Richards Blvd)	Northbound Between 8 th & K and Richards Blvd	Riders	14	8	23	14	
		Maximum Load	--	6	--	11	
		Trains Per Hour	2	--	2	--	
		% Seats Occupied	--	9%	--	17%	
			% of Capacity	--	4%	--	9%
	Southbound Between Richards Blvd and 7 th and I	Riders	16	10	21	15	
		Maximum Load	--	8	--	9	
		Trains Per Hour	2	--	2	--	
		% Seats Occupied	--	12%	--	15%	
				% of Capacity	--	6%	--

NOTES:

- 1 For the Green Line, ridership and capacity analyzed at the segment within the study area. This segment is currently the busiest point along the route.
- 2 Definition of Data Types are given as follows:
 - Riders = Based on data collected by RT on January 1, 2015 through October 31, 2015.
 - Maximum Load = Greatest number of riders at any single point.
 - Trains per Hour = Based on current RT schedules.
 - % Seats Occupied = Calculated for the busiest train assuming 64 seats per car. During the AM, PM, and Pre-event peak hours, each train has 1 car.
 - % of Capacity = Calculated as maximum load divided by total capacity (assuming 125 persons per car as capacity).

SOURCE: Regional Transit, 2015 based analysis of that data by Fehr & Peers.



Image 3: View of Green Line light rail train passing through North 7th Street/Richards Boulevard intersection. Photo taken on North 7th Street (looking south).

Existing Site Conditions

The project site is currently operational with vehicle trips observed to enter/exit its driveway on North 7th Street located approximately 630 feet south of Richards Boulevard. Although a driveway cut is present along Richards Boulevard 520 feet west of North 7th Street, it is closed via a gate. In November 2018, the project site was measured to generate 36 AM peak hour trips and 33 PM peak hour trips.

Refer to **Figure 3.11-7** for illustration of curb space uses along the project frontage.

Baseline Site Conditions

The State has already approved the Demolition Project. Whether or not the project is approved, the State will relocate the printing plant and all employees and demolish the existing structures. The approved Demolition Project will remove existing onsite buildings and related foundations, as well as remove asphalt paving, landscaping, utilities, and remove and/or remediate contaminated soil. When the Demolition Project is complete, the site will be completely clear of vegetation and the site surface will be largely dirt. As these actions will occur with or without the approval of this project, the most appropriate baseline from which to compare the true impacts of the project is the future condition of the site once the Demolition Project has been completed. Because of this reason, the impact discussions below will compare the project against a barren site.

The approved Demolition Project would remove 36 AM peak hour vehicle trips and 33 PM peak hour vehicle trips from the surrounding roadway network. As is described later, this is a modest level of eliminated traffic when compared to the trips that would be generated by the project.

3.11.2 Regulatory Setting

This section provides a discussion of relevant federal, State, and local regulations pertaining to transportation that may be applicable to the project.

Federal

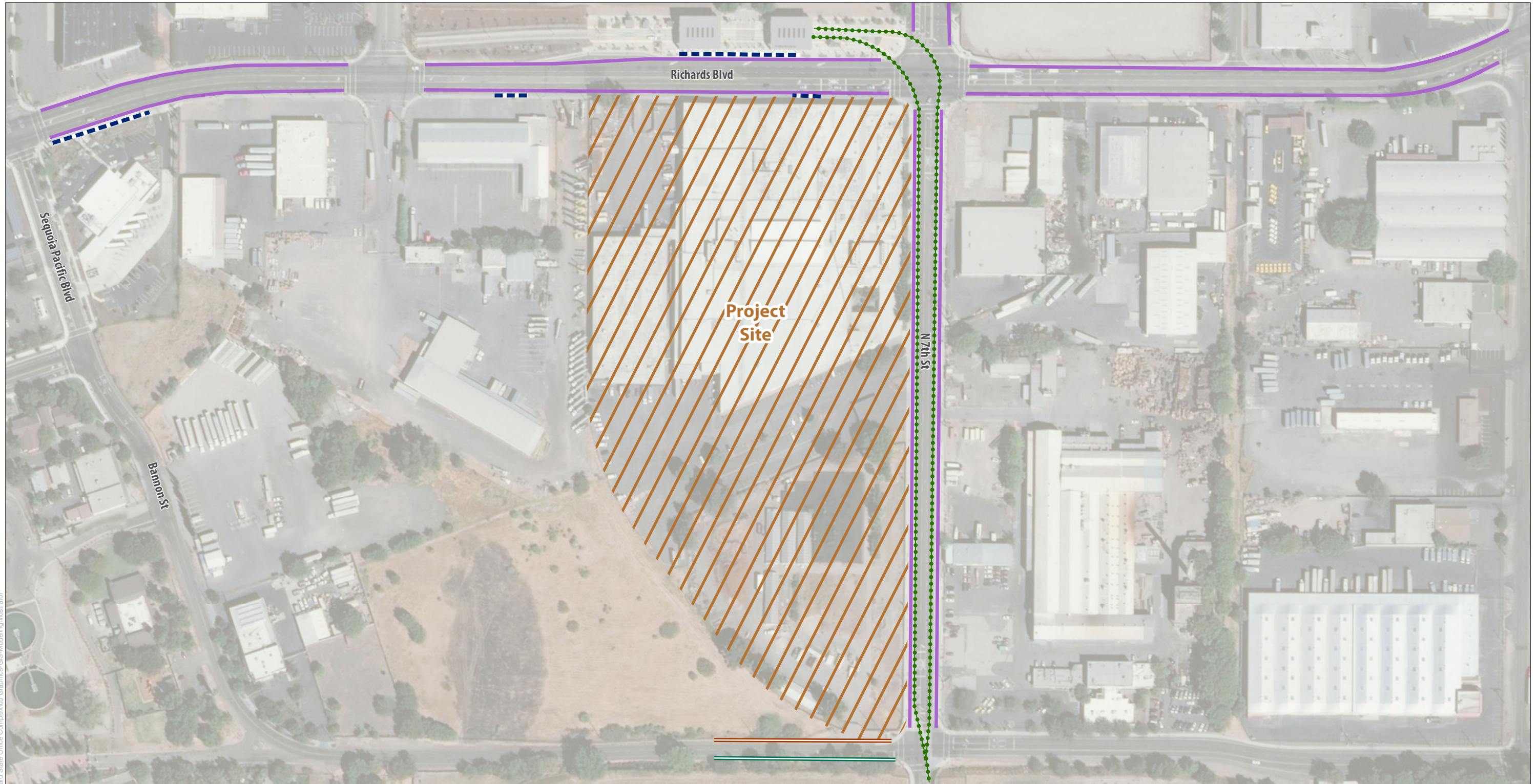
There are no applicable federal regulations that apply directly to the project. However, federal regulations relating to the Americans with Disabilities Act (ADA), Title VI, and Environmental Justice relate to transit service.

State

In 2012, Caltrans released a *Corridor System Management Plan*⁵ for portions of I-5 within the study area. Table 3.11-4 of this report shows existing operations on study segments of I-5 as being at LOS F. The *Transportation Concept Report, Interstate 5, District 3*⁶ indicates this

⁵ California Department of Transportation, 2012. *State of the Corridor Report on the Highway 99 and Interstate 5 Corridor System Management Plan*.

⁶ California Department of Transportation, 2017. *Transportation Concept Report, Interstate 5, District 3*. Available: www.dot.ca.gov/dist3/departments/planning/Systemplanning/Draft_I-5_TCR_04272017.pdf.



- Gravel Shoulder (Private Signs Prohibit Parking)
- On-Street Parking Permitted
- Bus Stop
- Light Rail Track
- Class II Bike Lane (No Parking)

Not to scale

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SOURCE: Fehr & Peers, 2018

Richards Boulevard State Office Complex

Figure 3.11-7
Existing Curb Space Utilization

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corridor would not meet the Concept LOS E, which is the minimum acceptable service condition over the next 20 years. Page 5 of the *State Route 160 Transportation Corridor Concept Report* indicates that for existing LOS F conditions, no further degradation is permitted as indicated by the applicable performance measure.

The *State Route 160 Transportation Corridor Concept Report*⁷ shows existing LOS D operations on SR 160 from the American River Bridge to the Capital City Freeway. The report indicates a Concept LOS F for this corridor.

The above LOS results are based on daily volume-to-capacity comparisons and do not necessarily consider specific operational characteristics (e.g., length of weave sections, peak hour factors, etc.) within the I-5 and SR 160 corridors. Nevertheless, these data are valuable in understanding Caltrans' expectations of their current and projected operating performance.

Senate Bill (SB) 743, passed in 2013, requires the California Governor's Office of Planning and Research (OPR) to develop new CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any." In December 2020, OPR published final technical guidance for implementing SB 743. The guidelines indicate that VMT will be the primary metric used to identify transportation impacts and local agencies will have an opt-in period until July 1, 2020 in which the law will become effective state-wide. As of this date, the City of Sacramento had not yet fully formally opted-in to SB 743, but has begun analyzing VMT in several environmental documents.

Regional

SACOG is responsible for the preparation of, and updates to, the 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) and the corresponding Metropolitan Transportation Improvement Program (MTIP) for the six-county Sacramento region.⁸ The 2020 MTP is under development, but still in draft form. Therefore, the 2016 MTP/SCS, which provides a 20-year transportation vision and corresponding list of improvement projects, remains the adopted plan for the region.

Local

The project is located on State-owned property and would be implemented by the California State Department of General Services (DGS). State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot create conflicts or inconsistencies with these policies and ordinances. As a good faith gesture, local plans, policies, and regulations that are applicable to the

⁷ California Department of Transportation, 2012. *State Route 160 Transportation Corridor Concept Report*.

⁸ Sacramento Area Council of Governments, 2016. *Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)*. Available: www.sacog.org/2016-mtpscscs. Accessed February 13, 2019.

project are described herein for reference. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

City of Sacramento 2035 General Plan

On March 3, 2015, the City of Sacramento City Council adopted the 2035 General Plan. The Mobility Element of the City of Sacramento's 2035 General Plan outlines goals and policies that coordinate the transportation and circulation system with planned land uses. The following LOS policy is relevant to this study:

Policy M 1.2.1: Right-of-Ways. The City shall preserve and manage right-of-ways consistent with: the circulation diagram, the City Street Design Standards, the goal to provide Complete Streets as described in Goal M 4.2, and the modal priorities for each street segment and intersection established in Policy M 4.4.1: Roadway Network Development, Street Typology System.

Policy M 1.2.2: The City shall implement a flexible context-sensitive Level of Service (LOS) standard, and will measure traffic operations against the vehicle LOS thresholds established in this policy. The City will measure vehicle LOS based on the methodology contained in the latest version of the Highway Capacity Manual (HCM) published by the Transportation Research Board. The City's specific vehicle LOS thresholds have been defined based on community values with respect to modal priorities, land use context, economic development, and environmental resources and constraints. As such, the City has established variable LOS thresholds appropriate for the unique characteristics of the City's diverse neighborhoods and communities. The City will strive to operate the roadway network at LOS D or better for vehicles during typical weekday conditions including AM and PM peak hour with certain exceptions mapped on Figure M-1 (and listed in the actual General Plan document).

- A. Core Area (Central City Community Plan Area) – LOS F allowed
- B. Priority Investment Areas – LOS F allowed
- C. LOS E roadways (11 distinct segments listed). LOS E is also allowed on all roadway segments and associated intersections located within ½ mile walking distance of a light rail stations.
- D. LOS F roadways (24 distinct segments listed)
- E. If maintaining the above LOS standards would, in the City's judgment, be infeasible and/or conflict with the achievement of other goals, LOS E or F conditions may be accepted provided that provisions are made to improve the overall system, promote non-vehicular transportation and/or implement vehicle trip reduction measures as part of a development project or a city-initiated project. Additionally, the City shall not expand the physical capacity of the planned roadway network to accommodate a project beyond that identified in Figure M4 and M4a (2035 General Plan Roadway Classification and Lanes).

According to Figure M1 (Vehicle Level of Service Exception Areas) of the 2035 City of Sacramento General Plan, the Tier 1 Priority Investment Area is bounded by the Sacramento River, American River, Broadway, and Alhambra Boulevard. All study intersections are located within the Tier 1 Priority Investment Area.

Policy M 1.2.3: Transportation Evaluation. The City shall evaluate discretionary projects for potential impacts to traffic operations, traffic safety, transit service, bicycle facilities, and pedestrian facilities, consistent with the City’s Traffic Study Guidelines.

Policy M 1.2.4: Multimodal Access. The City shall facilitate the provision of multimodal access to activity centers such as commercial centers and corridors, employment centers, transit stops/stations, airports, schools, parks, recreation areas, medical centers, and tourist attractions.

Policy M 1.3.1: Grid Network. To promote efficient travel for all modes, the City shall require all new residential, commercial or mixed-use development that proposes or is required to construct or extend streets to develop a transportation network that is well-connected, both internally and to off-site networks preferably with a grid or modified grid-form.

Policy M 1.3.2: Eliminate Gaps. The City shall eliminate “gaps” in roadways, bikeways, and pedestrian networks. To this end:

- a. The City shall construct new multi-modal crossings of the Sacramento and American Rivers.
- b. The City shall plan and pursue funding to construct grade-separated crossings of freeways, rail lines, canals, creeks, and other barriers to improve connectivity.
- c. The City shall construct new bikeways and pedestrian paths in existing neighborhoods to improve connectivity.

Policy M 1.3.3: Improve Transit Access. The City shall support the Sacramento Regional Transit District (RT) in addressing identified gaps in public transit networks by working with RT to appropriately locate passenger facilities and stations, pedestrian walkways and bicycle access to transit stations and stops, and public rights of way as necessary for transit- only lanes, transit stops, and transit vehicle stations and layover.

Policy M 2.1.2: Sidewalk Design. The City shall require that sidewalks wherever possible be developed at sufficient width to accommodate all users including persons with disabilities and complement the form and function of both the current and planned land use context of each street segment (i.e. necessary buffers, amenities, outdoor seating space).

Policy M 2.1.4: Cohesive and Continuous Network. The City shall develop a pedestrian network of public sidewalks, street crossings, and other pedestrian paths that makes walking a convenient and safe way to travel citywide. The network should include a dense pattern of routes in pedestrian-oriented areas such as the Central City and include wayfinding where appropriate.

Policy M 3.1.12: New Facilities. The City shall work with transit providers and private developers to incorporate transit facilities into new private development and City project designs including incorporation of transit infrastructure (i.e., electricity, fiber-optic cable, etc.), alignments for transit route extensions, new station locations, bus stops, and transit patron waiting area amenities (i.e. benches, real-time traveler information screens).

Policy M 3.1.14: Direct Access to stations. The City shall ensure that development projects located in the Central City and within ½ mile walking distance of existing and

planned light rail stations provide direct pedestrian and bicycle access to the station area, to the extent feasible.

Policy M 3.1.15: Light Rail Extensions and Enhancements. The City shall support the extension of light rail service to Sacramento International Airport, further extension in South Sacramento, and other improvements to facilities such as the 65th Street, Royal Oaks, and Swanston stations.

Policy M 3.1.16: Streetcar Facilities. The City shall support the development of streetcar lines and related infrastructure and services in the Central City and other multi-modal districts.

Policy M 4.2.1: Accommodate All Users. The City shall ensure that all new roadway projects and any reconstruction projects designate sufficient travel space for all users including bicyclists, pedestrians, transit riders, and motorists except where pedestrians and bicyclists are prohibited by law from using a given facility.

Policy M 4.2.2: Pedestrian and Bicycle-Friendly Streets. In areas with high levels of pedestrian activity (e.g., employment centers, residential areas, mixed-use areas, schools), the City shall ensure that all street projects support pedestrian and bicycle travel. Improvements may include narrow lanes, target speeds less than 35 miles per hour, sidewalk widths consistent with the Pedestrian Master Plan, street trees, high-visibility pedestrian crossings, and bikeways (e.g. Class II and Class III bike lanes, bicycle boulevards, separated bicycle lanes and/ or parallel multi-use pathways).

Policy M 4.2.5: Multi-Modal Corridors. Consistent with the Roadway Network and Street Typologies established in this General Plan, the City shall designate multi-modal corridors in the Central City, within and between urban centers, along major transit lines, and/or along commercial corridors appropriate for comprehensive multimodal corridor planning and targeted investment in transit, bikeway, and pedestrian path improvements if discretionary funds become available.

Policy M 4.4.4: Traffic Signal Management. To improve traffic flow and associated fuel economy of vehicles traveling on city streets, the City shall synchronize the remaining estimated 50 percent of the city's eligible traffic signals by 2035, while ensuring that signal timing considers safe and efficient travel for all modes.

Policy M 5.1.2: Appropriate Bikeway Facilities. The City shall provide bikeway facilities that are appropriate to the street classifications and type, number of lanes, traffic volume, and speed on all rights-of-way.

River District Specific Plan

In February of 2011, the City of Sacramento adopted the River District Specific Plan (RDSP) that establishes a future vision for the Sacramento River District area, which includes the site of the project. The following goals and policies from the RDSP Circulation chapter apply to this study.

Goal C1: Maximize vehicle and pedestrian/bicycle connections within and between the River District and surrounding neighborhoods

Policy C1a: Construct vehicular, bicycle and pedestrian connections through the secondary levee along North B Street, such as those at North 5th Street, North 6th Street, Judah Street, North 10th Street, and North 14th Street.

Policy C1b: Improve the design of major streets including North 16th Street, North 12th Street, North 7th Street, Jibboom Street and Richards Boulevard to enhance walkability while moving traffic as smoothly as possible through the District.

Policy C1c: Create local-serving east-west streets by constructing Riverfront Drive along the American River Parkway and extending Vine Street, Signature Street, Bannon Street and North C Street from North 5th Street to North 10th Street.

Policy C1d: Create local-serving north-south streets through the extension of North 5th Street, North 6th Street, Judah Street and North 10th Street from the Railyards to Vine Street.

Policy C1e: Consider a larger civic or campus-type development on a case-by-case basis provided that: 1) the project maintains pedestrian and bicycle connections in accordance with the grid pattern; and 2) the development would not be detrimental to the implementation of the goals and policies of the River District Specific Plan.

Goal C2: Support freeway improvements that will reinforce the Specific Plan circulation network.

Policy C2a: Support ramp and lane improvements to State Route 160 intersection with Richards Boulevard that will ensure safe crossing for all modes in the River District.

Policy C2b: Support improvements to the Interstate 5/Richards Boulevard Interchange that minimize its physical and visual impacts.

Policy C2c: Support Interstate 5 and Richards Boulevard Interchange improvements that do not restrict two-way street flow.

Policy C2d: Encourage the uninterrupted continuation of the Two Rivers Trail along the American River to be incorporated into the Highway 160 overcrossing improvements.

Goal C3: Support adding new and improving existing river crossings for all modes of travel.

Policy C3a: Support a multi-modal American River bridge that includes local vehicular traffic, light rail transit, pedestrians and bicycles to connect the River District and Natomas.

Policy C3b: Support improvements to the Highway 160 overcrossing at the American River for safe and efficient multi-modal travel, including bicycles and pedestrians.

Policy C3b: Support the evaluation of additional river crossings. The design of a viable and inviting pedestrian street requires the aspects of use, scale and visual treatment to work together.

Goal C4: Implement innovative approaches to solving traffic control problems.

Policy C4a: Implement innovative approaches to solving traffic control problems.

Policy C4b: Use traffic calming devices such as traffic circles and roundabouts where appropriate.

Goal C5: Maximize public transit connections within the River District.

Policy C5a: Support the extension of the light rail Green Line connection from the River District to the Sacramento International Airport.

Policy C5b: Support a future light rail connection between the Green Line and the Blue Line along Richards Boulevard (North 7th Street to North 12th Street).

Goal C6: Provide pedestrian and bicycle paths, lanes and routes suitable for recreational and commuting purposes.

Policy C6a: Ensure bicycle and pedestrian trails and routes provide seamless connections within and beyond the River District.

Policy C6b: Redesign the North 12th Street and North 16th Street underpasses between Alkali Flats and the River District to accommodate safe bicycle and pedestrian crossings.

Policy C6c: Link the Two Rivers Trail to Sutter's Landing Regional Park through a safe crossing at North 12th/North 16th streets.

Policy C6d: Improve access to and along the rivers for bicycles and pedestrians.

3.11.3 Analysis, Impacts and Mitigation

Significance Criteria

The following describes the significance criteria used to identify project-specific and cumulatively considerable impacts to the transportation and circulation system for the project.

Intersections

Impacts to the roadway system would be significant if:

- Traffic generated by the project degrades the overall roadway system operation to the extent that the project would not be consistent with City of Sacramento General Plan Policies M 1.2.1, 1.2.2, 1.2.4, 1.3.3, and 1.3.5.

Freeway Facilities

Impacts to the freeway system would be significant if:

- The traffic generated by the project degrades LOS from acceptable (without the project) to unacceptable (with the project);
- The LOS (without project) is already (or projected to be) unacceptable and project-related traffic leads to a perceptible worsening of the applicable performance measure; or
- The traffic related to the project causes off-ramp traffic to queue back to beyond the freeway gore point or worsens an existing/projected queuing problem.

Vehicle Miles Traveled

Impacts related to VMT would be considered significant if the project would:

- Substantially increase VMT per service population (total residents and employees) within the Sacramento Core Area.

Transit

Impacts to the transit system are considered significant if the project would:

- Adversely affect public transit operations; or
- Fail to adequately provide access to transit.

Bicycle Facilities

Impacts to bicycle facilities are considered significant if the project would:

- Adversely affect existing or planned bicycle facilities; or
- Fail to adequately provide for access by bicycle.

Pedestrian Circulation

Impacts to pedestrian circulation are considered significant if the project would:

- Adversely affect existing or planned pedestrian facilities; or
- Fail to adequately provide for access by pedestrians.

Construction-Related Traffic Impacts

The project would have a temporarily significant impact during construction if it would:

- Degrade an intersection or roadway to an unacceptable level, or exacerbate to a significant degree unacceptable operations;
- Cause inconveniences to motorists or light rail trains due to temporary or prolonged road closures; or
- Result in increased frequency of potential conflicts between vehicles, light rail trains, pedestrians, and bicyclists.

The significance criterion bullet listed above under “Intersections” generally describes how Policy M 1.2.2 should be applied in the Core Area and Priority Investment Areas of the City. This policy allows these areas to have intersections that operate at LOS F. However, such conditions should not be detrimental toward other General Plan circulation policies (including but not limited to policies M 1.2.1, 1.2.4, 1.3.3, and 1.3.5), which pertain to providing high-quality transit, walkable neighborhoods and business districts, continuous and connected bikeways, transportation demand management, emergency response, and other circulation considerations. So, while a single intersection operating at LOS F during the peak hour may be considered acceptable, an entire roadway system that experiences severe gridlock, and hampers all modes of travel is generally not considered acceptable. To this end, the evaluation of this significance

criterion focuses on the totality of system operations to assess consistency with General Plan Policy M 1.2.2.

Methodology and Assumptions

Project Description

For transportation impact analysis purposes, the project would consist of 6,000 employees and 1,375,000 gross square feet of office floor space (including space for employees as well as onsite amenities). The site would provide 1,420 parking spaces, including 50 spaces being designated for visitors/customers. Based on the degree to which some employees would be relocated either work part-time or telecommute (i.e., work from home), 5,853 (full-time equivalent) employees are expected onsite during a typical mid-week study period.

Overview of Analysis Methodology

The project's unique size and characteristics necessitated a tailored approach for estimating its trip generation that did not rely solely upon nationally-developed trip rates from the *Trip Generation Manual*.⁹ Thus, questions contained in an online employee commute survey formed the basis of the project trip generation estimates.

Due to the project's size, employee density, supply of parking, and types of available travel modes in its vicinity, a decision was made to survey existing employees that work at State agencies and departments in the Sacramento region, with a focus on those agencies planned for relocation to the new RBOC. This online survey, which was administrated in December 2018 and January 2019, was completed by 2,038 of the approximately 6,400 employees that were sent the survey via email, which represents a 32 percent response rate. Appendix G summarizes the key survey questions targeted toward understanding travel behavior and responses received in the survey. Employees were asked what travel mode they currently use to get to work, and what mode of travel they would choose if they instead worked at three different hypothetical worksites. Image 4 on the following page shows the first hypothetical worksite, which was the project site.

⁹ Institute of Transportation Engineers, 2017. *Trip Generation Manual*.

You will now be asked several hypothetical 'what if' questions about your travel preferences if you were to work at a different worksite.

- Hypothetical worksite #1 is located at the intersection of Richards Boulevard and 7th Street in the River District, just north of Downtown Sacramento (see map below).
- Transit options would include the following:
 - An adjacent Green Line light rail station. Blue or Gold line passengers would be required to transfer. The transfer would occur in Downtown Sacramento and could require walking to a different station or waiting several minutes for a Green Line train.
 - Three bus routes that extend into parts of Natomas, Rio Linda, and Downtown.
 - Commuter express bus from outlying areas would not be provided.
- Monthly parking costs you \$100. The worksite would provide on-site parking for some employees planning to drive.
- The State will continue to cover up to \$65 of your monthly bus, light rail, or Capitol Corridor transit pass cost (a monthly pass for light rail costs \$100).
- The State will continue to offer its Guaranteed Ride Home program (for emergency reasons).
- The site will be equipped with a complementary on-site State employee-only bikeshare program.



Under this hypothetical scenario, which primary mode of transportation would you most likely choose to travel from home to work?

- | | |
|--|---|
| <input type="radio"/> Drive alone and park at site | <input type="radio"/> Light rail to Downtown and Uber/Lyft/Bike to site |
| <input type="radio"/> Drive alone and park in site vicinity and Uber/Lyft/Bike to site | <input type="radio"/> Capitol Corridor |
| <input type="radio"/> Carpool and park at site | <input type="radio"/> Ridehailing Service (e.g., Uber, Lyft, etc.) |
| <input type="radio"/> Vanpool and park at site | <input type="radio"/> Bicycle/Bikeshare |
| <input type="radio"/> Bus | <input type="radio"/> Walk |
| <input type="radio"/> Light rail to site | |
| <input type="radio"/> Other (please specify) | |

Image 4: Question regarding mode choice preferences to project site.

For those respondents that indicated that they would drive alone and park at the project site, the following question was then posed:

If you were not able to drive alone and park at the site, which primary mode of transportation would you most likely choose to travel from home to work?

- | | |
|--|---|
| <input type="radio"/> Drive alone and park in site vicinity and Uber/Lyft/Bike to site | <input type="radio"/> Light rail to Downtown and Uber/Lyft/Bike to site |
| <input type="radio"/> Carpool and park at site | <input type="radio"/> Capitol Corridor |
| <input type="radio"/> Vanpool and park at site | <input type="radio"/> Ridehailing Service (e.g., Uber, Lyft, etc.) |
| <input type="radio"/> Bus | <input type="radio"/> Bicycle/Bikeshare |
| <input type="radio"/> Light rail to site | <input type="radio"/> Walk |
| <input type="radio"/> Other (please specify) | |

Image 5: Follow-up question regarding alternative mode choice preference if drive alone and park at site was not an option.

The above two questions were complemented by several other travel behavior questions relating to typical work arrival and departure times, carpool vehicle occupancy, and stated preference questions regarding strategies that would discourage/encourage certain modes of travel.

The following specific factors associated with the project and surrounding site vicinity would influence the project's travel characteristics under baseline conditions:

- **Onsite Parking Supply** – The proposed onsite parking supply (one space for every 4.4 employees) suggests that not all employees who may wish to park onsite would be able to do so. The above survey question addresses how the project's proposed parking supply would influence travel mode selection.
- **Off-Site Parking Supply** – Field surveys were performed to identify locations where off-site parking by employees could occur. Approximately 1,000 off-site spaces (generally located within ½ to ¾ mile of the project) are expected to be available in the near-term to accommodate employee parking demand associated with the project. This includes parking north of Richards Boulevard, on-street parking in the Railyards Specific Plan to the south, and parking in a planned, public garage south of Railyards Boulevard between 5th and 6th streets.
- **Bus Mode Split** – The project site is served by three SacRT bus routes from parts of Natomas, Del Paso Heights, Rio Linda, and Downtown Sacramento. According to the survey, about 12 percent of relocated employees indicated that their home residence is in one of the eight ZIP codes served by these routes. Unlike Downtown Sacramento, commuter bus service from the greater Sacramento region (e.g., Placer County Transit, e-Tran, Yuba-Sutter Transit, etc.) is not provided to the project site or immediate vicinity. The survey found that 6 percent of employees currently commute to work by bus. The percentage of employees who indicated that they would use the bus for their work commute to and from the project site decreased to

4 percent. However, when the respondents who indicated that they would drive alone and park at the project site were informed (via the survey) that they could not travel to the project site in that manner, the percentage of employees who indicated that they would use the bus for their work commute rose to 6 percent. Despite this survey response, due to the limited geographic coverage, frequency, and capacity of bus service available near the site, the bus mode split was capped at 4 percent for analysis of the project.

- **Light Rail Mode Split** – With onsite parking, off-site parking, and access to the site by bus at capacity or capped, access to the site by light rail became an attractive means for accommodating the remaining employees who could not be served by these other modes. However, initial estimates of light rail mode split exceeded 25 percent, which is twice the level of existing transit use for Downtown State office employees. Therefore, it was concluded that light rail usage should be capped at 20 percent. This level of usage is considered reasonable because SacRT has the flexibility to increase the number of cars per train on the Green Line (which stops at the project site) in response to increased demand. Additionally, a new light rail station is planned along the Blue Line on 16th Street near Richards Boulevard, which would be about ¾ mile from the site.

Given the lack of any other available viable travel modes, the initially estimated excess amount of light rail riders would be expected to instead rely on “kiss-and-ride” (i.e., dropped off/pick-up by spouse, friend, etc.) or ridehailing (i.e., Transportation Network Companies, TNCs, such as Uber or Lyft) to access the project. Some of the most frequently cited employee home residence ZIP codes are situated in relatively close proximity to the site, which could enable some employees to use TNCs to travel from home to work. Alternatively, some may choose to drive to/from their residence to an intermediate location (e.g., park-and-ride lot) and then use ridehailing for their “first/last mile” of travel to the project site. The effect of travel to and from a destination via a TNC is that each pick-up or drop-off generates two trip ends (e.g., the inbound morning peak hour trip to drop off an employee immediately followed by the outbound trip leaving the site).

Baseline Plus Project Conditions

Table 3.11-6 displays the existing (i.e., to their current worksite) mode split of employees likely to relocate. This table also shows the mode split of an iterative process, in which various modal or parking capacity constraints, resulted in changes in employee mode split. Refer to Appendix G for detailed calculations.

This table indicates that relocated employees would have substantially different travel modes than today for the reasons described below.

- The majority of relocated employees currently work in suburban settings. Among the more than three-quarters of relocated employees that currently drive alone and park, the vast majority park onsite for free. In contrast, the project would have paid parking that is highly sought after. In fact, to accommodate the total number of employees willing to carpool (if not permitted to drive alone and park onsite), more than half of the site’s onsite parking would need to be reserved for carpools.

- The number of employees that would choose to park off-site and walk, choose Uber/Lyft, or take some other form of transportation to the site would also be substantial, creating an off-site parking demand of nearly 1,000 spaces (in areas within ¾ mile from the site).

**TABLE 3.11-6
 RICHARDS BOULEVARD OFFICE COMPLEX - EMPLOYEE MODE SPLIT**

Mode of Travel	Existing Employee Split ¹	Project	
		Initial Employee Mode Split Preference ²	Final Employee Mode Splits ³
Drive alone and park at site	76.4%	67.0%	10.4%
Drive alone and park in vicinity and TNC/Bike to site	N/A	3.5%	17.1%
Carpool and park at site	11.4%	11.0%	25.0%
Vanpool and park at site	0.4%	0.9%	6.0%
Bus	6.0%	4.2%	4.0%
Light rail to site	4.0%	9.9%	20.0%
Light rail to Downtown and Uber/Lyft/Bike to site	N/A	1.2%	2.5%
Capitol Corridor	0.1%	0.4%	1.3%
Kiss-and-Ride or Ridehailing Service (e.g., Uber, Lyft, etc.)	0.1%	0.2%	10.1%
Bicycle/Bikeshare	0.9%	1.6%	3.4%
Walk	0.7%	0.1%	0.4%

NOTES:

- ¹ Based on online survey of existing travel modes by employees that would relocate to Richards Boulevard Office Complex.
- ² Represents the initial commute travel mode preferences of relocated employees without any limitations.
- ³ Final mode split builds upon initial mode split adjustments by considering effects of available off-site parking supply and bus and light rail mode split caps (see previous page).

SOURCE: Fehr & Peers, 2019.

Table 3.11-7 displays the project’s estimated weekday AM peak hour, PM peak hour, and daily vehicular trip generation. These trips represent the total number of vehicles that would enter/exit the study area (i.e., area generally bounded by I-5 on the west, the American River on the north, SR 160 on the east, and the UPRR railroad tracks on the south). Vehicle trips entering/exiting the project site would be somewhat lower because only a limited number of employees could park onsite. These estimates apply only to the baseline plus project scenario. A different trip generation estimate, which is presented later in this section, was prepared for cumulative conditions that considers planned transit service expansion as well as new planned parking facilities in the site vicinity. Refer to Trip Generation Memorandum in Appendix G for a more detailed discussion of trip generation estimation techniques.

Table 3.11-8 displays the project’s estimated VMT under baseline conditions, which is expressed as the total miles of vehicle travel on a weekday (daily) basis. As noted in the table, this represents the project’s net effect on VMT, primarily associated with the relocation of employees from current worksites to the project. As shown, the project would result in a net reduction of 55,753 daily VMT. Refer to footnotes in table for calculation procedures.

**TABLE 3.11-7
RICHARDS BOULEVARD OFFICE COMPLEX – VEHICULAR TRIP GENERATION UNDER BASELINE CONDITIONS**

Land Use	Employees	Square Feet (ksf)	Trips ¹								
			Daily			AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total	In	Out	Total
Office Complex	6,000	1,375	4,774	4,774	9,547	1,416	412	1,828	611	1,957	2,568
Existing Use	N/A	N/A	-75	-75	-150	-28	-8	-36	-6	-27	-33
		Net Increase	4,699	4,699	9,398	1,388	404	1,792	605	1,930	2,535

NOTES:

1 Refer to prior text and Appendix G for detailed calculations. As shown in appendix, these totals comprise trips made by employees (both primary commute and mid-day), visitors/customers, and other ancillary travel purposes.

N/A = Not Applicable

SOURCE: Fehr & Peers, 2019.

**TABLE 3.11-8
RICHARDS BOULEVARD OFFICE COMPLEX – BASELINE CONDITIONS VEHICLE MILES OF TRAVEL (VMT)**

Metric	Quantity (miles)
Baseline Daily VMT ¹	163,168
Baseline Plus Project Daily VMT ²	107,414
Net Change in Daily VMT ³	- 55,753

NOTES:

1 Calculated using the SACMET travel demand model based on the current home and work locations of employees that are proposed to be relocated as well as the current mode splits. VMT estimates include mid-day employee travel, visitor travel, and service/delivery travel.

2 Calculated using the project's trip generation and mode split estimates and the revised work location (with changes in distance of travel derived from SACMET travel demand model). VMT estimates include mid-day employee travel, visitor travel, and service/delivery travel.

3 This represents the project's net effect on VMT, which is expressed for a weekday daily condition.

SOURCE: Fehr & Peers, 2019.

However, the significance criteria for VMT impacts relates to whether or not the project would substantially increase VMT per service population within the Sacramento Core Area. That particular metric does not consider whether the VMT has shifted from other worksites or is new. As shown in Appendix G, the project would generate 117,260 daily VMT.

Figure 3.11-8 displays the distribution of inbound and outbound vehicle trips to the project site under baseline conditions. As noted in the figure, these percentages apply only to project trips that park onsite. Vehicle trips that park at an off-site location would have similar trip distribution percentages, but select different paths near the site to access parking.

Figure 3.11-9 displays the Baseline Plus Project AM and PM peak hour traffic volumes, controls, and lane configurations at the study intersections. These volumes were derived by adding the growth in traffic associated with the project to the existing volumes. It should be noted that due to

the lack of available public street curb space, all pick-up and drop-off activity is assumed to occur onsite, which is reflected in the driveway traffic volumes.

This figure also shows volumes at the two project driveways. For analysis purposes, the driveway on North 7th Street was assumed to consist of side-street stop-control. In contrast, the analysis for the driveway on Richards Boulevard assumed a traffic signal because preliminary analysis indicated that traffic volumes and queuing along Richards Boulevard would not enable project trips to exit this driveway. Project access is discussed in detail later in this section.

Table 3.11-9 displays the average delay and LOS at each study intersection under Baseline Plus Project conditions for each peak hour. This table shows a baseline no project condition, which is comprised of the relocation of the Printing Plant and demolition of existing structures. Under this condition, surrounding intersections will operate nearly identical to existing conditions given the nominal number of peak hour trips generated by the existing uses present onsite.

During the AM peak hour, the project would cause increased delays at nearly all study intersections. The following highlights these degradations in different parts of the study area:

- I-5 NB Ramps/Richards Boulevard (LOS B to E)
- North 7th Street/Richards Boulevard (LOS C to F)
- 12th Street/16th Street/Richards Boulevard (LOS F exacerbated by 33 seconds)
- North 7th Street/North B Street (LOS C to E)

During the PM peak hour, the project would substantially degrade/exacerbate operations to LOS F along much of the Richards Boulevard corridor. Examples of the degraded operations are as follows:

- Operations at the Richards Boulevard signalized intersections at Sequoia Pacific, North 5th Street, and North 10th Street worsen from LOS C or better to LOS F.
- Operations at the 7th Street signalized intersections at North B Street and Railyards Boulevard are substantially worsened (delays increase by 67 seconds and 218 seconds, respectively).
- Average delay per vehicle increases by one minute at the 12th Street/16th Street/Richards Boulevard intersection and increases by two minutes at the North 7th Street/Richards Boulevard intersection.

Table 3.11-10 displays the maximum vehicle queues on the I-5 off-ramps at Richards Boulevard under Baseline Plus Project Conditions (refer to Appendix G for technical calculations).

Table 3.11-11 displays existing AM and PM peak hour operations on the I-5 freeway study facilities under Baseline Plus Project Conditions (refer to Appendix G for technical calculations).



Project Site X% Trip Distribution Percentage

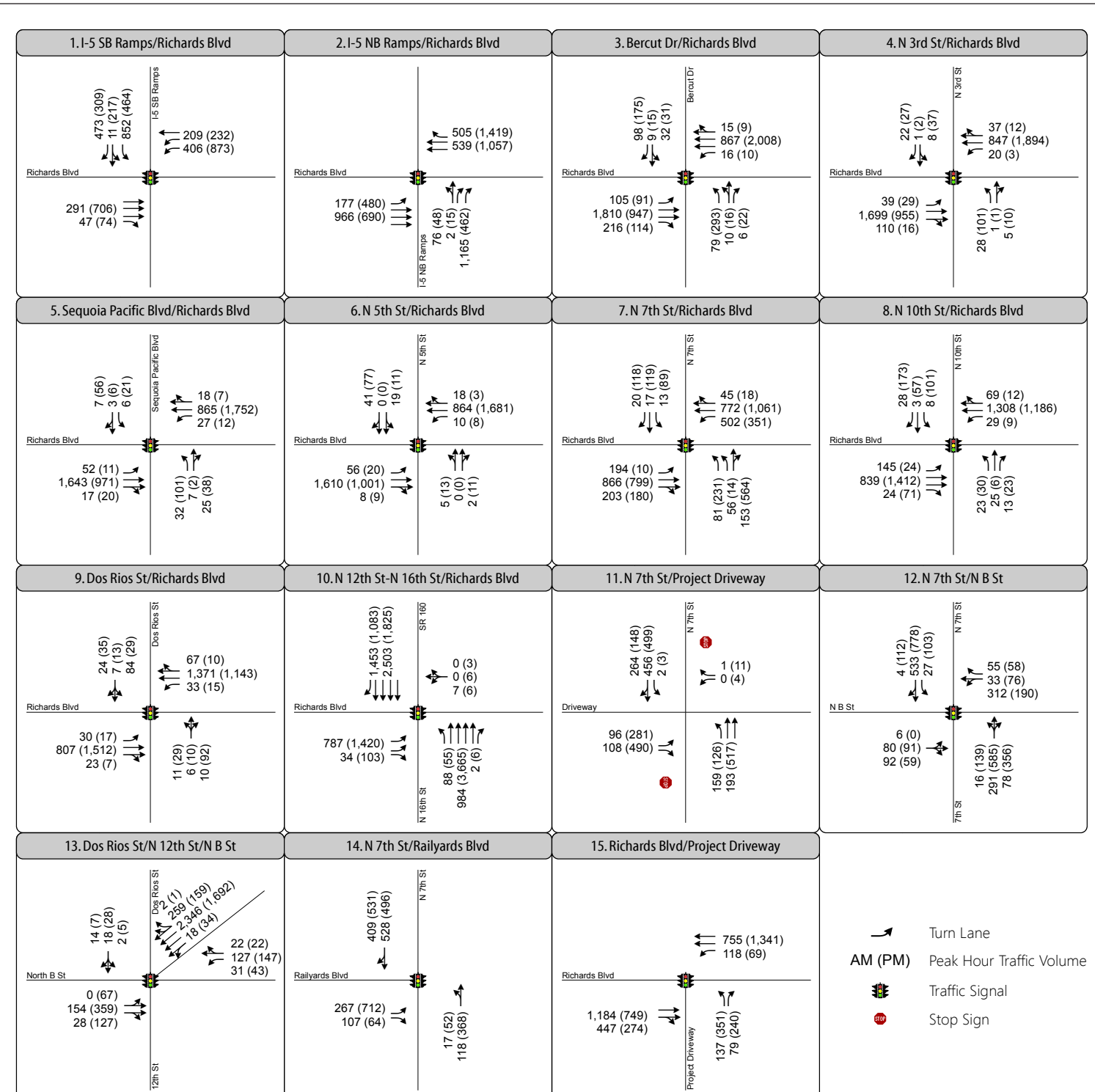
Not to scale

SOURCE: Fehr & Peers, 2018

Richards Boulevard State Office Complex

Figure 3.11-8
Project Trip Distribution - Baseline Conditions

D:\180722.00 - Richards Boulevard State Office Complex\05 Graphics-GIS-Modeling\Illustrator



Not to scale

SOURCE: Fehr & Peers, 2018

Richards Boulevard State Office Complex

Figure 3.11-9
Peak Hour Traffic Volumes and Lane Configurations - Baseline Plus Project Conditions



**TABLE 3.11-9
INTERSECTION OPERATIONS – BASELINE PLUS PROJECT CONDITIONS**

Intersection	Control Type	Baseline No Project				Baseline Plus Project				
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
		Avg Delay ¹	LOS	Avg Delay ¹	LOS	Avg Delay ¹	LOS	Avg Delay ¹	LOS	
1	I-5 SB Ramps/Richards Boulevard	Signal	19	B	35	D	33	C	50	D
2	I-5 NB Ramps/Richards Boulevard	Signal	12	B	12	B	70	E	14	B
3	Bercut Drive/Richards Boulevard	Signal	12	B	35	C	14	B	38	D
4	N 3rd Street/Richards Boulevard	Signal	12	B	39	D	16	B	62	E
5	Sequoia Pacific Boulevard/Richards Boulevard	Signal	10	A	31	C	13	B	108	F
6	N 5th Street/Richards Boulevard	Signal	9	A	23	C	11	B	144	F
7	N 7th Street/Richards Boulevard	Signal	35	C	71	E	85	F	195	F
8	N 10th Street/Richards Boulevard	Signal	12	B	11	B	20	C	86	F
9	Dos Rios Street/Richards Boulevard	Signal	11	B	10	A	12	B	49	D
10	N 12th St-N 16th St/Richards Boulevard	Signal	109	F	81	F	142	F	160	F
11	N 7th Street/Project Driveway	SSSC	2 (5)	A (A)	7 (15)	A (B)	9 (22)	A (C)	117 (441)	F (F)
12	N 7th Street/N B Street	Signal	33	C	81	F	78	E	148	F
13	Dos Rios Street/N B Street-N 12th Street	Signal	18	B	20	B	19	B	20	B
14	N 7th Street/Railyards Boulevard	Signal	22	C	40	D	43	D	258	F
15	Project Driveway/Richards Boulevard	Signal ²	N/A	N/A	N/A	N/A	26	D	166	F

NOTES:

1 For signalized intersections, average intersection delay is reported in seconds per vehicle for all approaches. For SSSC intersections, the LOS and control delay for the worst movement is shown in parentheses next to the average intersection LOS and delay. Intersection LOS and delay is calculated based on the procedures and methodology contained in the Highway Capacity Manual, 6th Edition (Transportation Research Board 2016). All intersections were analyzed in SimTraffic.

2 Assumed to be signalized under baseline plus project conditions.

SOURCE: Fehr & Peers, 2019.

**TABLE 3.11-10
 MAXIMUM FREEWAY OFF-RAMP QUEUE LENGTHS – BASELINE PLUS PROJECT CONDITIONS**

Location	Available Storage ¹	Peak Hour	Baseline No Project Queue ²	Baseline Plus Project Queue ²
1 I-5 SB Ramps/Richards Boulevard	1,350 feet	AM	250 feet	625 feet
		PM	325 feet	400 feet
2 I-5 NB Ramps/Richards Boulevard	1,100 feet	AM	275 feet	2,725 feet
		PM	125 feet	200 feet

NOTES:

- The available storage length for off-ramp queuing is measured from the noted off-ramp terminal intersection to the freeway off-ramp gore point.
- Maximum queue length is based upon output from SimTraffic microsimulation software.

SOURCE: Fehr & Peers 2019.

**TABLE 3.11-11
 I-5 FREEWAY OPERATIONS – BASELINE PLUS PROJECT CONDITIONS**

Study Segment	Peak Hour	Level of Service ¹	
		Baseline No Project	Baseline Plus Project
1 NB I-5 from I Street to Richards Boulevard	AM	D	D
	PM	E	E
2 NB I-5 from Richards Boulevard to Garden Highway	AM	D	D
	PM	F	F
3 SB I-5 from Garden Highway to Richards Boulevard	AM	E	E
	PM	D	D
4 SB I-5 from Richards Boulevard to J Street	AM	D	D
	PM	D	E

NOTES:

- Freeway facilities analyzed using Leisch Method in accordance with the *Highway Design Manual*.

SOURCES: Fehr & Peers 2019; California Department of Transportation, 2016. *Highway Design Manual*. Available: www.dot.ca.gov/design/manuals/hdm.html. Accessed February 13, 2019.

Cumulative Conditions

This subsection describes anticipated travel conditions under cumulative conditions for the roadway, transit, and bicycle/pedestrian systems. The version of the SACMET regional travel demand model previously used for the *Railyards Specific Plan Update, KP Medical Center, MLS Stadium & Stormwater Outfall Subsequent Environmental Impact Report* was used to forecast cumulative traffic volumes within the study area.¹⁰

Land Use and Transportation System Assumptions

The cumulative version of the SACMET model accounts for planned land use growth within the City of Sacramento according to the City’s 2035 General Plan, as well as growth in the

¹⁰ City of Sacramento, 2016. *Railyards Specific Plan Update, KP Medical Center, MLS Stadium, & Stormwater Outfall Subsequent Environmental Impact Report (SCH No. 2006032058)*. Certified November 10, 2016. Available: www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports/Railyards-Specific-Plan-EIR. Accessed February 13, 2019.

surrounding region. The SACMET model also accounts for planned improvements to the surrounding transportation system.

In February 2016, SACOG adopted its 2016 MTP/SCS for the Sacramento region.¹¹ This plan describes and then evaluates, based on assumptions about how local land use plans will develop over the plan horizon, a transportation plan for 2036 that establishes priorities for allocation of State and federal funding of transportation improvements, and the ways that the Sacramento region will meet the requirements of a number of different State laws (e.g., SB 375). This section references various data from the MTP/SCS including the Tier 1 project list, which comprises those transportation improvements that are planned (and have identified funding) to be constructed by 2036. Although the 2020 MTP/SCS is currently under development, its forecasts are still considered draft and the 2020 plan has not yet been adopted by the SACOG Board.

The cumulative analysis for this study assumes a variety of reasonably foreseeable future roadway improvements in the study area including:

- River District Roadway Network with the development of a grid street system including extensions of Bannon Street (from Bercut Drive to 12th Street), 5th and 6th streets between North B Street and Richards Boulevard, and other connections). Refer to Chapter 2 of the River District Design Guidelines¹² for a complete list of planned improvements.
- Railyards Specific Plan Roadway Network;¹³
- Widening/repurposing of North 7th Street/7th Street to consist of two continuous lanes in each direction (one vehicle only lane, and one vehicle/LRT lane) between Richards Boulevard and E Street.
- Richards Boulevard/12th Street/16th Street/Sutter's Landing Parkway intersection reconfiguration;¹⁴
- I-5/Richards Boulevard Interchange improvements (Tier 1 project);¹⁵
- Two-lane Truxel Road Bridge over the American River, extending from Sequoia Pacific Boulevard on the south to Garden Highway on the north;¹⁶
- Two-lane I Street Bridge Replacement over the Sacramento River to new location that would connect at C Street in West Sacramento on the west, and at Railyards Boulevard/Jibboom

¹¹ Sacramento Area Council of Governments, 2016. *Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)*. Available: www.sacog.org/2016-mtpscscs. Accessed February 13, 2019.

¹² City of Sacramento, 2011. *River District Specific Plan*. Adopted February 15, 2011.

¹³ City of Sacramento, 2016. *Railyards Specific Plan Update, KP Medical Center, MLS Stadium, & Stormwater Outfall Subsequent Environmental Impact Report (SCH No. 2006032058)*. Certified November 10, 2019. Available: www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports/Railyards-Specific-Plan-EIR. Accessed February 13, 2019.

¹⁴ City of Sacramento, 2015. *Sacramento 2035 General Plan*. Adopted March 3, 2015.

¹⁵ Sacramento Area Council of Governments, 2016. *Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)*. Available: www.sacog.org/2016-mtpscscs. Accessed February 13, 2019.

¹⁶ City of Sacramento, 2015. *Sacramento 2035 General Plan*. Adopted March 3, 2015.

Street on the east. In conjunction with this improvement, vehicles would no longer travel on the existing I Street Bridge;¹⁷

- High Occupancy Vehicle (HOV) lanes on I-5 from I-80 into downtown Sacramento (Tier 1 project);¹⁸

The new bridges comply with GP Policy M.1.3.2, which specifies that the City shall pursue construction of multi-modal crossings of the Sacramento and American Rivers.

Assumed Tier 1 transit improvements include the following:

- Green Line LRT system improvements – extension of service from the Richards Boulevard/Township 9 station to Sacramento International Airport, double-tracking of line along 7th Street to increase capacity, and increase in service to 15-minute headways;
- Sacramento/West Sacramento streetcar system – would operate within portions of the RSP Area. Although final routes and stations have not been established, preliminary mapping from the Downtown Transportation Study shows the Streetcar extending northerly along 7th Street, and then westerly along Railyards Boulevard, and extending across the new I Street Bridge (via a median transit lane).
- Neighborhood shuttles that would connect the RSP Area to West Sacramento, the River District, and Downtown.
- Sacramento Valley Station – Phase III upgrades including a bus terminal, public parking, and a double-tracked light rail loop along H Street, F Street, with connections to 7th Street south of the UPRR undercrossing.

A two-way cycle track is assumed in place on 12th Street from south of Richards Boulevard into downtown Sacramento. This would result in the elimination of one of the four travel lanes currently present on 12th Street in this area.

Land uses within the model include reasonably foreseeable projects including:

- Buildout of Railyards Specific Plan (as contemplated in the EIR certified in 2016).¹⁹
- Buildout of River District Specific Plan.²⁰
- Twin Rivers Redevelopment, including the reconstruction and expansion of the Dos Rios housing project along with mixed-use development located between Dos Rios Avenue and 16th Street, along 12th Street and south of Richards Boulevard. This would also include a new Blue Line LRT station on 12th Street near Richards Boulevard.

¹⁷ City of Sacramento, 2015. *Sacramento 2035 General Plan*. Adopted March 3, 2015.

¹⁸ Sacramento Area Council of Governments, 2016. *Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)*. Available: www.sacog.org/2016-mtpsc. Accessed February 13, 2019.

¹⁹ City of Sacramento, 2016. *Railyards Specific Plan Update, KP Medical Center, MLS Stadium, & Stormwater Outfall Subsequent Environmental Impact Report (SCH No. 2006032058)*. Certified November 10, 2019. Available: www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports/Railyards-Specific-Plan-EIR. Accessed February 13, 2019.

²⁰ City of Sacramento, 2011. *River District Specific Plan*. Available: www.cityofsacramento.org/Community-Development/Planning/Long-Range/Specific-Plans. Accessed February 13, 2019.

- Other developments including a new Sacramento County Courthouse located at north of H Street between 5th and 6th streets, and 11,000 new dwelling units in the downtown grid outside the RSP (consistent with City goal of adding new residential uses in downtown).

Cumulative No Project Conditions

The Cumulative No Project condition assumes that the site remains in its baseline condition, which consists of demolishing the existing uses and maintaining the site as undeveloped. However, since the surrounding River District properties are all assumed to be developed, the analysis relies upon the reasonable assumption that the Bannon Street and 6th Street extensions through the project site are made.

Figure 3.11-10 displays the Cumulative No Project AM and PM peak hour traffic forecasts at the study intersections. These forecasts consider the transportation improvements described above as well as the trips associated with the reasonably foreseeable land uses listed above. As shown in this figure, the list of study intersections has replaced the single 12th Street/16th Street/Richards Boulevard intersection with four new intersections: 12th Street/Vine Street, 12th Street/Richards Boulevard, 16th Street/Richards Boulevard/Sutter's Landing Parkway, and 16th Street/Vine Street. The associated map displays how the roadway network in this area would change as a result of the construction of Sutter's Landing Parkway and the Twin Rivers Redevelopment project.

Cumulative Plus Project Conditions

Whereas the analysis of the project under baseline conditions was based on its expected trip generation (see Table 3.11-7) and distribution (see Figure 3.11-8), use of these travel behavior estimates is not appropriate for evaluating the project's cumulative conditions for a number of reasons. First, much greater levels of transit service will be provided to the study area. Second, this analysis is intended to depict a cumulative condition in which the RBOC is constructed. As such, it is possible and likely that some employees would choose to live closer to their worksite, particularly given the substantial amount of new residential planned in its vicinity. Third, new public/private parking is planned within the Railyards and River District Specific Plan areas that could be used by those project vehicle trips not able to park onsite. Fourth, the introduction of this large number of new employees to the area would change how trip productions (i.e., from home) and attractions (i.e., to work) are matched. Use of the baseline travel behavior data would essentially 'overlay' baseline project trips on top of the cumulative condition, and not account for any of the important factors described above that should be considered under cumulative conditions.

To develop the Cumulative Plus Project forecasts, the project was added to the Cumulative No Project travel demand model. Although planning to accommodate the extensions of 6th Street and Bannon Street through the project site are still ongoing, this analysis conservatively assumes those connections are not extended through the project site.

The model estimated that the project would generate 1,584 AM peak hour vehicle trips and 1,724 PM peak hour vehicle trips. While those values are considerably lower than the baseline trip estimates in Table 3.11-7, it is important to note that the values in Table 3.11-7 consider the need

for 10 percent of project trips to be made by ridehailing (i.e., TNCs) or kiss-and-ride due to no other available transit options. In fact, when considering the baseline trip estimates (see Appendix G) associated with travel to the site by drive alone, carpool, vanpool, customers/visitors, and service/utility deliveries, the cumulative forecasts are actually 26 percent greater during the AM peak hour and 52 percent greater during the PM peak hour when compared to the baseline estimate. This is likely the result of differences in mode split (particularly bus/light rail) between the baseline estimates and cumulative model. In summary, the cumulative forecasts were derived in a manner consistent with various other land developments projects in the project vicinity and are considered conservative based on the data presented above.

Figure 3.11-11 displays the Cumulative Plus Project AM and PM peak hour traffic volumes, controls, and lane configurations at the study intersections. As shown, the project driveway on North 7th Street is assumed to be a signalized intersection located directly opposite Bannon Street (which would extend easterly from North 7th Street to 12th Street). The project driveway on Richards Boulevard would be a signalized three-way intersection. Opportunities to develop a fourth leg are precluded by the Township 9 LRT station.

Table 3.11-12 displays the project’s estimated VMT under cumulative conditions, which is expressed as the total miles of vehicle travel on a weekday (daily) basis. As noted in the table, this represents the project’s net effect on VMT. The cumulative VMT estimate considers vehicle travel by relocated employees, visitors, etc., as well as also assuming that all but one of the 25 distinct office space locations that would be vacated by relocated employees/State departments would be leased to new tenants. The only exception is 450 N Street, for which retenanting is unlikely given the building’s environmental/safety concerns. The cumulative travel demand model was used to perform this analysis. As shown in Table 3.11-12, the project would cause the net VMT model-wide (i.e., throughout the SACOG region) to increase by 86,813 miles. This increase is to be expected because the project results in a net increase of about 4,000 employees (i.e., 6,000 relocated employees less 2,000 from the 450 N Street building that would not be retenanting) in the region.

**TABLE 3.11-12
 RICHARDS BOULEVARD OFFICE COMPLEX – CUMULATIVE CONDITIONS VEHICLE MILES OF TRAVEL (VMT)**

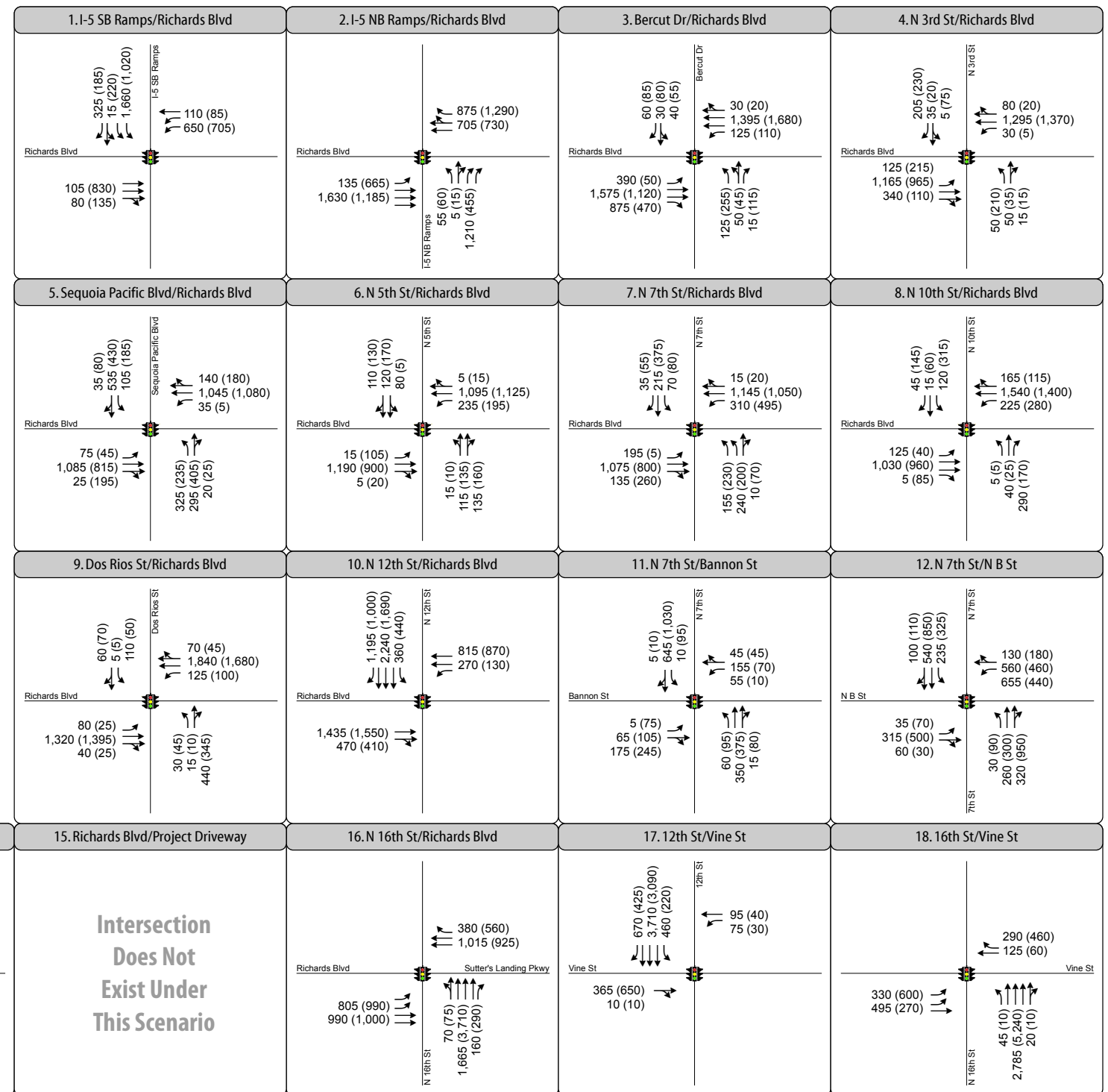
Metric	Quantity (miles)
Cumulative No Project VMT ¹	94,187,546
Cumulative Plus Project VMT ²	94,274,359
Net Change in VMT ³	+ 86,813

NOTES:

- 1 Calculated using the SACMET travel demand model.
- 2 Calculated using the SACMET travel demand model based adding the project land use to the model. Includes backfill land use growth for relocated employees, except for 450 N Street.
- 3 This represents the project’s net effect on VMT for trips generated by the SACOG region under cumulative conditions.

SOURCE: Fehr & Peers, 2019.

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Not to scale

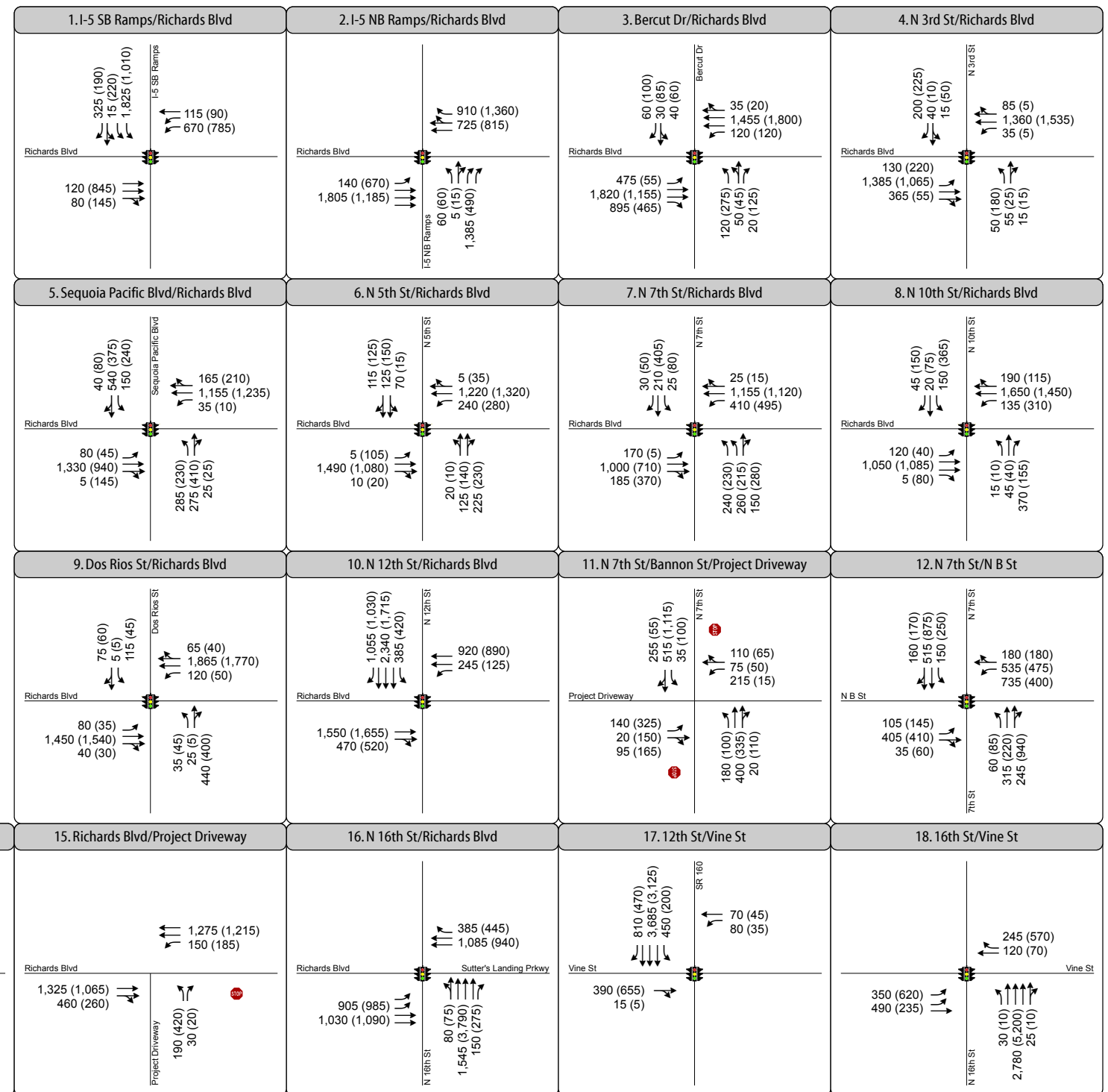
SOURCE: Fehr & Peers, 2018

Richards Boulevard State Office Complex

Figure 3.11-10
Peak Hour Traffic Volumes and Lane Configurations - Cumulative No Project Conditions



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Not to scale

SOURCE: Fehr & Peers, 2018

Richards Boulevard State Office Complex

Figure 3.11-11
Peak Hour Traffic Volumes and Lane Configurations - Cumulative Plus Project Conditions



Table 3.11-13 displays the average delay and LOS at each study intersection under cumulative conditions, without and with the project (see Appendix G for detailed calculations).

**TABLE 3.11-13
INTERSECTION OPERATIONS – CUMULATIVE CONDITIONS**

Intersection	Control Type	Cumulative No Project				Cumulative Plus Project				
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
		Avg Delay ¹	LOS	Avg Delay ¹	LOS	Avg Delay ¹	LOS	Avg Delay ¹	LOS	
1	I-5 SB Ramps/Richards Boulevard	Signal	211	F	88	F	241	F	103	F
2	I-5 NB Ramps/Richards Boulevard	Signal	52	D	26	C	96	F	21	C
3	Bercut Drive/Richards Boulevard	Signal	23	C	39	D	26	C	38	D
4	N 3rd Street/Richards Boulevard	Signal	18	B	87	F	23	C	77	E
5	Sequoia Pacific Boulevard/Richards Boulevard	Signal	72	E	129	F	82	F	144	F
6	N 5th Street/Richards Boulevard	Signal	19	B	103	F	18	B	166	F
7	N 7th Street/Richards Boulevard	Signal	60	E	62	E	61	E	90	F
8	N 10th Street/Richards Boulevard	Signal	93	F	90	F	90	F	80	F
9	Dos Rios Street/Richards Boulevard	Signal	107	F	95	F	111	F	88	F
10	N 12th St-N 16th St/Richard Boulevard	Signal	43	D	48	D	40	D	48	D
11	N 7th Street/Project Driveway	Signal	12	B	20	B	24	C	29	C
12	N 7th Street/N B Street	Signal	82	F	175	F	116	F	174	F
13	Dos Rios Street/N B Street-N 12th Street	Signal	60	E	31	C	44	D	29	C
14	N 7th Street/Railyards Boulevard	Signal	143	F	275	F	118	F	248	F
15	North Project Driveway/Richards Boulevard	Signal	N/A	N/A	N/A	N/A	16	B	126	F
16	N 16th Street/Richards Boulevard	Signal	60	E	83	F	72	E	73	E
17	N 12th St/Vine St	Signal	219	F	190	F	214	F	188	F
18	N 16th St/Vine St	Signal	23	C	42	D	22	C	50	D

NOTES:

1 For signalized intersections, average intersection delay is reported in seconds per vehicle for all approaches. Intersection LOS and delay is calculated based on the procedures and methodology contained in the *Highway Capacity Manual, 6th Edition*. All intersections were analyzed in SimTraffic.

SOURCE: Fehr & Peers, 2019; Transportation Research Board, 2016. *Highway Capacity Manual, 6th Edition*.

It is apparent from this table that both cumulative scenarios feature substantial levels of congestion. The following conclusions are drawn from this table:

- During the AM peak hour, the project would cause two intersections to worsen from LOS D/E to LOS F and increase delays at three intersections projected to already be operating at LOS F.
- During the PM peak hour, 10 of the 17 intersections would already be operating at LOS F under no project conditions. The project would cause one additional intersection (North 7th Street/Richards Boulevard) to worsen to LOS F, but would also reduce delays at several intersections (partially as a result of creating new bottlenecks elsewhere in the system).
- The average delay during the AM peak hour would increase from 76 to 82 seconds per vehicle between no project and plus project. The average delay during the PM peak hour would increase from 93 to 97 seconds per vehicle between no project and plus project.

Based on a comparison of Tables 3.11-9 and Table 3.11-13, project impacts at study intersections are less impactful under cumulative conditions than baseline conditions. The project causes the average intersection delay per vehicle during the AM and PM peak hours to increase by six and four seconds, respectively, under cumulative conditions. Under baseline conditions, the project causes the average (signalized) intersection delay per vehicle during the AM and PM peak hours to increase by 19 and 65 seconds, respectively. As noted earlier, this is due to several factors. First, the baseline analysis overlays projects on top of the baseline no project condition, whereas the cumulative condition is based on the travel demand model, which allows for rematching of trip origins and destinations. Second, the much greater degree of congestion under cumulative conditions limits the amount of project-related growth in delay that can occur.

The LOS results presented above are similar to cumulative conditions reported in prior environmental documents such as the *Railyards Specific Plan Update, KP Medical Center, & MLS Stadium Subsequent Environmental Impact Report* (2016), and *Final Initial Study/Environmental Assessment for Twin Rivers Transit-Oriented Development and Light Rail Station Project* (2017). However, some differences do occur, which are explained below:

1. The cumulative forecasts for those two prior environmental documents were prepared before the Railyards Boulevard, 5th Street, 6th Street, and Jibboom Street connections were made. As such, it was not known how much initial travel would occur on those roadways. In contrast, this study captured those existing volumes. And because the level of existing traffic is part of the estimation of cumulative forecasts (i.e., via the difference method forecasting procedure), certain segments have slightly different forecasts for this study than in previous studies.
2. The portion of the study area in the vicinity of Richards Boulevard/12th Street/16th Street was analyzed using the lane configurations from the *Final Initial Study/Environmental Assessment for Twin Rivers Transit-Oriented Development and Light Rail Station Project*.²¹ Thus, results presented here (not withstanding item 1 above) should generally match that

²¹ City of Sacramento, 2017. *Final Initial Study/Environmental Assessment for Twin Rivers Transit-Oriented Development and Light Rail Station Project*. Available: www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/Environmental-Impact-Reports/2017-07-18_Twin-Rivers-IS-EA.pdf?la=en. Accessed February 13, 2019.

study. In contrast, the at the time the *Railyards Specific Plan Update, KP Medical Center, & MLS Stadium Subsequent Environmental Impact Report*²² was being prepared, geometrics associated with reconfiguration of this area were not yet available, and so these intersections were not studied.

Table 3.11-14 displays the maximum vehicle queues on the I-5 off-ramps at Richards Boulevard under cumulative conditions, without and with the project (refer to Appendix G for technical calculations). As shown, the project would either cause or exacerbate queue spillbacks from the I-5 off-ramps onto northbound and southbound I-5 during the AM peak hour.

**TABLE 3.11-14
 MAXIMUM FREEWAY OFF-RAMP QUEUE LENGTHS – CUMULATIVE PLUS PROJECT CONDITIONS**

Location		Available Storage ¹	Peak Hour	Cumulative No Project Queue ²	Cumulative Plus Project Queue ²
1	I-5 SB Ramps/Richards Boulevard	1,350 feet	AM PM	6,100 600	7,100 725
2	I-5 NB Ramps/Richards Boulevard	1,100 feet	AM PM	600 300	2,025 250

NOTES:

- 1 The available storage length for off-ramp queuing is measured from the noted off-ramp terminal intersection to the freeway off-ramp gore point.
- 2 Maximum queue length is based upon output from SimTraffic microsimulation software.

SOURCE: Fehr & Peers 2019.

Table 3.11-15 displays existing AM and PM peak hour operations on the I-5 freeway study facilities under cumulative conditions, without and with the project (refer to Appendix G for technical calculations).

**TABLE 3.11-15
 I-5 FREEWAY OPERATIONS – CUMULATIVE PLUS PROJECT CONDITIONS**

Study Segment	Peak Hour	Level of Service ¹	
		Cumulative No Project	Cumulative Plus Project
1 NB I-5 from I Street to Richards Boulevard	AM	F	F
	PM	F	F
2 NB I-5 from Richards Boulevard to Garden Highway	AM	F	F
	PM	F	F
3 SB I-5 from Garden Highway to Richards Boulevard	AM	E	F
	PM	F	F
4 SB I-5 from Richards Boulevard to J Street	AM	D	D
	PM	E	F

NOTES:

- 1 Freeway facilities analyzed using Leisch Method in accordance with the *Highway Design Manual*.

SOURCES: Fehr & Peers 2019; California Department of Transportation, 2016. *Highway Design Manual*. Available: www.dot.ca.gov/design/manuals/hdm.html. Accessed February 13, 2019.

²² City of Sacramento, 2016. *Railyards Specific Plan Update, KP Medical Center, MLS Stadium, & Stormwater Outfall Subsequent Environmental Impact Report (SCH No. 2006032058)*. Certified November 10, 2016. Available: www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports/Railyards-Specific-Plan-EIR. Accessed February 13, 2019.

Impacts and Mitigation Measures

Impact 3.11-1: Implementation of the project could worsen conditions at intersections in the City of Sacramento.

The project would degrade operations at intersections in the City of Sacramento. As shown on Table 3.11-9, the City intersections listed below would experience substantially degraded operations. For the purposes of the list below, substantially degraded intersections are those that experience worsening LOS by multiple grades (resulting in LOS E/F conditions) and intersections where existing LOS E/F condition are substantially worsened as measured by the change in delay.

AM Peak Hour

- North 7th Street/Richards Boulevard (LOS C to F)
- North 12th Street/North 16th Street/Richards Boulevard (LOS F exacerbated, with 33 seconds of added delay per vehicle)
- North 7th Street/North B Street (LOS C to E)

PM Peak Hour

- Sequoia Pacific Boulevard/Richards Boulevard (LOS C to F)
- North 5th Street/Richards Boulevard (LOS C to F)
- North 7th Street/Richards Boulevard (LOS E to F, with 124 seconds of added delay per vehicle)
- North 10th Street/Richards Boulevard (LOS B to F)
- North 12th Street/North 16th Street/Richards Boulevard (LOS F exacerbated, with 79 seconds of added delay per vehicle)
- North 7th Street/North B Street (LOS F exacerbated, with 67 seconds of added delay per vehicle)
- North 7th Street/Railyards Boulevard (LOS D to F)
- Project driveway intersections on Richards Boulevard and North 7th Street (each would operate at LOS F).

During the AM and PM peak hours, traffic generated by the project would degrade the overall roadway system operation to the extent that the project would not be consistent with General Plan Policy M 1.2.2 relating to the City's Level of Service Policy and would be detrimental toward achieving other General Plan circulation policies relating to multi-modal improvements (General Plan Policies M 1.2.1, M 1.2.4, M 1.3.3 and M 1.3.5). Although Policy M 1.2.2 does allow the study area to have intersections that operate at LOS F, such conditions should not adversely affect the ability to provide high-quality transit, walkable neighborhoods and business districts, continuous and connected bikeways, transportation demand management, adequate emergency response, and other circulation considerations. The results in Table 3.11-9 indicate that the

majority of the roadway system would experience severe gridlock, and would hamper these other modes of travel and goals. Therefore, this impact is considered **potentially significant**.

Mitigation Measure 3.11-1

- a) The project applicant/architect shall refine the project design to provide an optimal amount of parking that minimizes baseline vehicular trip generation.
- b) The project applicant shall investigate, and if feasible, implement strategies that increase employee telecommuting and workday start/end time flexibility.
- c) The project applicant shall consider the following site design modifications and Transportation Demand Management (TDM) strategies to:
 - i. Increase the cost to drive alone and park onsite to at least \$150 per month.
 - ii. Implement a fair value commuting program, where fees charged to SOV commuters (e.g., through parking pricing) are tied to DGS vehicle trip reduction targets and fee revenue is rebated to non-SOV commuters.
 - iii. Incentivize use of carpool/vanpool modes through matching programs, preferred parking, and other incentives.
 - iv. If feasible, increase monthly transit subsidy to \$100.
- d) Prior to building occupancy, the project applicant shall increase the capacity of the North 7th Street/North B Street intersection by widening and improving traffic signal phasing efficiency.
- e) The project applicant shall investigate, and if feasible, construct a new driveway prior to occupancy on North B Street that permits outbound right-turns only.
- f) The project applicant/architect shall refine the project design to widen the west side of North 7th Street and south side of Richards Boulevard along the project's frontage to create a new curb lane.
- g) Prior to building occupancy, the project applicant shall install traffic signals, if feasible, at the project driveways on North 7th Street and Richards Boulevard, with location/design to the satisfaction of the City of Sacramento who will own/operate the signals.

Level of Significance After Mitigation: Regarding Mitigation Measure 3.11-1(a), analyses show that if the project was designed to provide an additional 436 parking spaces, the 10.1 percent of trips made by ridehailing or 'kiss and ride' (which are necessitated by the lack of capacity by any other available travel modes) under baseline conditions could be eliminated. Because each of these trip types actually generates two trip ends at the site, their removal could be beneficial to traffic operations. This would reduce the project's vehicular trip generation by 313 trips during the AM peak hour and 416 trips during the PM peak hour.

Regarding Mitigation Measure 3.11-1(b), strategies that encourage employees to occasionally telecommute or vary their arrival/departure time would benefit peak hour

traffic conditions. Currently, 46 percent of employees arrive during the AM peak hour and 62 percent depart during the PM peak hour. The vast majority of employees work full-time and are onsite five days per week. If a set of strategies were enacted that, for example, resulted in five percent of employees telecommuting on a typical mid-week day, and 10 percent fewer employees arriving/ departing during each peak hour, this would reduce the project's vehicular trip generation by 301 trips during the AM peak hour and 405 trips during the PM peak hour (holding all other variables constant).

Regarding Mitigation Measure 3.11-1(c), TDM strategies could prove beneficial in reducing vehicle trips and impacts to the roadway network. Many of the listed strategies discourage single-occupant driving in favor of carpooling or taking transit. As noted earlier, the Baseline Plus Project condition would result in light rail and bus utilization that is at or near capacity. Therefore, any TDM strategies that encourage greater use of those modes must be coupled with mitigation measures discussed for Impact 3.11-4 (Public Transit). The results of the DGS employee survey indicate that increasing parking pricing and transit subsidies could be effective in encouraging employees to alter their mode choice. Specifically, when asked how they would respond if the monthly cost to park were to increase from \$100 to \$150, nearly 40 percent of employees stated they would be somewhat or very unlikely to continue driving alone. When the cost was increased to \$200 per month, 53 percent stated this conclusion. The employee survey also revealed that items iii (carpool/vanpool matching programs) and iv (increase transit subsidy from \$65 to \$100) would each result in about 40 percent of respondents stating that they would be somewhat or very unlikely to continue driving alone.

Regarding Mitigation Measure 3.11-1(d), by the time the project would be constructed, this intersection would likely already be improved from its current configuration as part of new development within the Railyards Specific Plan. However, if not yet improved, the project should widen the intersection to increase its capacity. This would include development of a dedicated northbound left-turn pocket to enable the northbound and southbound phases to operate with protected left-turn phasing.

Regarding Mitigation Measure 3.11-1(e), a new outbound right-turn only driveway onto North B Street from the project site would reduce the amount of traffic exiting onto southbound 7th Street from the project's main driveway and passing through the North B Street intersection. Motorists may be inclined to use this new driveway to "loop around" the project to access Richards Boulevard via signalized intersections at Sequoia Pacific Boulevard or Bercut Drive. However, the project's limited frontage along North B Street would require that this driveway be situated less than 100 to 150 feet away from North 7th Street, which may not be acceptable to the City. To restrict movements to outbound right-turns only, a narrow raised median would need to be constructed along North B Street and the driveway would need to be designed with widths and geometrics that makes westbound right-turn (inbound) movements infeasible.

Regarding Mitigation Measure 3.11-1(f), widening along the project frontages to add a curb lane would enable drop-off/pick-up activity to occur on-street (in a dedicated space) versus requiring those motorists to briefly enter and then exit the project site for this activity. While this improvement would not benefit traffic conditions on roadways more remote to the site, conditions would improve in the immediate vicinity of the project.

Regarding Mitigation Measure 3.11-1(g), traffic signals should be installed by the applicant at both project driveways prior to occupancy. Coordination with the City is

required to determine appropriate lane configurations, treatment of light rail vehicle pre-emptions, and other considerations.

In summary, Mitigation Measure 3.11-1 is a multi-faceted set of strategies that are intended to shift RBOC employees' travel choices to more efficient travel modes, increase capacity at critical intersections, and provide adequate project ingress/egress. In combination, these strategies could produce major changes in vehicle trips generated by the site and corresponding traffic operations. For instance, measures (a) and (b) alone (i.e., provide optimal amount of parking supply, and encourage telecommuting/flexible work schedules) could reduce the project's PM peak hour vehicle trip generation by 32 percent. Because it is not known which of the above seven strategies will ultimately be implemented and how effective they may be, this section does not include a quantitative analysis of their effects on the roadway network. However, it is apparent from the narrative provided here that benefits may be considerable.

Due to the uncertainty that these mitigation measures will be implemented and achieve the desired level of traffic relief within the study area, this impact is considered **significant and unavoidable**.

Impact 3.11-2: Implementation of the project could worsen conditions on freeway facilities maintained by Caltrans.

The project would cause freeway facilities maintained by Caltrans to have degraded operating conditions including exacerbation of LOS F conditions during the PM peak hour on northbound I-5 between Richards Boulevard and Garden Highway. As noted in Table 3.11-10, the project would cause the maximum queue length during the AM peak hour on the I-5 Northbound off-ramp at Richards Boulevard to exceed the available storage, thereby causing queues to spill onto the I-5 mainline. The project would also result in greater queuing on westbound SR 160 during the AM peak hour (as evidenced by the increase in delay and reduced percent demand served statistics shown in Appendix G). This impact is considered **potentially significant**.

Mitigation Measure 3.11-2

Implement Mitigation Measure 3.11-1.

Level of Significance After Mitigation: As noted above, it is not known which of the seven strategies included within Mitigation Measure 3.11-1 will ultimately be implemented and how effective they may be.

Due to the uncertainty that these mitigation measures will be implemented and achieve the desired level of traffic relief on Caltrans freeway facilities, this impact is considered **significant and unavoidable**.

Impact 3.11-3: Implementation of the project could substantially increase VMT per service population (total residents and employees) within the Sacramento Core Area.

The project would generate 117,260 daily VMT under baseline conditions. According to Table 4.4-4 of *10th and O Street Office Building Project Draft EIR*,²³ the Sacramento Core Area (bounded by the Sacramento River, American River, Alhambra Boulevard, and Broadway) currently generates 4,190,318 daily VMT. Given that this area has a combined service population (residents and employees) of 113,577, the daily VMT per service population is 36.89. The project would increase the VMT by 117,260 and the service population by 6,000. Using the same mathematical formulation, the VMT per service population under baseline plus project conditions would be 36.02. Thus, the project would not increase the VMT per service population within the Sacramento Core Area. Therefore, this impact is considered **less than significant**.

Mitigation Measure

None required.

Impact 3.11-4: Implementation of the project could adversely affect public transit operations or fail to adequately provide access to transit.

The project would generate demand for 535 employee light rail passengers during the AM peak hour and 729 employee light rail passengers during the PM peak hour. The Green Line (with a stop adjacent to project site) operates on 30-minute headways with a one-car train. Each car can accommodate 125 passengers. Although these cars are currently less than 10 percent occupied, the project's net increase in employee passengers would substantially exceed the line's directional capacity of 250 passengers per hour. Therefore, by virtue of its location within the existing light rail network and existing light rail service levels, the project would not provide adequate access to light rail transit for employees who desire to utilize light rail service.

The project would generate demand for 107 employee bus passengers during the AM peak hour and 146 employee bus passengers during the PM peak hour. These passengers would almost exclusively use SacRT Routes 11 and 15, which serve destinations in Natomas and Sacramento County (terminating at Watt/I-80). They each operate on 30 minute headways. Assuming capacity of 40 persons per bus, the PM peak hour ridership would represent 91 percent of these route's capacity. Given that existing ridership is most likely greater than 10 percent of capacity, these buses would reach capacity during peak hours. Additionally, the project site is not currently served by any of the regional commute bus services that otherwise stop in downtown. The project would require employees/visitors desiring to access the site from the new Dos Rios Blue Line station (near Richards Boulevard and 12th Street) to walk ¾ mile, which exceeds the typical ½ mile maximum walk distance to transit. Lastly, degraded traffic operations along Richards

²³ California Department of General Services, 2018. *10th and O Street Office Building Project Draft EIR* (SCH No. 2018072065). Available: www.documents.dgs.ca.gov/resd/psb/EIR/10thandOStDraft_EIR.pdf. Accessed February 13, 2019.

Boulevard and North 7th Street could cause delays to both light rail vehicles and buses. For these reasons, this impact is considered **potentially significant**.

Mitigation Measure 3.11-4

- a) Implement Mitigation Measure 3.11-1.
- b) Prior to building occupancy, the project applicant shall coordinate with SacRT to expand Green Line service (i.e., more cars, more frequent headways, extended hours of operation).
- c) Prior to building occupancy, the project applicant shall coordinate with SacRT to investigate the potential for modifying existing bus routes to improve service to the project site.
- d) Prior to building occupancy, the project applicant shall coordinate with other transit service providers to provide commute bus service to the project site.
- e) Prior to building occupancy, the project applicant shall develop and implement a shuttle service plan that transports employees between the project site and the planned new Blue Line Dos Rios station near 12th Street and Richards Boulevard.

Level of Significance After Mitigation: Regarding Mitigation Measure 3.11-4(a), this measure would reduce project-generated vehicle trips and improve operations on the surrounding roadway network. This could reduce delays to light rail trains and buses. Regarding Mitigation Measure 3.11-4(b), trains could be operated with two or three cars during peak periods (versus single cars) to expand LRT service capacity to and from the project site. Regarding Mitigation Measure 3.11-4(c), through relocated employee residence ZIP code data, it is possible to identify routing changes for existing bus routes that would achieve the greatest ridership generation. Regarding Mitigation Measure 3.11-4(d), among relocated employees who currently work in downtown, 14 percent report using bus service as their primary mode of travel to work. This mitigation measure requires the applicant to coordinate with providers such as Placer County Transit, eTran, YoloBus, and Yuba-Sutter Transit to explore new routes or route modifications to serve the project site. Regarding Mitigation Measure 3.11-4(d), the ideal solution would be a free employee shuttle that operates during peak periods between the planned new Blue Line station and the project site. Other solutions (though less ideal due to potential for travel in adverse weather and in darkness on streets not currently well-suited to these modes) include coordinating with bikeshare and scooter providers to encourage placement of their devices at these locations.

It is unknown whether agreements can be reached with the various transit service providers to achieve the service expansions described above.

Due to the uncertainty that these mitigation measures will be implemented and achieve the desired level of transit service expansion, this impact is considered **significant and unavoidable**.

Impact 3.11-5: Implementation of the project could adversely affect existing or planned bicycle facilities or fail to provide for access by bicycle.

The project could generate short distance bicycle (and e-scooter) trips between the project site and nearby destinations such as downtown, nearby restaurants, and the planned Dos Rios Blue Line station. Some long distance commute bicycle trips could also occur. The majority of roadways within the study area (including along the project frontage) include Class II on-street bike lanes.

The current project design would preclude construction of the planned Bannon Street and 6th Street extensions through the site, which would thus not allow for the planned construction of Class II bike lanes along Bannon Street and Class III bike facilities along North 6th Street. The loss of bicycle connectivity along Bannon Street is particularly critical because of the considerable distance between Richards Boulevard and North B Street. In contrast, parallel north-south capacity to 6th Street is provided via North 7th Street, North 5th Street, and Judah Street.

Mitigation Measure 3.11-1(f) recommends that the project applicant widen Richards Boulevard and North 7th Street along the project frontage to create a curb lane. Along North 7th Street, the resulting cross-section (starting at the project's curb line) would consist of a curb lane, a Class II bike lane, a LRT-only travel lane, and an auto/bus lane, all of which would operate in the southbound direction. Although the segment of Richards Boulevard along the project's frontage is fairly short (about 630 feet), it would include a signalized driveway and the existing bus stop located 200 feet west of North 7th Street. The introduction of the new curb lane would modify the existing Class II bike lane configuration, potentially causing conflicts with other modes of travel. Therefore, this impacts associated loss of east-west bicycle connectivity along Bannon Street and potential conflicts of the new curb lane with other modes of travel are considered **potentially significant**.

Mitigation Measure 3.11-5

- a) Prior to building occupancy, the project applicant shall coordinate with the City of Sacramento to identify and implement a mutually acceptable set of bicycle network improvements along the project frontage. This may include the system described above, or could take the form of a series of one-way or two-way 'protected bike lanes' similar to what has recently been constructed in downtown. Other considerations involve bicycle/light rail, and bicycle/bus stop, and bicycle/signalized driveway interactions and design treatments.
- b) The project applicant/architect shall refine the project design to provide, if feasible from a design perspective, a bicycle facility along Bannon Street through the project site.

Level of Significance After Mitigation: Coordination with City staff would be expected to result in a design along the project frontages that reduces conflicts with other modes of travel, which would lessen this portion of the impact to less-than-significant. However, it is currently unknown whether the project design can accommodate an east-west through

street within the site. Therefore, this impact is considered cumulatively **significant and unavoidable**.

Impact 3.11-6: Implementation of the project could adversely affect existing or planned pedestrian facilities or fail to provide for access for pedestrians.

The project would not adversely affect any existing pedestrian facilities. It would construct two new signalized intersections on Richards Boulevard and North 7th Street, both of which would include crosswalks. The new crosswalk on Richards Boulevard would be particularly important as it would provide more direct pedestrian access to the adjacent Township 9 light rail station versus walking to the Richards Boulevard/North 7th Street intersection.

The current project design would preclude construction of the planned Bannon Street and 6th Street extensions through the site, which would thus not allow for pedestrian facilities on these streets. The loss of pedestrian connectivity along Bannon Street is particularly critical because of the considerable distance between Richards Boulevard and North B Street. In contrast, parallel north-south capacity to North 6th Street is provided via North 7th Street, North 5th Street, and Judah Street. The loss of east-west pedestrian connectivity along Bannon Street is an impact that is considered **potentially significant**.

Mitigation Measure 3.11-6

The project applicant/architect shall refine the project design to provide, if feasible from a design perspective, a pedestrian connection along Bannon Street through the project site.

Level of Significance After Mitigation: This mitigation measure would reduce this impact to less than significant if it were to be implemented. However, it is currently unknown whether the project design can accommodate an east-west through street within the site. Therefore, this impact is considered cumulatively **significant and unavoidable**.

Impact 3.11-7: The project could cause construction-related traffic impacts.

Construction of the project would involve large amounts of grading, earthwork, and construction activities over an extended period of time. Large numbers of trucks and employee trips would enter and exit the project site during construction. These activities could cause lane closures, damage to roadways, and increased conflicts with bicyclists, pedestrians, and transit. The duration of construction, number of trucks, truck routing, number of employees, employee parking, truck idling, lane closures, and a variety of other construction-related activities are unknown at this time. Therefore, it would be speculative to conduct any type of quantitative analysis. However, because of the extent and duration of construction, and the associated potential for prolonged lane closures, damage to roadbeds, and traffic hazards to bikes/pedestrians, this impact is considered **potentially significant**.

Mitigation Measure 3.11-7

Before start of construction activities on the project site, the project applicant shall prepare a detailed Construction Traffic Management Plan that will be subject to review and approval by the City Department of Public Works, in consultation with affected transit providers, and local emergency service providers including the City of Sacramento Fire and Police departments. The plan shall ensure that acceptable operating conditions on local roadways are maintained. At a minimum, the plan shall include:

- The number of truck trips, time, and day of street closures
- Time of day of arrival and departure of trucks
- Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting
- Provision of a truck circulation pattern
- Identification of detour routes and signing plan for street/lane closures
- Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas)
- Maintain safe and efficient access routes for emergency vehicles and transit
- Manual traffic control when necessary
- Proper advance warning and posted signage concerning street closures
- Provisions for pedestrian and bicycle safety

A copy of the construction traffic management plan shall be submitted to local emergency response agencies and transit providers, and these agencies shall be notified at least 30 days before the commencement of construction that would affect roadways.

Level of Significance After Mitigation: The implementation of the above mitigation measure would reduce this impact to **less than significant**.

Cumulative Impacts

The identification of cumulative impacts is based on the significance criteria contained in Section 3.11.2 and the analysis results presented in this section. The cumulative context focuses on the project's contribution toward cumulatively considerable impacts, taking into consideration past, present, and reasonably probable future projects.

Impact 3.11-8: Implementation of the project, in combination with other development, could contribute to cumulatively worsened conditions at intersections in the City of Sacramento.

The project, in combination with other development, could contribute to cumulatively worsened conditions at intersections in the City of Sacramento. As shown on Table 3.11-13, the following

City intersections would experience substantially degraded operations. For purposes of the list below, substantially degraded intersections are those that experience worsening LOS by multiple grades (resulting in LOS E/F conditions) and intersections whose existing LOS E/F condition are substantially worsened as measured by the change in delay.

AM Peak Hour

- Sequoia Pacific Boulevard/Richards Boulevard (LOS E to F, with 10 seconds of added delay per vehicle)
- North 7th Street/North B Street (LOS F exacerbated, with 34 seconds of added delay per vehicle)

PM Peak Hour

- Sequoia Pacific Boulevard/Richards Boulevard (LOS F exacerbated, with 15 seconds of added delay per vehicle)
- North 5th Street/Richards Boulevard (LOS F exacerbated, with 63 seconds of added delay per vehicle)
- North 7th Street/Richards Boulevard (LOS E to F, with 28 seconds of added delay per vehicle)
- Project driveway intersection on Richards Boulevard (would operate at LOS F).

During the AM and PM peak hours, traffic generated by the project would contribute to cumulatively degraded overall roadway system operation to the extent that the project would not be consistent with General Plan Policy M 1.2.2 relating to the City's Level of Service Policy and would be detrimental toward achieving other General Plan circulation policies relating to multi-modal improvements (General Plan Policies M 1.2.1, M 1.2.4, M 1.3.3 and M 1.3.5). Although Policy M 1.2.2 does allow the study area to have intersections that operate at LOS F, such conditions should not adversely the ability to provide high-quality transit, walkable neighborhoods and business districts, continuous and connected bikeways, transportation demand management, adequate emergency response, and other circulation considerations. The results in Table 3.11-13 indicate that the majority of the roadway system would experience severe gridlock, and would hamper these other modes of travel and goals. The cumulative impact would be potentially significant, and the project's contribution would be considerable. Therefore, this impact is considered **potentially significant**.

Mitigation Measure 3.11-8

- a) Implement Mitigation Measure 3.11-1 (portions thereof that are applicable under cumulative conditions).
- b) The project applicant/architect shall refine the project design to provide, if feasible from a design perspective, a vehicular connection of Bannon Street through the project site.

Level of Significance After Mitigation: Regarding Mitigation Measure 3.11-8(b), analyses show that this street segment would accommodate approximately 3,000 ADT (all background traffic, and not project-related) if constructed. This traffic would be diverted to portions of Richards Boulevard and North B Street if the connection was severed. Neither of these streets (and intersections along them) have adequate reserve capacity to accommodate this shift in traffic.

It is not known which of the strategies associated with Mitigation Measure 3.11-1 will ultimately be implemented and how effective they may be. Thus, this section does not include a quantitative analysis of their cumulative benefits to the roadway network.

Due to the uncertainty that these mitigation measures will be implemented and achieve the desired level of traffic relief within the study area, this impact is considered **cumulatively significant and unavoidable**.

Impact 3.11-9: Implementation of the project, in combination with other development, could contribute to cumulatively worsened conditions on freeway facilities maintained by Caltrans.

The project, in combination with other development, could contribute to cumulatively worsened conditions at freeway facilities maintained by Caltrans. This includes degraded operations on southbound I-5 between Garden Highway and Richards Boulevard (LOS E to F during the AM peak hour and worsening of LOS F during the PM peak hour), degraded operations on southbound I-5 between Richards Boulevard and J Street (LOS E to F during the PM peak hour), and worsened LOS F operations on both study segments of northbound I-5 during the AM and PM peak hours. The project would also worsen delay at the I-5 SB Ramps/Richards Boulevard intersection (project added delay of 30 seconds during the AM peak hour and 15 seconds during the PM peak hour) and cause the I-5 NB Ramps/Richards Boulevard intersection to worsen from LOS D to LOS F during the AM peak hour. Lastly, the project would cause the maximum queue length during the AM peak hour on the I-5 Northbound and Southbound off-ramps at Richards Boulevard to exceed the available storage or exacerbate an already unacceptable vehicle storage situation. The cumulative impact would be potentially significant, and the project's contribution would be considerable. This impact is considered **potentially significant**.

Mitigation Measure 3.11-9

- a) Implement Mitigation Measure 3.11-1 (portions thereof that are applicable under cumulative conditions).
- b) The ongoing I-5/Richards Boulevard Interchange Project Approval/ Environmental Document studies (being led by the City of Sacramento, and in partnership with Caltrans) for an upgraded interchange should consider the travel demands of the project when analyzing traffic forecasts and preferred geometric improvements for the reconstructed interchange.

Level of Significance After Mitigation: As noted above, it is not known which of strategies included within Mitigation Measure 3.11-1 would ultimately be implemented

and how effective they may be. Additionally, it is not known what type of geometric design for the reconstructed interchange will ultimately be selected.

Due to the uncertainty that these mitigation measures will be implemented and achieve the desired level of traffic relief on Caltrans freeway facilities, this impact is considered cumulatively **significant and unavoidable**.

Impact 3.11-10: Implementation of the project could substantially increase VMT per service population (total residents and employees) within the Sacramento Core Area under cumulative conditions.

As shown in Table 3.11-12, the project would result in a net increase of 86,813 VMT under cumulative conditions. This occurs as a result the project causing a net increase of about 4,000 employees (i.e., 6,000 relocated employees less 2,000 from the 450 N Street building that would not be retented).

According to Table 5-5 of *10th and O Street Office Building Project Draft EIR*,²⁴ a cumulative analysis using the SACMET cumulative year travel demand model indicated that all travel to/from the traffic analysis zones (TAZs) representing the Core Area (bounded by the Sacramento River, American River, Alhambra Boulevard, and Broadway) of the City would generate 5,997,448 VMT. Given that these zones would have a combined service population (residents and employees) of 193,808, the daily VMT per service population was estimated to be 30.95. The project would increase the VMT by 86,813 and the service population by 4,030. Using the same mathematical formulation, the VMT per service population under cumulative plus project conditions would be 30.75. Thus, the project would not increase the VMT per relocated employee nor would it increase the overall VMT per service population in the downtown core area. Therefore, this impact is considered **less than significant**.

Mitigation Measure

None required.

Impact 3.11-11: Implementation of the project, in combination with other development, could adversely affect public transit operations or fail to adequately provide access to transit under cumulative conditions.

Transit service in the project vicinity would be much enhanced over current conditions due to the extension of the Green Line LRT service to Natomas and beyond, additional bus service, and the new Blue Line Dos Rios Light Rail Station. SacRT is considering other system modifications that could results in improved geographic coverage in the study area. However, the project would

²⁴ California Department of General Services, 2018. *10th and O Street Office Building Project Draft EIR* (SCH No. 2018072065). Available: www.documents.dgs.ca.gov/resd/psb/EIR/10thandOStDraft_EIR.pdf. Accessed February 13, 2019.

degrade traffic operations on certain roadways, which could adversely affect bus and light rail operations. The cumulative impact would be potentially significant, and the project's contribution would be considerable. Therefore, this impact is considered **potentially significant**.

Mitigation Measure 3.11-11

Implement Mitigation Measure 3.11-1 (portions thereof that are applicable under cumulative conditions).

Level of Significance After Mitigation: Due to the uncertainty that these mitigation measures will be implemented and achieve the desired level of traffic relief within the study area, this impact is considered cumulatively **significant and unavoidable**.

Impact 3.11-12: Implementation of the project could adversely affect existing or planned bicycle facilities or fail to provide for access by bicycle under cumulative conditions.

The project could generate short distance bicycle (and e-scooter) trips between the project site and nearby destinations such as downtown, nearby restaurants, and the planned Dos Rios Blue Line station. Some long distance commute bicycle trips could also occur. The majority of roadways within the study area (including along the project frontage) include Class II on-street bike lanes.

The current project design would preclude construction of the planned Bannon Street and 6th Street extensions through the site, which would thus not allow for the planned construction of Class II bike lanes along Bannon Street and III bike facilities along North 6th Street. The loss of bicycle connectivity along Bannon Street is particularly critical because of the considerable distance between Richards Boulevard and North B Street. In contrast, parallel north-south capacity to 6th Street is provided via North 7th Street, North 5th Street, and Judah Street. The cumulative impact would be potentially significant, and the project's contribution would be considerable. The loss of east-west bicycle connectivity along Bannon Street is an impact that is considered **potentially significant**.

Mitigation Measure 3.11-12

The project applicant/architect shall refine the project design to provide, if feasible from a design perspective, a bicycle facility along Bannon Street through the project site.

Level of Significance After Mitigation: This mitigation measure would reduce this impact to less than significant if it were to be implemented. However, it is currently unknown whether the project design can accommodate an east-west through street within the site. Therefore, this impact is considered cumulatively **significant and unavoidable**.

Impact 3.11-13: Implementation of the project could adversely affect existing or planned pedestrian facilities or fail to provide for access for pedestrians under cumulative conditions.

The project would not adversely affect any existing pedestrian facilities. It would construct two new signalized intersections on Richards Boulevard and North 7th Street, both of which would include crosswalks. The crosswalk on Richards Boulevard would be particularly important as it would provide more direct pedestrian access to the adjacent Township 9 light rail station versus walking to the Richards Boulevard/North 7th Street intersection.

The current project design would preclude construction of the planned Bannon Street and 6th Street extensions through the site, which would thus not allow for pedestrian facilities on these streets. The loss of pedestrian connectivity along Bannon Street is particularly critical because of the considerable distance between Richards Boulevard and North B Street. In contrast, parallel north-south capacity to North 6th Street is provided via North 7th Street, North 5th Street, and Judah Street. The cumulative impact would be potentially significant, and the project's contribution would be considerable. The loss of east-west pedestrian connectivity along Bannon Street is an impact that is considered **potentially significant**.

Mitigation Measure 3.11-13

The project applicant/architect shall refine the project design to provide, if feasible from a design perspective, a pedestrian connection along Bannon Street through the project site.

Level of Significance After Mitigation: This mitigation measure would reduce this impact to less than significant if it were to be implemented. However, it is currently unknown whether the project design can accommodate an east-west through street within the site. Therefore, this impact is considered cumulatively **significant and unavoidable**.

Impact 3.11-14: The project, in combination with other development, could contribute to cumulatively considerable construction-related traffic impacts.

Construction of the project would involve large amounts of grading, earthwork, and construction activities over an extended period of time. Large numbers of trucks and employee trips would enter and exit the project site during construction. These activities could cause lane closures, damage to roadways, and increased conflicts with bicyclists, pedestrians, and transit. The duration of construction, number of trucks, truck routing, number of employees, employee parking, truck idling, lane closures, and a variety of other construction-related activities are unknown at this time. This activity could occur simultaneously with other construction projects in the area including new development in the Railyards Specific Plan, the Twin Rivers Redevelopment Project, and other activities. Therefore, it is important that construction activities on the project site be coordinated through the City with activities at other nearby sites. The cumulative impact would be potentially significant, and the project's contribution would be considerable. The

potential effect of multiple construction activities occurring simultaneously is considered **potentially significant**.

Mitigation Measure 3.11-14

Implement Mitigation Measure 3.11-7 (Develop and Implement Construction Traffic Management Plan), and consider other planned construction activities in the area when developing the plan.

Level of Significance After Mitigation: The implementation of the above mitigation measure would reduce this impact to **less than significant**.

3.12 Utilities and Infrastructure

This section assesses the potential effects on utilities and infrastructure as a result of implementation of the Richards Boulevard Office Complex (RBOC) project. This section includes relevant baseline information, such as a description of existing surface and groundwater supply, wastewater and stormwater treatment, and solid waste disposal; anticipates future conditions after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete; and considers how the project would affect the aforementioned utilities and infrastructure. This section contains a description of the potential impacts resulting from the project, as well as the identification of feasible mitigation (where applicable) to avoid or lessen those impacts.

Comments on the notice of preparation (NOP) relating to utilities infrastructure and service systems were received from the Central Valley Regional Water Quality Control Board, the City of Sacramento Department of Community Development, and the Sacramento Municipal Utility District (SMUD). The comments include requests to consider the effects of project design on the capacity of the City and other service providers to adequately provide water, sewer, drainage, and electrical transmission and distribution facilities to future development, and to consider compliance with the permitting requirements related to surface and groundwater relevant to the project. These comments are addressed in this chapter.

The primary sources of data referenced for this section include:

- City of Sacramento 2035 General Plan (2035 General Plan),¹
- 2035 General Plan Background Report,²
- 2035 General Plan Update Draft Master Environmental Impact Report (Master EIR),³
- City of Sacramento Department of Utilities (Department of Utilities) 2015 Urban Water Management Plan,⁴
- Department of Utilities Design and Procedure Manual Sections 9⁵ and 11,⁶
- Sacramento Regional County Sanitation District (Regional San) 2020 Master Plan Final Executive Summary for the Sacramento Regional Wastewater Treatment Plant (SRWWTP),⁷

¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

² City of Sacramento, 2015. *City of Sacramento 2035 General Plan Background Report: Chapter 4*. Adopted March 3, 2015.

³ City of Sacramento, 2014. *City of Sacramento 2035 General Plan Update Draft Master Environmental Impact Report*. August 2014.

⁴ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016.

⁵ City of Sacramento Department of Utilities, 2018. *Department of Utilities Design and Procedure Manual Section 9: Sewer Collection Systems*. July 24, 2018.

⁶ City of Sacramento Department of Utilities, 2018. *Department of Utilities Design and Procedure Manual Section 11: Stormwater Collection Systems*. July 24, 2018.

⁷ Sacramento Regional County Sanitation District, 2008. *2020 Master Plan Final Executive Summary for the Sacramento Regional Wastewater Treatment Plant*. May 2008.

- Regional San 2017 State of the District Report,⁸
- River District Specific Plan (RDSP),⁹
- RDSP Draft EIR,¹⁰ and
- Stormwater Quality Design Manual for the Sacramento Region.¹¹

3.12.1 Environmental Setting

Existing Conditions

Water Supply

The Department of Utilities is generally responsible for providing water services, including water, sewer collection, storm drainage, and flood control services, to the City of Sacramento within city limits. Certain communities in an adjacent, unincorporated portion of Sacramento County also receive water from the Department of Utilities, while certain residents within city boundaries are served by the Sacramento Suburban Water District (SSWD). As of 2015, this population amounted to approximately 480,105 individuals over an area of roughly 99 square miles (63,182 acres), and the Department of Utilities served approximately 135,830 connections.¹² The City of Sacramento also serves as a wholesale water service provider to the Sacramento County Water Agency, the Sacramento Suburban Water District, the California American Water Company, and the Fruitridge Vista Water Company.

Under water entitlements issued by the State Water Resources Control Board (SWRCB), the City of Sacramento is able to divert water from both the Sacramento and American Rivers. Surface water is diverted from the Sacramento River downstream of the confluence of the Sacramento and the American, serves locations within City limits, while water diverted from the American River downstream of the Howe Avenue Bridge serves both locations within City limits and areas adjacent to the City boundaries. Groundwater is drawn from the two subbasins of the Sacramento Valley Groundwater Basin over which Sacramento is situated: the North American Subbasin, located north of the American River, and the South American Subbasin, situated south of the American River.¹³

Surface Water Supply

The City of Sacramento has historically been dependent on river water as its primary source of drinking and surface water supply, and holds multiple water entitlements, including pre-1914 diversion rights, those issued by the SWRCB (summarized in **Table 3.12-1**), and a 1957 water

⁸ Sacramento Regional County Sanitation District, no date. *2017 State of the District Report*.

⁹ City of Sacramento Community Development Department and Economic Development Department, 2011. *River District Specific Plan*. Adopted February 15, 2011.

¹⁰ City of Sacramento Community Development Department, 2010. *River District Specific Plan Draft Environmental Impact Report*. July 2010.

¹¹ Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, Sacramento, and County of Sacramento, 2018. *Stormwater Quality Design Manual for the Sacramento Region*. July 2018.

¹² City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 3-1 to 3-2.

¹³ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. pp. 3-2, 6-1.

rights settlement contract established with the U.S. Bureau of Reclamation (USBR). The pre-1914 rights permit the diversion of 75 cubic feet per second (cfs) from the Sacramento River, and three of the five SWRCB permits allow direct divergence from the Sacramento and American Rivers. Up to 81,000 acre-feet per year (AFY) may be diverted from the Sacramento River with a maximum flow of 225 cfs, while a maximum diversion rate of 675 cfs is permitted from the American River. The other two SWRCB permits allow indirect redirection of up to 1,510 cfs and storage of up to 589,000 AFY of American River tributary waters by SMUD’s Upper American River Project (UARP).¹⁴

**TABLE 3.12-1
 SUMMARY OF CITY OF SACRAMENTO SURFACE WATER RIGHTS PERMITS**

Application Permit and License No.	Priority Date	River Source	Maximum Amount Specified		Purpose of Use	Period of Use	Place of Use
			cfs	AFY			
A: 1743 P: 992	3/30/1920	Sacramento	225 ^a	81,800 ^a	Municipal	Jan 1 to Dec 31	City of Sacramento
A: 12140 P: 11358	10/29/1947	American	675 ^b	245,000 ^c	Municipal	Nov 1 to Aug 1	79,500 acres within and adjacent to City
A: 12321 P: 11359	2/13/1948	Tributaries of American			Municipal	Nov 1 to Aug 1 ^d	96,000 acres within and adjacent to City
A: 12622 P: 11360	7/28/1948	Tributaries of American			Municipal	Nov 1 to Aug 1 ^d	96,000 acres within and adjacent to City
A: 16060 P: 11361	9/22/1954	Tributaries of American			Municipal	Nov 1 to Aug 1 ^e	79,500 acres within and adjacent to City

NOTES:

- a See Articles 9 and 10 of Contract No. 14-06-200-6497 dated 6/28/57 between the City of Sacramento and the USBR.
- b Combined total 675 cfs diversion. See Articles 9 and 10 of Contract No. 14-06-200-6497 dated 6/28/57 between the City of Sacramento and the USBR.
- c Combined total 245,000 AFY diversion. See Articles 9 and 10 of Contract No. 14-06-200-6497 dated 6/28/57 between the City of Sacramento and the USBR.
- d Year-round period for redirection of water previously diverted by SMUD Upper American River Reservoirs.
- e January 1 to December 31 (Municipal and Recreational); November 1 to August 1 (Industrial)

SOURCE: City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 6-8.

Under the permanent 1957 USBR contract, the City of Sacramento agreed to limit its diversion rate and amounts in exchange for assurance that USBR facilities would at all times make available adequate water levels in the Sacramento and American Rivers so that the City would always maintain a permanent reliable surface water supply. **Table 3.12-2** illustrates the City of Sacramento’s allowable diversion from its riverine sources over the next approximately 20 years.

The 2000 Water Forum Agreement (WFA) was passed in order to both preserve the resources of the Lower American River and to ensure the City of Sacramento maintains a reliable and secure water supply through the year 2030. Under the WFA, the City is required to limit its surface water divergence from the American River during extremely dry years (known as “Conference

¹⁴ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. pp. 6-6 to 6-7.

**TABLE 3.12-2
 MAXIMUM ANNUAL DIVERSION ALLOWED TO THE YEAR 2040^a**

Year	Maximum Diversion from Sacramento River (AFY) ^b	Maximum Diversion from the American River (AFY) ^c	Maximum Combined Diversion (AFY)
2015	81,800	189,000	252,000
2020	81,800	208,500	278,000
2025	81,800	228,000	304,000
2030	81,800	245,000	326,800
2035	81,800	245,000	326,800
2040	81,800	245,000	326,800

NOTES:

- a Data obtained from Schedule A of the 1957 Water Rights Settlement Contract between USBR and the City of Sacramento.
- b The City may divert up to 81,800 AFY from the Sacramento River as long as the total combined diversion from both the Sacramento and American Rivers does not exceed the Maximum Combined Diversion.
- c The City may divert up to the Maximum Diversion from the American River as long as the total combined diversion from both the Sacramento and American Rivers does not exceed the Maximum Combined Diversion.

SOURCE: City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016, pp. 6-8.

Years”) and at times when river flows fall below the “Hodge Flow Criteria,” established in *Environmental Defense Fund v. East Bay Municipal Utility District*.¹⁵ This case claimed a contract for annual water diversions from the American River between the East Bay Municipal Utility District and the U.S. Bureau of Reclamation violated the reasonable use mandate of Article X, Section 2 of the California Constitution. This case found that a “legally enforceable duty to produce recycled water”¹⁶ exists given appropriate cause of action. However, Judge Richard Hodge of the Alameda County Superior Court implemented a solution to the conflict underlying the case in an attempt to balance the need to for water supply, attention to public health, and the public trust by establishing the Hodge Flow Criteria.¹⁷ Therefore, during Conference Years and times when the river flows fall below Hodge Flow Criteria, the City may source its allowable water divergence for the American River from the Sacramento River diversion point.¹⁸

Conference Years occur when the California Department of Water Resources (DWR) projects an annual unimpaired flow of 550,000 AFY or less, or a March-to-November unimpaired flow of less than 400,000 AFY, into the Folsom Reservoir. During this time, the maximum diversions permissible from the American River to be treated at the E.A. Fairbairn Water Treatment Plant

¹⁵ Stanford Law School Robert Crown Law Library, 2009. *Environmental Defense Fund, Inc. v. East Bay Mun. Utility Dist.*, 20 Cal. 3d 327. Available: scocal.stanford.edu/opinion/environmental-defense-fund-inc-v-east-bay-mun-utility-dist-30404. Accessed February 6, 2019.

¹⁶ Gibson, Hilary Jones, 2011. Out of the mud: Moving past *Environmental Defense Fund v. East Bay Municipal Utility District* toward finding a duty to produce recycled water. *University of San Francisco Law Review* 46(4):1125-1148. p. 1135.

¹⁷ Gray, Brian E., 2012. Ensuring the public trust. *UC Davis Law Review* 45(973):973-1019. p. 987-989.

¹⁸ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 6-8.

(FWTP) are 50,000 AFY at 155 cfs. Three Conference Years have occurred on the American River three times in recorded hydrologic history: in 1924, 1977, and 2015.¹⁹

Under the WFA, the Hodge Flow Criteria serves as a minimum flow standard to protect the resources of the American River. Under standard conditions, diversion from the American River to the FWTP is permitted at up to 310 cfs, or 200 millions of gallons per day (mgd); however, when flows in the Lower American River fall below this established criteria, diversion is limited, as shown in **Table 3.12-3**.²⁰

**TABLE 3.12-3
 MAXIMUM RATE OF DIVERSION TO THE FWTP DURING HODGE FLOW YEARS**

Period	Maximum Diversion (cfs) ^a	Maximum Diversion (mgd) ^a
January through May	120	77.6
June through August	155	100.2
September	120	77.6
October through December	100	64.6

NOTES:
 a Diversion limits obtained from WFA, Section 5.

SOURCE: City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 6-9.

Per 2015 reported values, surface water supply was 70,467 AFY, or 22,962 mgd, within the City of Sacramento. Projections of future water supply are included in **Table 3.12-4**. For surface water supply available from the Sacramento River, projected water supply is consistent with the reasonably available volume under the SWRCB permits (i.e., 81,800 AFY), while from the American River, supply is anticipated to increase to 245,000 AFY through 2040.

Groundwater Supply

Groundwater supply during “normal years” is presumed to be 25,205 AFY, according to the 2015 Urban Water Management Plan.²¹ The City of Sacramento operates 22 active municipal groundwater supply wells at present; 20 of these wells are located within the City’s water service area north of the American River.²² Given current operations, the total pumping capacity of the City’s active wells is roughly 23,077 AFY, or 20.6 mgd. Several of these wells are currently undergoing a well rehabilitation program to improve well capacity, and, as of 2015, two new wells pending construction were expected to supply potable water by 2017/2018. The addition of these two wells and the increased capacity acquired through the rehabilitation program is anticipated to increase groundwater pumping capacity of the entire City to approximately 28,006 AFY, or 25 mgd.²³

¹⁹ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 6-9.
²⁰ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 6-9.
²¹ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 7-9.
²² City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 3-4.
²³ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 3-4.

**TABLE 3.12-4
 CURRENT AND PLANNED ANNUAL WATER DEMAND AND SUPPLY SOURCES FOR THE
 CITY OF SACRAMENTO 2015-2040^a**

	2015 (AFY)	2020 (AFY)	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040(AFY)
Surface Water Supply	70,467	253,168	267,119	273,507	273,507	273,507
Groundwater Supply ^b	13,706	21,749	20,169	19,912	19,912	19,912
Recycled Water Supply ^c	0	1,000	1,000	1,000	1,000	1,000
Mutual Aid	659 (215)	0	0	0	0	0
Total Water Supply	84,832	275,917	288,288	294,419	294,419	294,419
Water Demand^d	84,832	123,229	130,548	139,882	149,213	162,029
Surplus(+)/ Deficit(-)	0	152,688	157,740	154,537	145,206	132,390

NOTES:

- ^a Supplies and demand remain the same during normal, single dry, and multiple dry years because the City of Sacramento has sufficient water supply entitlements.
- ^b Groundwater supplies are based on the City of Sacramento's firm capacity, which is 90 percent of the total well capacities.
- ^c Recycled water is defined in the 2015 UWMP as municipal wastewater that has been treated and discharged from a wastewater facility for beneficial reuse. Recycled water supplies shown here represent projected supplies, but the City of Sacramento does not currently use recycled water.
- ^d Includes residential, commercial and industrial, institutional/governmental, landscaping, and system losses.

SOURCE: City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. pp. 4-3, 6-5, 6-10, 6-18, and 7-10 to 7-12.

While surface water supply may diverge outside of normal year conditions, groundwater levels during dry years are not expected to degrade in such a way as to limit supply well pumping capacities, and limitations on American River diversions may be accounted for through diversions along the Sacramento River.²⁴ Therefore, as demonstrated by Table 3.12-4, the City of Sacramento has adequate surface and ground water supply to accommodate demand through 2040 even under buildout of the 2035 General Plan, and retains a water supply surplus under anticipated demand.

City Water Demand

Per 2015 reported values, water demand was 84,832 AFY, or 27,643 mgd, within the City of Sacramento. Projections of future demand included in Table 3.12-4; are based on the anticipated buildout and increase in population growth from the City of Sacramento's 2035 General Plan. The anticipated demand in Table 3.12-4 is calculated for normal, single dry, and multiple dry year conditions and also demonstrate conditions which may occur during Conference Years and Hodge Flow limitation periods. Projected water demand through 2040 is anticipated to increase to approximately 162,029 AFY.

Wastewater, Treatment, and Disposal

Wastewater collection and transportation in the City of Sacramento is provided by two distinct systems: the combined sewer system and the separated sewer system. The combined sewer system is operated by the Department of Utilities and conveys sanitary sewage and storm

²⁴ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. pp. 6-6 through 6-9.

drainage flows within areas of Downtown Sacramento, East Sacramento, Land Park, River Park, and Tahoe Park. The separated sewer system is operated by both the Department of Utilities and the Sacramento Area Sewer District (SASD) and serves areas of the City of Sacramento and Sacramento County, including the project site. All wastewater collected in the City's separated sewer system,²⁵ which serves the project site, is delivered to the SRWWTP. The SRWWTP is situated in Elk Grove, south of the City of Sacramento, and is operated by Regional San. The facility treats wastewater from the cities of Citrus Heights, Elk Grove, Folsom, Rancho Cordova, Sacramento, and West Sacramento, as well as from portions of Courtland, Walnut Grove, and unincorporated Sacramento County.²⁶ Wastewater from the project site is collected into the City of Sacramento's separated sewer system. The system is composed of 35 pump stations, an interceptor system, and approximately 482 miles of pipelines 4 to 36 inches in diameter.²⁷ Both the SRWWTP and the interceptor system, which consists of a series of large-diameter pipes and pump stations and routes wastewater flows throughout the Sacramento region to SRWWTP for treatment, are owned and maintained by Regional San. Of the separated sewer system conveyance system mentioned above, 11 pump stations and 169 miles of interceptor pipelines are operated by Regional San.²⁸ The City of Sacramento underwent a rehabilitation project in 2016 to ensure its water distribution system was adequate to convey the full capacity of 160 mgd which Regional San is permitted to treat.²⁹

Several force main lines of various widths are situated in proximity to the project site. One 36-inch main and one 8-inch main are situated along the southern border of the project site parallel with North B Street; the 36-inch main is intersected by an 18-inch main running beneath North 7th Street. Both the 36-inch and 8-inch mains intersect a series of 12-inch force main lines flowing north to south beneath North 7th Street, which gradually intersect a 12-inch main line abutting the site perimeter along Richards Boulevard, flowing east to west, and encountering two 21-inch main lines near the northwestern corner of the project site (see **Figure 3.12-1**).

Wastewater treatment for the project site is provided by Regional San in the form of primary and secondary treatment. Secondary treatment includes the use of structural and physical processes, such as "mechanical bar screens, aerated grit removal, primary sedimentation, pure oxygen activated sludge aeration, secondary clarification, chlorine disinfection, and dechlorination."³⁰ In normal years, Regional San treats an average of 127 mgd of wastewater,³¹ with the City of Sacramento conveying up to 60 mgd to the treatment plant.³² Treatment capacity is therefore adequate for conveyance flows. In accordance with the most recent National Pollutant Discharge Elimination System (NPDES) permit afforded to SRWWTP and with the Waste Discharge Requirements (WDRs) under which Regional San operates, Regional San is required to apply

²⁵ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 6-8.

²⁶ Sacramento Regional County Sanitation District, no date. *2017 State of the District Report*. p. 3.

²⁷ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 6-12.

²⁸ Sacramento Regional County Sanitation District, no date. *2017 State of the District Report*. p. 3.

²⁹ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 6-13.

³⁰ City of Sacramento Department of Utilities, 2016. *2015 Urban Water Management Plan*. June 2016. p. 6-13.

³¹ Sacramento Regional County Sanitation District, no date. *2017 State of the District Report*. p. 3.

³² City of Sacramento, 2015. *City of Sacramento 2035 General Plan Background Report: Chapter 4*. Adopted March 3, 2015. p. 4-2.

California Code of Regulations (CCR) Title 22 tertiary treatment standards to all effluent. Tertiary treatment is currently only applied to water which has undergone secondary treatment and which is utilized as recycled water. SRWWTP currently maintains a Water Reclamation Facility (WRF) designed to produce up to 5 mgd and permitted to produce up to 10 mgd of tertiary-treated effluent; however, operation of a tertiary treatment facility capable of producing up to 181 mgd of tertiary-treated effluent is anticipated by 2020 in order to meet Title 22 standards.

Stormwater

Stormwater drainage from the project site is collected via an existing pump house situated at the northwest corner of the site. Stormwater flows from this pump house through a 21-inch concrete force main within the Richards Boulevard right-of-way, which runs from Richards Boulevard up North 5th Street toward the American River, where it extends through the levee. On this side of the levee, the pipe is protected by a metal grate and a breakwater foundation made of loose stone (known as rip-rap). Stormwater collected from the project site discharges through this pipe into the American River, in compliance with the requirements of the MS4 Discharge General Permit (Order No. R5-2016-0040, NPDES No. CAS0085324) described below in Section 3.12-2, Regulatory Setting.

Solid Waste

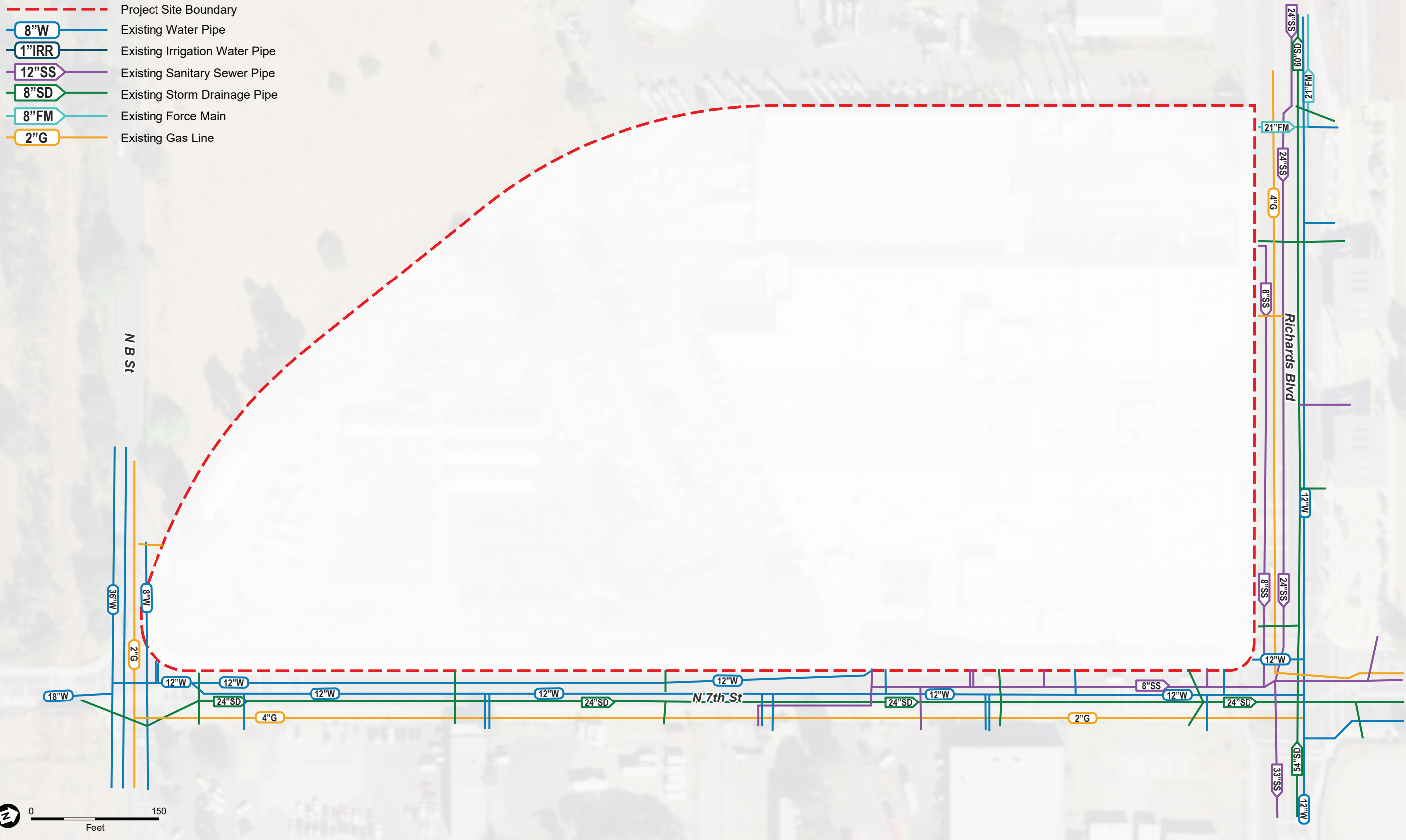
According to CalRecycle, the City of Sacramento generates a waste stream of approximately 525,968 tons per year collected within city boundaries, as recorded in the Disposal Reporting System (DRS).³³ Commercial solid waste is overseen by the Sacramento Solid Waste Authority, which authorizes privately franchised haulers to collect waste for commercial properties and businesses in Sacramento. There are currently 17 licensed solid waste haulers and ten authorized recyclers operating under the auspices of the Sacramento Solid Waste Authority,³⁴ which distribute solid waste to 5 landfills serving the city of Sacramento. Currently, none of these facilities are in violation of California State minimum standards for solid waste handling and disposal,³⁵ and the two primary landfills to which waste is transported retain substantial available capacity for waste reception (see **Table 3.12-5**).

³³ CalRecycle, 2018. Jurisdiction Review Reports. Available: <https://www2.calrecycle.ca.gov/LGCentral/AnnualReporting/ReviewReports>. Accessed January 22, 2019.

³⁴ Sacramento Regional Solid Waste Authority, no date. Franchisee and Authorized Recyclers Listing. Available: www.swa.saccounty.net/Pages/Franchisee-Listing.aspx. Accessed January 22, 2019.

³⁵ CalRecycle, 2018. Inventory of Facilities Violating State Minimum Standards. Available: www2.calrecycle.ca.gov/swfacilities/Enforcement/Inventory. Accessed January 22, 2019.

D:\180722.00 - Richards Boulevard State Office Complex\05 Graphics-GIS-Modeling\Illustrator



SOURCE: HGA, 2018; ESA, 2018

Richards Boulevard State Office Complex

Figure 3.12-1
Utilities



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**TABLE 3.12-5
 CITY-SERVING LANDFILL CAPACITIES**

Facility	Daily Permitted Capacity (tons)	Maximum Permitted Capacity (cubic yards)	Remaining Capacity (cubic yards)
L and D Landfill ¹	4,125	6,031,055	4,100,000
Sacramento County Kiefer Landfill ²	10,815	117,400,000	112,900,000
Elder Creek Transfer and Recovery Station ³	2,500	N/A	N/A
North Area Transfer Station ⁴	2,400	N/A	N/A
Sacramento Recycling and Transfer Station ⁵	2,500	N/A	N/A

SOURCES:

- 1 CalRecycle, 2018. SWIS Facility Detail: L and D Landfill (34-AA-0020). Available: www2.calrecycle.ca.gov/swfacilities/Directory/34-AA-0020/. Accessed January 22, 2019.
- 2 CalRecycle, 2018. SWIS Facility Detail: Sacramento County Landfill (Kiefer) (34-AA-0001). Available: www2.calrecycle.ca.gov/swfacilities/Directory/34-AA-0001/. Accessed January 22, 2019.
- 3 CalRecycle, 2018. SWIS Facility Detail: Elder Creek Transfer and Recovery (34-AA-0033). Available: www2.calrecycle.ca.gov/swfacilities/Directory/34-AA-0033/. Accessed January 22, 2019.
- 4 CalRecycle, 2018. SWIS Facility Detail: North Area Transfer Station (34-AA-0002). Available: www2.calrecycle.ca.gov/swfacilities/Directory/34-AA-0002/. Accessed January 22, 2019.
- 5 CalRecycle, 2018. SWIS Facility Detail: Sacramento Recycling and Transfer Station (34-AA-0195). Available: www2.calrecycle.ca.gov/swfacilities/Directory/34-AA-0195/. Accessed January 22, 2019.

Energy

Electricity

Electrical service to the project site is currently provided by SMUD. SMUD is a publicly-owned utility which generates and distributes electricity to nearly 629,000 accounts across a 900-square mile service area.³⁶ This area includes most of Sacramento County and parts of Placer and Yolo Counties, and is divided into seven “wards.” Electricity is produced through hydropower generation, as well as through generation via renewable energy sources such as wind, solar, and biomass or landfill gas.

Electrical service is conveyed to the project site, which is located in Ward 5,³⁷ through existing 21-kV underground distribution and transmission infrastructure and utilities along the southern side of Richards Boulevard, just west of the existing printing plant building. SMUD has additional existing 21-kV underground and overhead infrastructure and facilities along the northern side of North B Street, at the southern project boundary. Also in proximity to the project site is existing secondary voltage underground infrastructure, which extends for approximately 200 feet along the western side of North 7th Street, at the eastern project boundary.

Natural Gas

Gas service to the State printing plant is currently supplied by Pacific Gas and Electric (PG&E). The site is included in PG&E’s broader 70,000-square mile service area that provides natural gas

³⁶ Sacramento Municipal Utility District, 2019. Company information. Available: www.smud.org/en/Corporate/About-us/Company-Information. Accessed January 31, 2019.

³⁷ Sacramento Municipal Utility District, 2019. Our service area. Available: www.smud.org/en/Corporate/About-us/SMUDs-Territory-Map. Accessed January 31, 2019.

to approximately 4.3 million customers,³⁸ and operates 6,700 miles of gas transmission pipelines, as well as 42,000 miles of gas distribution pipelines.³⁹

Natural gas is conveyed to the State printing plant site via a transmission line east of the site at Dos Rios Street and Richards Boulevard⁴⁰ and via an existing 4-inch natural gas main located within the Richards Boulevard right-of-way.

Baseline Conditions

The approved Demolition Project will result in demolition of existing onsite structures and the removal of utility connections within 6 feet of the ground surface. Utility connections will be capped and abandoned per City requirements. After the Demolition Project is complete, the stormwater pump house at the northwest corner of the site will remain to keep groundwater levels down during construction, keeping in place an existing connection for power to allow for that pumping; minimal electricity use will occur under baseline conditions. Since the Demolition Project will result in a site that has no other buildings or structures on it, no demands for infrastructure or utilities, including water supply and wastewater management, would occur. Site runoff resulting from rainfall would be managed based on post-construction stormwater management requirements issued by the SWRCB.

3.12.2 Regulatory Setting

Federal

Safe Water Drinking Act

Title XIV of the Public Health Service Act, the Safe Drinking Water Act (SDWA), protects the quality of potential or designed public drinking water supplies. The Act, passed in 1974, allows the U.S. Environmental Protection Agency (US EPA) to establish minimum standards to protect tap water from contaminants, and for state governments to protect underground drinking water sources. SDWA administers two types of standards: national primary drinking water regulations (NPDWR, or primary standard), legally-enforceable standards which limit the amount of specific contaminants which can impact public health by establishing maximum contaminant levels (MCLs); and treatment technique rules, national secondary drinking water regulations (NSDWR, or secondary standard). MCLs are regulated through the maximum contaminant level goal (MCLG), which is the maximum level of contaminant in drinking water at which no known or anticipated unfavorable health effects would occur, with an adequate margin of safety.⁴¹

³⁸ Pacific Gas and Electric, 2019. Company profile. Available: www.pge.com/en_US/about-pge/company-information/profile/profile.page. Accessed January 30, 2019.

³⁹ Pacific Gas and Electric, 2019. Learn about the PG&E natural gas system. Available: www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/natural-gas-system-overview.page. Accessed January 30, 2019.

⁴⁰ Pacific Gas and Electric, 2019. Explore our natural gas transmission pipeline map. Available: www.pge.com/en_US/safety/how-the-system-works/natural-gas-system-overview/gas-transmission-pipeline/gas-transmission-pipelines.page. Accessed January 30, 2019.

⁴¹ U.S. Environmental Protection Agency, 2018. How EPA Regulations Drinking Water Contaminants. <https://www.epa.gov/dwregdev/how-epa-regulates-drinking-water-contaminants#requirements>.

Clean Water Act

The Clean Water Act (CWA) regulates the discharge of pollutants into United States waters and establishes water surface quality standards in order to maintain the chemical, physical, and biological health of national water systems. Under the CWA, pollutants may not be discharged from a point source into surface waters unless permitted by the NPDES under the regulation of the US EPA.

National Pollutant Discharge Elimination System

NPDES is a permit program which establishes limits on municipal, industrial, and agricultural pollutant discharge into United States waters, effectively converting the standards of the CWA into a framework specific to each pollutant point source. These permits establish acceptable levels of pollutants within a discharge source, and may include structural, educational, regulatory, or policy-based best management practices (BMPs) for controlling those pollutant levels. NPDES permit requirements vary depending on municipal regulations and on the system into which pollutants are being discharged; for example, an NPDES permit is not required for discharge into a municipal sanitary sewer system, but may be necessary for discharge into a municipal storm sewer system. Federal and state minimum mandatory standards for clean water are met under NPDES permits.⁴²

NPDES permits are applicable to the construction and operation of municipal, industrial, and agricultural facilities from which pollutants may be discharged, including discharge from wastewater treatment systems, stormwater, and runoff.⁴³ Section 402(p) of the CWA establishes that an NPDES permit is not required for non-point source pollutant discharges, or discharges comprising only stormwater. Stormwater may be distributed over a broader area than an isolated point source discharge and collect pollutants and debris which may then be deposited in municipal separate storm sewer systems (MS4s) or local bodies of water. MS4s include systems owned by municipalities designed to convey stormwater which are not part of a combined sewer system, sewage treatment plant, or publicly owned treatment work.⁴⁴ Exceptions to the condition established in Section 402(p) include discharge from a MS4 serving a population of 250,000 or more, and discharge from a MS4 serving a population of 100,000 or more but less than 250,000. These operators are required to acquire NPDES permits and establish stormwater management programs to regulate operation of these facilities in a manner consistent with NPDES permit requirements. NPDES permits are also required for facilities undergoing construction activities which disturb one or more acres or which are part of a broader development plan.

⁴² U.S. Environmental Protection Agency, 2018. NPDES Permit Basics. Available: www.epa.gov/npdes/npdes-permit-basics. Accessed: December 19, 2018.

⁴³ U.S. Environmental Protection Agency, 2018. NPDES Permit Basics. Available: www.epa.gov/npdes/npdes-permit-basics. Accessed: December 19, 2018.

⁴⁴ U.S. Environmental Protection Agency, 2018. Stormwater Discharges from Municipal Sources. Available: www.epa.gov/npdes/stormwater-discharges-municipal-sources. Accessed: December 19, 2018.

State

Green Building Initiative

The Green Building Initiative, as established within Governor Brown's 2012 Executive Order B-18-12, includes water efficiency improvement goals for all facilities owned and operated by the State of California. These goals include:

- The reduction of overall water use at State facilities by ten percent by 2015 and by 20 percent by 2020, as measured against a 2010 baseline;
- Continual updates to be incorporated into the State Administrative Manual pertaining to improved operating efficiency and water and resource conservation policies and guidelines for the operation and maintenance of State facilities;
- The use of alternative water sources where cost-effective for a new construction and major renovations to state buildings and landscaping, including but not limited to recycled water, graywater, rainwater capture, stormwater retention, and other conservation measures; and
- The use of plants in landscaping which are suitable to local climate and site conditions, and which limit water needs and life-cycle maintenance requirements.

The initiative also addresses energy efficiency goals for State facilities, such that:

- New State buildings and major renovations beginning design after 2025 shall be constructed as Zero Net Energy (ZNE) facilities with an interim target of 50 percent of ZNE for new facilities beginning design after 2020. State agencies shall also take measures toward achieving ZNE for 50 percent of the square footage of existing State-owned building area by 2025;
- Any proposed new or major renovation of State buildings larger than 10,000 square feet use clean, onsite power generation, such as solar photovoltaic, solar thermal, and wind power generation, and clean back-up power supplies, if economically feasible; and
- State agencies shall identify and pursue opportunities to provide electrical vehicle charging stations, and accommodate future charging infrastructure demand, at employee parking facilities in new and existing buildings.

Included in the initiative are the goals that:

- New constructions and major renovations to State buildings shall be designed and constructed to exceed the 2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings (CCR Title 24, Part 6) by 15 percent or more for buildings authorized to begin design after July 1, 2012; and
- Achievement of Leadership in Energy and Environmental Design (LEED) "Silver" Certification or higher for all new or major-renovated State facilities larger than 10,000 square feet.

Urban Water Management Plan

The California Urban Water Management Planning Act (UWMPA), authorized under Sections 10610-10656 of the California Water Code, establishes that although urban water supplies are a

matter of statewide concern, planning and management of those resources are best addressed at local levels. As such, individual urban water suppliers should ensure adequate levels of urban water resources and adequate capacity of water service to meet the needs of the various individual facilities operating within their boundaries throughout a 20-year time frame for not only normal water years, but also for dry and multiple successive dry water years. To this end, suppliers must prepare an urban water management plan (UWMP) that evaluates sources of water supply, use, reclamation, and demand management activities within the areas to which they provide service, in order to ensure that urban water resources are being used efficiently.

Within the context of the UWMPA, urban water suppliers are defined as “a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually.” The UWMPA requires that every urban water supplier update its UWMP at least every five years on or before December 31, during years which end in zero or five. Senate Bill (SB) 610 amended the UMPWA in 2001 to require urban water suppliers describe and account for all water supply projects and programs that might be undertaken to meet total projected water use in preparing their UWMPs. SB 318 further amended Section 10631 of the California Water Code in 2004, requiring that UWMPs describe opportunities for the development of desalinated water, including, ocean water, brackish water, and groundwater, as a long-term supply resource. California Executive Order B-18-12 also affects the development of UWMPs, as the order requires that State facilities reduce overall water use by 20 percent by 2020, as measured against a 2010 baseline.⁴⁵ UWMPs must account for and record progress towards achievement of this goal.

California Safe Drinking Water Act

Implementation of the federal Safe Drinking Water Act within California is overseen by the State Water Resources Control Board Division of Drinking Water (SWRCB-DDW), which is also responsible for implementation of California’s state mandates pertaining to drinking water. These mandates are established within the California Safe Drinking Water Act (CA SDWA) adopted in 1976, which was meant to ensure that public water systems supply water that is “pure, wholesome, and potable.”⁴⁶ Standards for ensuring that drinking water supplies meet these requirements codify MCLs established by the California Department of Health Services within CCR Title 22, Sections 64431-64501. These MCLs under the CA SDWA meet at least national primary standards under the SDWA.

NPDES Permit for the Sacramento Regional Wastewater Treatment Plant

The level of treatment which wastewater must undergo in wastewater treatment plants before being returned to water systems is established by an NPDES permit, which is issued by the applicable Regional Water Quality Control Board (RWQCB). These state agencies are

⁴⁵ State of California Governor’s Office, 2012. *Executive Order B-18-12*. April 25, 2012.

⁴⁶ California Health and Safety Code, 2015. *Division 104, Part 12, Chapter 4, Article 1, Section 116270*. Available: <https://law.justia.com/codes/california/2015/code-hsc/division-104/part-12/chapter-4/article-1/section-116270/>. Accessed December 27, 2018.

responsible for the regulation of wastewater discharge within distinct California regions. Regional San falls under the provinces of the Central Valley RWQCB, which adopted Wastewater Discharge Requirements (WDRs) Order R5-2016-0020 in 2016. This self-monitoring NPDES permit, applicable through 2021, establishes acceptable specifications and prohibitions for the District's treated wastewater discharge into Sacramento waterways from the SRWWTP.⁴⁷

NPDES Municipal Stormwater Permit for Sacramento County

The Central Valley RWQCB issued NPDES no. CAS082597 in 2015, which represented a reissuance of the WDRs regulating stormwater discharge within the area-wide MS4 which serves the County of Sacramento and the Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, and Sacramento. An NPDES municipal permit is required for Sacramento County and the City of Sacramento as these areas are considered large municipalities, with combined populations exceeding 250,000 people. The permit states that Sacramento County and the City of Sacramento, in addition to the other cities included in the permit, have jurisdiction over and maintenance responsibilities within the MS4s they own and operate. Furthermore, these municipalities must consider potential storm water impacts during development and redevelopment activities to reduce pollutant discharge to the maximum extent practicable, in accordance with the CWA. Under Order R5-2015-0023, which issued the NPDES municipal permit, municipalities were required to implement their Stormwater Quality Improvement Plans (SQIPs), serving as Storm Water Management Plans (SWMPs), for the full duration of the 18 months during which the permit was applicable. These SQIPs account for the variation in discharges which could reasonably be encountered throughout these municipalities, taking into account the effects of land use, seasonality, geology, and hydrologic events.⁴⁸

A region-wide MS4 Discharge General Permit was issued in 2016, which allowed the municipalities included under NPDES permit no. CAS082597 to participate in a Regional Monitoring Program (RMP) that would reduce local water quality monitoring efforts.⁴⁹ RMP monitoring stations are not meant to directly ascertain if a discharge source causes or contributes to acceptable water quality standards being exceeded; rather, these "integrator sites" are intended to consider the combined impacts of multiple discharges within an MS4 on water quality when analyzed in conjunction with relevant data such as flow rate, velocity, and spatial and temporal distribution of point and non-point discharges.⁵⁰ This general permit establishes municipal requirements for the sampling and monitoring of receiving water, urban discharge, and toxicity of water columns, sediments, and bioassay.

⁴⁷ Central Valley California Regional Water Quality Control Board, 2016. *National Pollutant Discharge Elimination System Permit No. CA 0077682*. Adopted April 21, 2016.

⁴⁸ Central Valley California Regional Water Quality Control Board, 2015. *National Pollutant Discharge Elimination System Permit No. CAS082597*. Adopted April 17, 2015. pp. 1-11.

⁴⁹ Central Valley California Regional Water Quality Control Board, 2016. *Notice of Applicability; General Permit for Discharges from Municipal Separate Storm Sewer Systems, Order R5-2016-0040*. Adopted November 23, 2016.

⁵⁰ Central Valley California Regional Water Quality Control Board, 2015. *National Pollutant Discharge Elimination System Permit No. CAS082597*. Adopted April 17, 2015. p. 65.

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (Assembly Bill (AB) 939) was passed to regulate the management of solid waste and to reduce the amount of solid waste to be disposed of in landfills. Per AB 939, all California cities were required to submit to their respective counties by July 1, 1991 a Source Reduction and Recycling Element (SRRE) for the compilation of county-wide siting elements and Integrated Waste Management Plans (IWMPs). These SRREs were to address waste characterization, source reduction, recycling, composting, solid waste facility capacity, education and public information, funding, special waste, and household hazardous waste. The three guiding waste management principles in order of priority as established under AB 939 were source reduction, recycling and composting, and environmentally safe transformation and land disposal. Additionally, each municipality was required to divert 25 percent of all solid waste from landfill or transformation facilities by January 1, 1995 and 50 percent of all solid waste by January 1, 2000.⁵¹ The California Department of Resources Recycling and Recovery (CalRecycle) is responsible for the oversight of municipalities' local implementation and enforcement of this Act. AB 75, passed in 1999, subsequently established that State-owned and –operated facilities would also be responsible for diverting at least 50 percent of their solid waste from disposal facilities on and after January 1, 2004.

Additional regulation pertaining to recycling at State-owned and –operated facilities include:

- Executive Order W-7-91, which establishes state agency recycling programs and requires the purchase and use of recycled products within California State facilities;
- Public Contract Code (PCC) Sections 12164.5 – 12167.1, which mandates that CalRecycle design and implement recycling plans and programs for the State Legislature and all State-owned and –leased facilities, and that State agencies report collected recyclable materials to CalRecycle;
- PCC 42560 – 42562, which mandates the recycling of specific paper types within State agency offices; and
- California State Administration Manual Chapter 1990, which supports waste prevention, reuse, and recycling within State facilities.

Clean Energy and Pollution Reduction Act

The Clean Energy and Pollution Reduction Act (SB-350), passed in 2015, established new clean energy, clean air, and greenhouse gas (GHG) reduction goals through 2030 and beyond. The purpose of SB 350 is to help California meet its goal of reducing GHG emissions to 80 percent below 1990 levels by 2050, with the aim of reducing GHG emissions to 40 percent below 1990 levels by 2030. This 2030 reduction target addresses energy efficiency standards, the use of resources eligible under the Renewables Portfolio Standard (RPS) (e.g., solar, wind, biomass, geothermal, and other resources). In achieving these goals, large utilities are required to

⁵¹ CalRecycle, 2018. History of California Solid Waste Law, 1985-1989. Available: www.calrecycle.ca.gov/laws/legislation/calhist/1985to1989. Accessed January 22, 2019.

implement integrated resource plans (IRPs) that specify how the utilities will reduce GHG emissions and increase the delivery of clean energy resources while still meeting the needs of their customer bases.⁵²

Building Energy Efficiency Standards of the California Code of Regulations

Title 24 of the CCR includes State Building Energy Efficiency Standards, which contain requirements pertaining to energy and water efficiency and indoor air quality for new construction and additions or alterations to existing buildings. The standards provide builders with design and construction methods known to be efficient and in compliance with the prescribed requirements, or allow builders to implement their own methods, so long as the resultant buildings achieve the same performance standards. The standards, which were first adopted in 1976, are updated periodically; initial estimates suggest that implementation of the 2016 Building Energy Efficiency Standards may reduce annual electricity consumption, electrical peak demand, and natural gas consumption substantially.⁵³

California Green Building Standards Code

The California Green Building Standards Code (CALGreen) represents Part 11 of The California Building Standards Code under Title 24 of the California Code of Regulations. CALGreen is intended to promote sustainable construction practices by reducing negative impacts associated with construction, applying design and methodology to encourage positive environmental impacts. The code is the state's first green building code, and applies to "the planning design, operation, construction, use, and occupancy of every newly-constructed building or structure on a statewide basis unless otherwise indicated."⁵⁴

Local

The project is located on State-owned property and would be implemented by the California State Department of General Services (DGS). State agencies are not subject to local plans, policies, and zoning regulations and therefore cannot conflict with these policies and ordinances. Local plans, policies, and regulations that are applicable to the project are described herein for reference. Off-site work, such as utility installation and/or road improvements would be subject to local policies and ordinances.

Water Service System and Fees

Chapter 13.04 of the Sacramento City Code establishes the water service area as those areas which have been approved by City Council for water service as consistent with applicable water right restrictions.⁵⁵ This chapter also delineates parameters regulating: the installation and

⁵² California Energy Commission, 2019. Clean Energy and Pollution Reduction Act SB 350 Overview. Available: <https://www.energy.ca.gov/sb350/index.html#sb350>. Accessed February 9, 2019.

⁵³ California Energy Commission, 2015. *2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings*. June 2015. pp. Abstract.

⁵⁴ California Department of Housing and Community Development, 2018. CALGreen Compliance. Available: www.hcd.ca.gov/building-standards/calgreen/index.shtml. Accessed January 10, 2019.

⁵⁵ Sacramento City Code, 2019. 13.04.020 Water service area. Available: www.qcode.us/codes/sacramento/view.php?topic=13-13_04-i-13_04_020&frames=on. Accessed January 22, 2019.

implementation of water meters; the construction of water distribution facilities within city limits; the process of approval for water service outside city limits; the assurance of adequate onsite fire protection facilities and water flow for fire protection; the conservation of water for outdoor uses and applications; and the rates, fees, and charges applicable to water service installation, operation, disconnection, and restoration. These rates, fees, and charges, for sewer and storm drain service may be set in amounts that apply uniformly throughout the City, or that may enact separate amounts for sewer service provided by the separate sewer system.⁵⁶

Sewer System Development Fee

Section 13.08.480 of the Sacramento City Code mandates that every new connection to the city sewer system is subject to a sewer development fee and that no new sewer service shall be rendered by the city unless the fee has been paid, except as provided for by the ordinance. This fee helps to defray the capital costs of the City of Sacramento's existing and/or new sewer system facilities to facilitate overall development within the city sewer service area.

City of Sacramento 2035 General Plan

The following goals and policies included in the Sacramento 2035 General Plan⁵⁷ are relevant to the project.

Utilities Element

Goal U 1.1: High-Quality Infrastructure and Services. Provide and maintain efficient, high-quality public infrastructure facilities and services throughout the city.

Policy U 1.1.1: Provision of Adequate Utilities. The City shall continue to provide and maintain adequate water, wastewater, and stormwater drainage utility services to areas in the city, and shall provide and maintain adequate water, wastewater, and stormwater drainage utility services to areas in the city that do not currently receive these City services upon funding and construction of necessary infrastructure.

Policy U 1.1.5: Growth and Level of Service. The City shall require new development to provide adequate facilities or pay its fair share of the cost for facilities needed to provide services to accommodate growth without adversely impacting current service levels.

Policy U 1.1.11: Underground Utilities. The City shall require undergrounding of all new publicly-owned utility lines, encourage undergrounding of all privately-owned utility lines in new developments, and work with electricity and telecommunications providers to underground existing overhead lines.

Goal U 2.1: High-Quality and Reliable Water Supply. Provide water supply facilities to meet future growth within the city's Place of Use and assure a high-quality and reliable supply of water to existing and future residents.

⁵⁶ Sacramento City Code, 2019. Article V. Charges and Fees. Available: https://www.qcode.us/codes/sacramento/view.php?topic=13-13_08-v&showAll=1&frames=on. Accessed January 22, 2019.

⁵⁷ City of Sacramento, 2015. *City of Sacramento 2035 General Plan: Utilities Element*. Adopted March 3, 2015. pp. 2-221 – 2-251.

Policy U 2.1.9: New Development. The City shall ensure that water supply capacity is in place prior to granting building permits for new development.

Policy U 2.1.10: Water Conservation Standards. The City shall achieve a 20 percent reduction in per-capita water use by 2020 consistent with the State’s 20x2020 Water Conservation Plan.

Policy U 2.1.12: Water Conservation Enforcement. The City shall continue to enforce City ordinances that prohibit the waste or runoff of water, establish limits on outdoor water use, and specify applicable penalties.

Policy U 2.1.14: Rain Capture. The City shall promote the use of rain barrels and rain gardens to conserve water, while not increasing the occurrence of disease vectors.

Policy U 2.1.15: Landscaping. The City shall continue to require the use of water-efficient and river-friendly landscaping in all new development, and shall use water conservation gardens (e.g., Glen Ellen Water Conservation Office) to demonstrate and promote water conserving landscapes.

Policy U 2.1.16: River-Friendly Landscaping. The City shall promote “River Friendly Landscaping” techniques which include the use of native and climate appropriate plants; sustainable design and maintenance; underground (water-efficient) irrigation; and yard waste reduction practices.

Goal U 3.1: Adequate and Reliable Sewer and Wastewater Facilities. Provide adequate and reliable sewer and wastewater facilities that collect, treat, and safely dispose of wastewater.

Policy U 3.1.1: Sufficient Service. The City shall provide sufficient wastewater conveyance, storage, and pumping capacity for peak sanitary sewer flows and infiltration.

Policy U 3.1.3: Stormwater Infiltration Reduction. The City shall develop design standards that reduce infiltration into new City-maintained sewer pipes.

Goal U 4.1: Adequate Stormwater Drainage. Provide adequate stormwater drainage facilities and services that are environmentally sensitive, accommodate growth, and protect residents and property.

Policy U 4.1.4: Watershed Drainage Plans. The City shall require developers to prepare watershed drainage plans for proposed developments that define needed drainage improvements per City standards, estimate construction costs for these improvements, and comply with the City’s National Pollutant Discharge Elimination System (NPDES) permit.

Policy U 4.1.5: Green Stormwater Infrastructure. The City shall encourage “green infrastructure” design and Low Impact Development (LID) techniques for stormwater facilities (i.e., using vegetation and soil to manage stormwater) to achieve multiple benefits (e.g., preserving and creating open space, improving runoff water quality).

Policy U 4.1.6: New Development. The City shall require proponents of new development to submit drainage studies that adhere to City stormwater design requirements and incorporate measures, including “green infrastructure” and Low Impact Development (LID) techniques, to prevent on- or off-site flooding.

Goal U 5.1: Solid Waste Facilities. Provide adequate solid waste facilities, meet or exceed State law requirements, and utilize innovative strategies for economic and efficient collection, transfer, recycling, storage, and disposal of refuse.

Policy U 5.1.1: Zero Waste. The City shall achieve zero waste to landfills by 2040 through reusing, reducing, and recycling solid waste; and using conversion technology if appropriate. In the interim, the City shall achieve a waste reduction goal of 75 percent diversion from the waste stream over 2005 levels by 2020 and 90 percent diversion over 2005 levels by 2030, and shall support the Solid Waste Authority in increasing commercial solid waste diversion rates to 30 percent.

Policy U 5.1.8: Diversion of Waste. The City shall encourage recycling, composting, and waste separation to reduce the volume and toxicity of solid wastes sent to landfill facilities.

Policy U 5.1.9: Electronic Waste Recycling. The City shall continue to coordinate with businesses that recycle electronic waste (e.g., batteries, fluorescent lamps, compact-fluorescent (CFL) bulbs) and the California Product Stewardship Council to provide convenient collection/drop off locations for city residents.

Policy U 5.1.14: Recycled Materials in New Construction. The City shall encourage the use of recycled materials in new construction.

Policy U 5.1.15: Recycling and Reuse of Construction Wastes. The City shall require recycling and reuse of construction wastes, including recycling materials generated by the demolition and remodeling of buildings, with the objective of diverting 85 percent to a certified recycling processor.

Goal U 6.1: Adequate Level of Service. Provide for the energy needs of the city and decrease dependence on nonrenewable energy sources through energy conservation, efficiency, and renewable resource strategies.

Policy U 6.1.1: Electricity and Natural Gas Services. The City shall continue to work closely with local utility providers to ensure that adequate electricity and natural gas services are available for existing and newly developing areas.

Policy U 6.1.5: Energy Consumption per Capita. The City shall encourage residents and businesses to consume 25 percent less energy by 2030 compared to the baseline year of 2005.

Policy U 6.1.6: Renewable Energy. The City shall encourage the installation and construction of renewable energy systems and facilities such as wind, solar, hydropower, geothermal, and biomass facilities.

Policy U 6.1.7: Solar Access. The City shall ensure, to the extent feasible, that sites, subdivisions, landscaping, and buildings are configured and designed to maximize passive solar access.

Policy U 6.1.8: Other Energy Generation Systems. The City shall promote the use of locally shared solar, wind, and other energy generation systems as part of new planned developments.

Policy U 6.1.15: Energy Efficiency Appliances. The City shall encourage builders to supply Energy STAR appliances and HVAC systems in all new residential developments,

and shall encourage builders to install high-efficiency boilers where applicable, in all new non-residential developments.

Goal U 7.1: Telecommunication Technology. Provide state-of-the-art telecommunication services to households, businesses, institutions, and public agencies throughout the city that connect Sacramento to the nation and world.

Policy U 7.1.5: Large Scale Developments. The City shall establish requirements for the installation of state-of-the-art internal telecommunications technologies in new large-scale planned communities and office and commercial developments (e.g., wiring of all new housing and businesses).

Sacramento Regional County Sanitation District Consolidated Ordinance

The Regional San Consolidated Ordinance (Ordinance #SRSD-0120), adopted in 2018, outlines uniform requirements for the use of the District’s wastewater collection and treatment system. The ordinance also establishes provisions, policies, and reporting requirements to ensure the implementation and enforcement of these requirements, and delineates rates, charges, and fees associated with the use of the District’s sewer collection facilities and with facility development impact fees.⁵⁸

Stormwater Quality Design Manual

As described above, the County of Sacramento and the Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, and Sacramento participate in an RMP through application of an NPDES MS4 Discharge General Permit. This program is intended to regulate stormwater pollutant discharge to the maximum extent practicable and to reduce the need for localized water quality monitoring while still allowing participants to plan, implement, and maintain MS4s within their respective jurisdictions. The Stormwater Quality Design Manual serves as a guiding document to assist individual municipalities within the Sacramento Region with BMPs and design of stormwater quality control measures for developments that meet both the standards of the CWA and applicable NPDES permit compliance. These measures may be broadly categorized as source control, low impact development, and treatment control principles.⁵⁹ Please refer to Section 3.6, Hydrology and Water Quality, for a more detailed description of the manual and its requirements applicable to the project.

3.12.3 Analysis, Impacts and Mitigation

Significance Criteria

For the purposes of this EIR, an impact to utilities and infrastructure would be considered significant if implementation of the project would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications

⁵⁸ Sacramento Regional County Sanitation District, 2018. *Regional San Consolidated Ordinance*. Adopted January 10, 2018.

⁵⁹ Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, Sacramento, and County of Sacramento, 2018. *Stormwater Quality Design Manual for the Sacramento Region*. July 2018. p. xv.

facilities, the construction or relocation of which could cause significant environmental effects;

- Not have access to sufficient available water supplies to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- 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; or
- Not comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Methodology and Assumptions

The State has already approved the Demolition Project at the project site. Whether or not the project is approved, the State will relocate the printing plant and all employees and demolish the existing structures, except the pump house. No utility connections, except for the remaining electrical connection to the pump house, would be present onsite.

Water Demand

Per CEQA Guidelines Section 15155, a project which may be deemed a “water-demand project” requires the preparation of a water supply assessment (WSA). A WSA establishes that the public water system(s) relevant to the project have sufficient water supplies available to serve the project during normal, single dry, and multiple dry years over a 20-year period. The assessment, submitted via a City of Sacramento SB 610/SB 221 Water Supply Assessment and Certification Form for areas to which the City of Sacramento 2015 UWMP is applicable, is prepared by the public water system which will serve the project. Under CEQA Guidelines Section 15155(a)(2), a “public water system” is a system containing 3,000 or more connections which provides drinking water to the public.

The RBOC meets the classification criteria of a water-demand project, as the facility would exceed 250,000 square feet of floor space and would employ more than 1,000 people. The project would also demand a quantity of water equivalent to or greater than a 500-dwelling unit project.⁶⁰ Although there is no water demand factor specific to office developments on the City of Sacramento SB 610/SB 221 Water Supply Assessment and Certification Form, the project site occupies a land use category of “Urban Center High” under the 2035 General Plan.⁶¹ Therefore, the WSA completed for the project used a demand factor consistent with the “Urban Center High” designation under “Mixed-Use – Higher Density” development on the certification form (see **Appendix H**). This approach to identifying demand factors for the project was approved by

⁶⁰ Association of Environmental Professionals, 2018. *2018 California Environmental Quality Act Statute and Guidelines*. p. 189.

⁶¹ City of Sacramento, 2017. *2035 General Plan: Land Use and Urban Form Diagram*. Amended February 22, 2017.

the Department of Utilities.⁶² Using the water demand factor of 0.04 AFY per employee, the anticipated demand for the project is approximately 240 AFY.

Wastewater Treatment and Disposal

Impacts pertaining to capacity for wastewater transportation, treatment, and disposal were analyzed by estimating the increase in wastewater resulting from the project and comparing those estimates against existing wastewater infrastructure capacities. Wastewater flow rates relevant to the project are based on the following wastewater generation rates provided by the Department of Utilities Design and Procedure Manual:⁶³

- Office Building = 0.5 ESD/1,000 square feet
- 1 ESD = 310 gallons per day (gpd) of wastewater flow

Applying the office building wastewater generation rate to the 1.3 million square feet of development anticipated by the project provides an average dry weather flow (ADFW) of 201,500 gpd and a peak dry weather flow (PDWF) of 374,701 gpd, with a peaking factor of 1.86 and a rainfall dependent infiltration and inflow rate of 30,725 gpd. Using these calculations, anticipated peak wet weather flow (PWWF) for the project is 404,976 gpd (281.23 gallons per minute [gpm]).⁶⁴

Solid Waste

Solid waste disposal estimates for project operations were established based on per-employee waste disposal rates for business groups produced by CalRecycle. Rates were based on samples from business types similar to that of the project, including public administration, restaurants, and retail trade. Under these assumed rates, public administration businesses generate approximately 0.37 tons per employee annually, while restaurants generate roughly 1.92 tons per employee annually and retail trade businesses create approximately 1.96 tons per employee annually.⁶⁵ As the final site design for the project has not yet been decided upon and may include various uses beyond office workspace, the highest solid waste generation rate of 1.96 tons per employee was utilized within this analysis to account for waste generation which may include potential retail uses on the ground floor of the RBOC. Applying material type equivalency factor estimates supplied by CalRecycle, one cubic yard of mixed solid waste, compacted in a landfill, weighs approximately 0.75 tons.⁶⁶

⁶² Ewart, Brett, Senior Engineer, City of Sacramento, Department of Utilities, email communication with Natasha Eulberg of ESA, January 11, 2019.

⁶³ City of Sacramento Department of Utilities, 2018. *Department of Utilities Design and Procedure Manual Section 9: Sewer Collection Systems*. July 24, 2018. pp. 9-54 through 9-57.

⁶⁴ Webber, John, Project Director I, City of Sacramento, Department of General Services, email communication with Elizabeth Boyd of ESA, February 6, 2019.

⁶⁵ CalRecycle, 2019. Disposal and Diversion Rates for Business Groups. Available: www2.calrecycle.ca.gov/WasteCharacterization/BusinessGroupRates. Accessed on January 9, 2019.

⁶⁶ CalRecycle, no date. *Facility Information Toolbox (FacIT)*.

Energy

Impacts to electricity were analyzed by determining whether SMUD would adequately be able to serve the project, whether implementation of the project would require the construction of new facilities, and whether—if construction of new facilities were required—such construction would adversely affect SMUD’s electrical service capacity or infrastructure.

Issues or Potential Impacts Not Discussed Further

The project would not include any natural gas uses; therefore, impacts to natural gas are not discussed further.

Impacts and Mitigation Measures

Impact 3.12-1: Implementation of the project would have sufficient water supplies available to serve the project and reasonably foresee future development during normal, dry, and multiple dry years.

Implementation of the project would result in an increase in water demand as compared to no water use after completion of the Demolition Project. The WSA prepared for the project is included in this EIR as Appendix H. Based on the WSA, the Department of Utilities used a water demand factor of 0.04 AFY per employee and verified that sufficient water supplies are available for the project during normal, single dry, and multiple dry years over a 20-year period. The anticipated demand for implementation of the project is approximately 240 AFY.

The project would be required to comply with water conservation, reuse, and efficiency standards under CALGreen, as described previously, and to meet at least LEED Silver certification criteria for water efficiency. To this end, the RBOC facilities would utilize low-flow/high-efficiency plumbing fixtures, and landscaping on the project site would be designed and maintained for low water use, site conditions, and methods to reduce water demand. Compliance with the measures described above may reduce water demand for the project to less than 240 AFY. Furthermore, although the State is not required to adhere to 2035 General Plan policies, implementation of the aforementioned measures would also make the project consistent with the water conservation standards established in Policies U 2.1.10, U 2.1.14, U 2.1.15, and U 2.1.16, to reduce per capita water use, to promote the use of captured rainwater for water conservation, and to adopt water-efficient, climate-appropriate, and river-friendly landscaping for new development. This increase in water demand would represent an approximately 0.28-percent increase in the total water demand (84,832 AFY) of the City of Sacramento in 2015 (see Table 3.12-4). In 2015, the City had surface water rights to divert up to 326,800 AFY from the American and Sacramento rivers and had a groundwater pumping capacity of 23,077 AFY. Thus, the total available water supply for the City of Sacramento in 2015 was over 349,800 AFY.

Surplus water supply for the City of Sacramento is projects to range from 152,688 AFY in 2020 to 132,390 AFY in 2040 for normal, single dry, and multiple dry years (see Table 3.12-4). The project is anticipated to be completed at some point in 2024, when the City’s surplus water supply is projected to be 157,740 AFY in 2025. Therefore, the increase in water demand resulting from

the project would be approximately 0.15 percent of the City's surplus water supply. The City of Sacramento would have adequate planned water supply to serve the RBOC for normal, single dry, and multiple dry years, as confirmed by the WSA prepared for the project.

Furthermore, the project would implement project design, operational, and maintenance measures to reduce water demand that meet CALGreen standards, as well as those established by the Green Building Initiative and LEED Silver certification. For these reasons, the project would have a **less-than-significant** impact on water supply resources.

Mitigation Measure

None required.

Impact 3.12-2: Implementation of the project could require or result in the interruption of existing infrastructure, or in the relocation or construction of new or expanded infrastructure, the interruption, construction, or relocation of which could cause significant environmental effects.

Utility services other than an electrical connection to the pump house would not be active at the project site following the Demolition Project. During project construction, DGS would coordinate with relevant utility providers as needed throughout the design and construction process to prevent temporary disruption of utility services to adjacent land as result from construction on the project site. In attempting to prevent such an occurrence, DGS would also coordinate with the City of Sacramento Department of Public Works to secure encroachment permits prior to ground disturbance activities to reduce the potential of damaging or rerouting existing utilities infrastructure. Given these precautions, construction impacts to utilities infrastructure and service as a result of the project would be **less than significant**.

Mitigation Measure

None required.

Impact 3.12-3: Implementation of the project could require or result in the relocation or construction of new or expanded water conveyance infrastructure.

As discussed in Impact 3.12-1, above, the water supply infrastructure for the project must be able to accommodate an estimated demand of 240 AFY of water (although this factor may represent a conservative estimate, as it does not account for reductions resulting from the implementation of design, operational, and maintenance measures to limit water demand). Furthermore, as the ultimate project design, building construction type, and total fire flow calculation area have not yet been finalized, the infrastructure must meet a fire flow requirement of up to 8,000 gpm for a

four-hour duration,⁶⁷ as well as an automatic fire sprinkler system flow demand of 300-500 gpm and associated standpipe system demand of 1,000 gpm.

An existing 12-inch PVC water main in North 7th Street and a connected 12-inch cast iron water main in Richards Boulevard currently provide domestic water to the State printing plant facilities and supply fire hydrants along both streets. However, baseline conditions for the project site following the Demolition Project would require the construction of new, separate water and fire infrastructure to serve the RBOC. As described in Chapter 2, Project Description, at least two metered connections from the existing water mains would be established in accordance with the City of Sacramento's Standard Specifications for Public Construction. The connection from North 7th Street would serve as the primary connections and the connection from Richards Boulevard would act as a redundancy for both domestic water and fire flow water.

Per the California Building Code, at least one fire pump is required for all high-rise buildings (i.e., at least 75 feet tall), with redundant pumps being required for buildings taller than 200 feet. All buildings 120 feet or less in height may be supplied by a single fire water connection, while buildings taller than 120 feet would be supplied by at least two connections to water mains valved in such a way as to isolate potential interruptions to the fire water supply. Section 15.100.740 of the Sacramento City Code also requires that each high-rise building be equipped with two primary fire pumps, one electric and one diesel, in addition to secondary fire pumps installed in 275-foot high intervals. These secondary pumps would be placed in such a way as to evenly segment the upper portion of the building and to ensure that no fire pump shall be required to pump more than 275 feet vertically. All buildings would include automatic fire sprinkler systems, with water pressure requirements to be determined in accordance with building heights. Each fire pump system must be capable of automatically providing the water demand necessary to supply these automatic sprinkler systems.

As described above in Section 3.12.1, Environmental Setting, the SRWWTP is permitted to treat 160 mgd at full capacity. Average daily water demand for the project would be approximately 214,260 gpd, which would represent roughly 0.13 percent of the SRWWTP's remaining available water treatment capacity. Water treatment capacity would therefore be sufficient to meet the project's water demand needs.

Although the existing water mains at North 7th Street and Richards Boulevard currently serve the State printing plant on the project site and would likely have adequate capacity to serve the RBOC, the City has not yet provided confirmation that the existing infrastructure will have sufficient capacity to meet the needs of the RBOC. The 12-inch main in North 7th Street is likely to have been more recently constructed than the 12-inch main in Richards Boulevard; however, without additional information relating to the quality of those mains at present, it is uncertain if the existing water supply infrastructure could adequately serve the water and fire flow demands of the project. As a result, this impact is **potentially significant**.

⁶⁷ California Building Standards Commission, 2016. *2016 California Fire Code*. Effective January 1, 2017. p. 610.

Mitigation Measure

Mitigation Measure 3.12-3

The water supply infrastructure must be able to accommodate an estimated water demand of 240 AFY and a fire flow requirement of up to 8,000 gallons per minute (gpm) for a four-hour duration, with an automatic fire sprinkler system flow demand of 300-500 gpm and associated standpipe system demand of 1,000 gpm.

- a) Prior to approval for connection to the City of Sacramento's water supply infrastructure, DGS shall conduct a water study to be submitted to the Department of Utilities, to ensure the condition and capacity of the City of Sacramento's water supply infrastructure relative to the project site and ensure that infrastructure is sufficient to serve the needs to of the project. However, relative construction information pertaining to the two existing water mains at the project site should be discussed with the Department of Utilities prior to implementation of this study.
- b) Prior to the issuance of a building occupancy permit, the California State Fire Marshall shall test fire flow to ensure that the water supply infrastructure serving the RBOC meets fire flow standards.
- c) If water infrastructure is found insufficient to meet the needs of the project, the water study shall identify improvements necessary to meet the project's demands and fire flow requirements.

Level of Significance After Mitigation: The water study would ensure that the water supply infrastructure associated with the project could meet water demand and fire flow pressure requirements to adequately serve the project. Any improvements required to meet these requirements would be identified and carried out by DGS in order to ensure the quality and ability of the infrastructure to adequately supply water to the project. Application of Mitigation Measure 3.12-1 would reduce the impact to water supply infrastructure capacity to a **less-than-significant** level.

Impact 3.12-4: Implementation of the project could result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

The project site would be served by the City's separated sewer system, operated by both the Department of Utilities and the SASD.

New connections to these existing 8-inch sewer pipelines would be constructed to convey wastewater discharged by gravitational force from the RBOC buildings. These existing sewers connect at the intersection of Richards Boulevard and North 7th Street, and discharge into an existing 33-inch sanitary sewer pipeline in Richards Boulevard, east of North 7th Street, which currently serves the project site. The calculated conveyance capacity of one of the 8-inch sewer pipeline is 449 gpm, and at PWWF, full buildout of the project would generate approximately

281.23 gpm.⁶⁸ Therefore, at peak flow, wastewater generated by the project would be substantially less than the peak conveyance capacity of the existing 8-inch sewer pipeline.

In order to accommodate the construction of the necessary connections to the existing 8-inch sewer pipelines adjacent to the project site and the increases in wastewater discharge flows which would result from the project, DGS would be required to pay a sewer development fee as established in Sacramento City Code 13.08.480. This fee is used to fund the capital costs associated with operation, maintenance, and development of the sewer system facilities in the City.

The project would increase wastewater flows to the separated sewer system compared to the baseline conditions at the project site following completion of the Demolition Project (i.e., no wastewater flows). Since the PWWF of the project would be 281.23 gpm (404,976 gpd) and the conveyance capacity of an 8-inch sewer pipeline is 449 gpm, the existing sewer pipeline would have adequate capacity to receive discharges produced from operation of the project, and the connection with the existing pipeline would represent a replacement, rather than an expansion, of existing sewer infrastructure. For these reasons, impacts to wastewater conveyance would be **less than significant**.

Mitigation Measure

None required.

Impact 3.12-5: Implementation of the project could require or result in the construction of new or expanded storm water drainage facilities.

Stormwater Drainage

A 21-inch storm drain pipe is located in the Richards Boulevard right-of-way and currently serves the project site. Following completion of the Demolition Project, this pipeline and the pump house would be left in place to manage stormwater levels in conjunction with other post-construction requirements issued by the SWRCB. The project, however, would result in the capping of this stormwater pipe at the project site; the existing pump house and 21-inch main would be decommissioned and abandoned in place, and the project site would be served by the separated stormwater system managed by the Department of Utilities. Through this system, stormwater runoff within the service area is collected, conveyed, treated, and released.

An existing 24-inch storm drainage pipe is located adjacent to the project site beneath North 7th Street, and intersects an existing 54-inch storm drainage pipeline along Richards Boulevard. This 54-inch pipeline increased in width to 60 inches at the northwestern corner of the project boundary along Richards Boulevard. New drainage pipelines would be constructed to connect the

⁶⁸ Webber, John, Project Director I, Department of General Services, email communication with Elizabeth Boyd of ESA, February 6, 2019.

RBOC facilities to the existing Richards Boulevard stormwater pipelines. These new connections would be designed according to the criteria established in the Department of Utilities' Design and Procedure Manual, which states that 12 inches is the minimum allowable pipe diameter within the separated stormwater system.⁶⁹ The acquisition of a NPDES permit for construction activities and adherence to the measures contained within that permit would ensure compliance with the NPDES during construction of the project.

As discussed in Section 3.6, Hydrology and Water Quality, the project would represent an increase of up to 17.3 acres of onsite impervious surface area compared to baseline conditions. The potential increase in stormwater runoff which could result from this increased impervious surface area would be mitigated through compliance with the Stormwater Quality Design Manual for the Sacramento Region, which establishes stormwater quality control measures for various types of development.

Because the project would result in an impervious area greater than one acre, source control and treatment control measures are required under the Stormwater Quality Design Manual for the Sacramento Region, while additional control measures may be applied to the project site, depending on suitability. Furthermore, implementation of stormwater BMPs associated with these measures would help reduce stormwater runoff rates from the project site, and although optional, would be assessed as a component of the project's design criteria. Landscaping and other LID controls afford substantial opportunity to reduce the impacts to stormwater flow from increased impervious surface area. Implementation of LID practices are required in compliance with LEED Silver certification standards, and a combination of LID approaches are recommended to maximize the benefits of these practices.⁷⁰

After the project is built and is using the City's stormwater system, the State will need to comply with NPDES permit no. CAS082597. This NPDES permit requires that projects reduce pollutant discharge to the maximum extent practicable. Application of LID BMPs where suitable, in addition to compliance with NPDES no. CAS082597, would reduce impacts to stormwater runoff from the project site. While the State is not required to comply with City policies within the scope of this project, the State's actions to comply with the NPDES permit and with LID BMPs would result in consistency with 2035 General Plan Policies U 4.1.5 and U 4.1.6, relative to the use of LID techniques in stormwater infrastructure and new development.

The project would be required to comply with Stormwater Quality Design Manual control measures, LID controls under LEED standards, and BMPs requirements under NPDES permit no. CAS082597. These practices these practices would result in consistency with 2035 General Plan Policies U 4.1.5 and U 4.1.6, relative to the use of LID techniques in stormwater infrastructure and new development. By implementing LID BMPs and reducing stormwater runoff to the extent

⁶⁹ City of Sacramento Department of Utilities, 2018. *Department of Utilities Design and Procedure Manual Section 11: Stormwater Collection Systems*. July 24, 2018. p. 11-18.

⁷⁰ U.S. Green Building Council, 2019. *LEED v4.1 Building Design and Construction*. January 22, 2019. pp. 36.

practicable, this would ensure that the project would not overwhelm the City's stormwater infrastructure capacity, resulting in a **less-than-significant** impact.

Mitigation Measure

None required.

Impact 3.12-6: Implementation of the project could require or result in the construction of new or expanded energy transmission or distribution facilities that could result in significant environmental effects.

Electricity

Electrical service to the RBOC facilities would be provided by SMUD, via an existing connection to the 21-kV distribution network along Richards Boulevard. The existing SMUD vault along Richards Boulevard would be demolished by the Demolition Project; however, SMUD is currently in the process of installing new 21-kV feeders along North 7th Street which will have the capacity to serve the project site. The project would extend the infrastructure supporting electricity delivery from two new 21-kV circuits installed along North 7th Street as a result of this ongoing SMUD project to serve various facilities via a new onsite, underground electrical utility distribution. Each building on the complex, as well as each potential commercial retail tenant in the facilities, would be expected to be individually metered by SMUD.

As discussed in Chapter 2, Project Description, the mid-rise offices would require a service voltage of 480/277V through a pad-mounted and/or alcove utility service transformer. The high-rise office buildings and the onsite Central Plant would likely require medium voltage service, as loading for those buildings would exceed SMUD's maximum permitted service capacity of 480/277V.

Emergency power and critical equipment or operation backup in the event of a utility power outage to the project site would be provided by onsite diesel generators. These generators would likely be located in the Central Plant building. It is anticipated that the Central Plant emergency power system would serve as a central backup power source for the entire RBOC facility, with emergency power transmitted through onsite underground concrete-encased conduits. This system would consist of two (2) 1000kW diesel generator sets, in addition to the space and infrastructure required for a portable generator connection. The generators would be operated in parallel and connected to a central paralleling and distribution switchboard. Emergency power distribution for each building would be regulated via individual transfer switches and unique distribution needs pertaining to requirements such as life-safety, legally-required standby, and optional standby.

The project would not include onsite electricity generation from solar or renewable sources. However, energy supplies to the RBOC would be entirely provided through renewable sources due to the project's participation in the SMUD Greenergy program.

SMUD has confirmed that it would be able to provide service to the RBOC based on projected electrical demand load.⁷¹ SMUD is currently upgrading its transmission facilities within the area to meet the future demand of the River District (see Impact 3.12-13). SMUD has stated that they “will be upgrading [their] surrounding infrastructure to support this project.”⁷²

SMUD has indicated that construction of two new 21-kV circuits would meet the overall estimated service requirements of the RBOC. These circuits would connect SMUD substation Station E, which is currently under construction at 2100 North B Street, to the project site and to Station H, proposed at the intersection of H and 6th Streets. Completed construction of these circuits is projected by 2022 (Circuit 2303) and 2024 (Circuit 2309) respectively, but is subject to change. Substation H, which includes the reconstruction and expansion of the existing 115/12-kV Substation A site, is anticipated to be a 115/21-kV substation project which would eventually service the entirety of the project site following completion of construction (estimated for 2024).⁷³

Although the project design of the RBOC has not yet been finalized, the project would be designed to meet energy use and efficiency standards as delineated in Chapter 3.4, Energy. These standards include meeting or performing better LEED Silver certification energy standards, performing better than the 2019 Building Energy Efficiency Standards, and meeting the high performance Energy Use Index (EUI) design criteria. Furthermore, the RBOC would participate in SMUD's Greenergy program, meaning that 100 percent of the energy used to serve the project site would be provided through renewable sources. Additionally, RBOC facilities would implement energy-efficient equipment, such as Energy Star office equipment, energy-efficient computer monitors, and light-emitting diode (LED) lighting, to help limit energy consumption and meet reduction goals. Electrical loads would be controlled on a per-system basis (e.g., lighting, mechanical, etc.) on each floor through the use of electrical metering and control systems.

As SMUD is upgrading its infrastructure to serve both the project site and development in the surrounding area and has indicated that this is sufficient to serve the site with 100 percent renewable energy, the potential for the project to result in significant environmental effects because of new or expanded energy facilities is **less than significant**.

⁷¹ Fuke, David, Senior Project Manager, Sacramento Municipal Utility District, email communication with Elizabeth Boyd of ESA, February 19, 2019.

⁷² Fuke, David, Senior Project Manager, Sacramento Municipal Utility District, email communication with Elizabeth Boyd of ESA, February 19, 2019.

⁷³ Fuke, David, Senior Project Manager, Sacramento Municipal Utility District, email communication with Rob Ferrara of SMUD, January 3, 2019.

Mitigation Measure

None required.

Impact 3.12-7: Implementation of the project could require or result in the construction of new or expanded telecommunications facilities.

Telecommunications

If utilities infrastructure is needed to support a project, the City of Sacramento requires that developers be responsible for the construction and coordination of that infrastructure. As no infrastructure to support telecommunications will be accessible on the project site following the Demolition Project, the robust infrastructure which would be necessary to serve the facility's technological needs would likely be contracted by DGS to private third-part commercial providers and supplemented by the State's own fiber optic network. As the State would be required to coordinate and fund the installation of telecommunications infrastructure for the RBOC, this development would not represent a substantial adverse environmental impact as a result of the project.

In the event that a Tier 2 Data Center would be commissioned onsite, the center and all associated computer rooms throughout the RBOC facilities would be required to comply with the 2016 Building Energy Efficiency Standards. Per these standards, a computer room is defined as a "room within a building whose primary function is to house electronic equipment and that has a design equipment power density exceeding 20 watts/square foot (215 watts/square meter) of conditioned floor area," while a data center is defined as "a building whose primary function is to house computer room(s)." ⁷⁴ Adherence to the mandatory prescriptive requirements for computer rooms and data centers as established in the 2016 Building Energy Efficiency Standards, however, would ensure compliance with current regulation pertaining to data centers. For these reasons, impacts to telecommunications as a result of the project would be considered **less than significant**.

Mitigation Measure

None required.

⁷⁴ California Energy Commission, 2015. *2016 Building Energy Efficiency Standards for Residential and Nonresidential Buildings*. June 2015. pp. 55-56.

Impact 3.12-8: Implementation of the project could generate solid waste in excess of State or local standards or the capacity of local infrastructure, or could otherwise impair the attainment of solid waste reduction goals.

As mentioned in Chapter 2, Project Description, construction of the RBOC would generate up to an estimated 110,000 cubic yards of solid waste, enough to require approximately 4,782 total haul trips for all phases of construction at approximately 23 cubic yards of waste per haul.⁷⁵ However, under Section 5.408 of CALGreen, the project would be required to develop and implement a construction waste management plan to regulate the disposal of solid waste generated during construction. This plan would: identify materials which may be diverted from landfill disposal; determine how construction waste would be sorted onsite; locate diversion facilities where construction waste may be taken; and specify whether the amount of construction waste would be recorded by weight or by volume. This plan would also require that at least 65 percent of the non-hazardous waste produced during construction activities be recycled or salvaged for reuse.⁷⁶ Furthermore, the project would be required to comply with LEED Silver standards for construction-produced waste reduction (see Appendix C for the LEED checklist). Assuming that construction of the project would generate approximately 110,000 cubic yards of waste, roughly 38,500 cubic yards of waste could potentially be disposed of in one of the regional Sacramento landfills. This amount of waste would represent approximately two percent of the remaining capacity at L and D Landfill, and less than one percent of the remaining capacity at Kiefer Landfill.

The project would accommodate an influx of up to 6,000 State employees to the project site. The majority of these employees already work in currently operating State buildings, many of them situated within or near Sacramento city limits, and the change in physical location itself would likely not alter the amount of solid waste generated by these employees in the execution of their professional duties. Implementation of the RBOC would, however, represent an increase in the production of solid waste from the baseline conditions at the project site following completion of the Demolition Project. Therefore, although many of the employees who would potentially occupy the RBOC are currently working in areas served by local landfills, for the purposes of this discussion, waste estimates resulting from the up-to-6,000 employees which the project could accommodate are considered as a new and isolated waste stream in the Sacramento region.

Given maximum tenancy of the facilities, public administration uses for the project would generate approximately 2,220 tons of new waste each year (see **Table 3.12-6**). However, this estimate assumes a generation rate that does not include the recycling and waste diversion methods which would be required under AB 75 and AB 939. Compliance with these bills would require that the RBOC, as a State facility, recycle at least 50 percent of its waste; therefore, the waste produced by operation of the project would likely be less than the estimates shown in Table 3.12-6. Implementing the recycling and waste reduction measures mandated by AB 75 and

⁷⁵ Mittleman, Andrew, CCM, LEED Green Associate, JACOBS Construction, email communication with Christina Erwin and Elizabeth Boyd of ESA, December 27, 2018.

⁷⁶ California Department of Housing and Community Development, 2018. CALGreen Compliance. Available: www.hcd.ca.gov/building-standards/calgreen/index.shtml. Accessed January 10, 2019. p. 44.

AB 939 would result in approximately 3.04 tons (5.37 cubic yards) of waste per day and 1,110 tons (1,480 cubic yards) of waste annually to be disposed of in a landfill as a result of implementation of the project.

**TABLE 3.12-6
 ESTIMATED NEW VOLUMES OF SOLID WASTE PRODUCED THROUGH OPERATION OF THE RBOC**

Employment Type ^a	Number of Employees ^b	Disposal Rate ^c (tons/employee/ year)	Tons per Day	Tons per Year	Cubic Yards per Day	Cubic Yards per Year
Public Administration	6,000	0.37	6.08	2,220	8.11	2,960

NOTES:

- a Although a final project design has not yet been established and operation of the RBOC could potentially include up to 150,000 gross square feet (GSF) of amenities, the number of employees or amount of waste such facilities could generate is currently unknown. Therefore, this estimate focuses on the maximum number of potential State employees which could potentially serve as tenants of the RBOC under implementation of the project.
- b As the project does not yet include definite estimates or exact counts for the number of employees which would work in the RBOC, this estimate is intended to be conservative and represent the maximum number of employees which could potentially work on the project site.
- c This generation rate includes waste that may be recycled or otherwise diverted from the landfill as required under AB 75 and AB 939. Therefore, actual generation rates would likely be lower than the estimate provided in this table.

SOURCE: CalRecycle, 2019. Disposal and Diversion Rates for Business Groups. Available: www2.calrecycle.ca.gov/WasteCharacterization/BusinessGroupRates. Accessed January 24, 2019.

As a State-owned and –operated facility, the RBOC would be required to contract commercial collection of the solid waste produced on the project site. Within the Sacramento region, commercial haulers are able to select the landfill or associated waste transfer facility of their preference for the disposal of solid waste. Based on the permitted capacities of several key regional facilities as shown in Table 3.12-5, above, the estimated new waste produced daily as a result of the project, would—even prior to the requisite diversion of recyclable materials—represent approximately: 0.07 percent of the permitted daily disposal capacity of the L and D Landfill; 0.03 percent of the permitted daily disposal capacity of the Sacramento County Kiefer Landfill; 0.13 percent of the permitted daily disposal capacity of the Elder Creek Transfer and Recovery and Sacramento Recycling and Transfer Stations; and 0.12 percent of the permitted daily disposal capacity of the North Area Transfer Station. Following adoption of the requisite recycling and diversion reduction levels, the RBOC would represent approximately 0.04 percent of the remaining capacity at the L and D Landfill, and less than 0.01 percent of the remaining capacity at the Sacramento County Kiefer Landfill. Therefore, there is sufficient capacity at available regional waste disposal facilities to accommodate waste generated by both construction and operation of the RBOC, and implementation of the project would comply with federal, state, and local policies and reduction mandates pertaining to solid waste production and disposal. As a result, the impact resulting to solid waste disposal facilities as a result of the project would be **less than significant**.

Mitigation Measure

None required.

Cumulative Impacts

The impact of the project on utilities and infrastructure must be considered in the context of past, present, and future development projects which could contribute to the impacts of the RBOC project and create cumulative impacts. The context for the cumulative analysis of utilities service discussed in this technical section depends on the service in question.

Cumulative impacts related to water supply, conveyance, and treatment include the water supply service area for the City of Sacramento, including predicted demand increases as established in the 2035 General Plan Master EIR and the City's 2015 UWMP.

Cumulative impacts pertaining to wastewater treatment and stormwater drainage are considered within the scope of planned future growth in the Regional San and separated sewer system service areas.

Cumulative impacts dealing with solid waste are relevant to all current and future development within the service area of the Sacramento Regional Solid Waste Authority, which includes the City of Sacramento and certain unincorporated portions of Sacramento County.

Impact 3.12-9: Implementation of the project, in combination with other development, could contribute to cumulative impacts to water supplies available to the City's service area during normal, dry, and multiple dry years.

The 2015 UWMP projects the water supply necessary for future development and buildout as anticipated through 2040 consistent with the 2035 General Plan. The 2015 UWMP was prepared following the adoption of the 2035 General Plan by the Sacramento City Council, and therefore reflects intended development which would include the project site and vicinity.

As discussed above, conditions when river flows fall below Hodge Flow Criteria do not limit the overall surface water supply available to the City of Sacramento, but do restrict the diversions available to FWTP from the American River. As a result, water supply capacity for the City of Sacramento is adequate to meet development demands of the 2035 General Plan potentially through 2020, but the increased demand specifically to potable water would exceed the City's water diversion and treatment capacity. This existing capacity is insufficient to meet anticipated annual demands during Conference Years with surface water supply alone, but coupled with existing groundwater production, a capacity deficit would not be experienced until 2030. During years when conditions are above Hodge Flow Criteria, a capacity deficit of surface water supply could be felt by 2025, but may not occur until 2030 if supplemented by full use of the groundwater production capacity of 20 mgd.⁷⁷

Assuming no additional surface water diversion and treatment capacity is added to the City's water supply and the 2000 WFA is maintained, the City of Sacramento would be required to increase groundwater pumping capacity by roughly 98 mgd to complete buildout of the 2035

⁷⁷ City of Sacramento, 2014. *City of Sacramento 2035 General Plan Update Draft Master Environmental Impact Report*. August 2014. pp. 4.11-7 to 4.11-8.

General Plan, even below Hodge flow conditions. Moreover, there are not enough groundwater well facilities within the City service area, and 68 new wells would need to be constructed in order to meet the 98 mgd capacity deficit.⁷⁸

Groundwater supplies in the North American Basin are not adequate to entirely supply the capacity deficit mentioned above, even with the construction of new groundwater pumping wells. Furthermore, the attempt could potentially result in groundwater drawdown within the basin and have a substantial environmental effect on other groundwater pumping activities in the area, resulting in a significant cumulative impact. While the City of Sacramento would, as established in discussion of Impact 3.12-1, have sufficient capacity through existing water rights to supply domestic water through buildout of the 2035 General Plan, the City would be unable to divert sufficient water supplies to meet this goal using only existing facilities and infrastructure. While the project would represent a comparatively small percentage (six percent) of the demand increase resulting from development under the 2035 General Plan, the project would have a considerable contribution to cumulative water supply demands, and this cumulative impact would therefore be considered **potentially significant**.

Mitigation Measure 3.12-9

In order to ensure that the City has adequate water supply available to meet cumulative demands under buildout of the 2035 General Plan, the City shall implement, to the extent required to secure adequate supply, one or more of the following measures:

- a) In order to comply with the Green Building Initiative under Executive Order B-18-12, which, among other things, requires urban water agencies to reduce statewide per capita water consumption 20 percent by 2020, Chapter 9 of the City of Sacramento 2015 UWMP suggests implementation of key water conservation measures, or Demand Management Measures (DMMs). Six of these DMMs, which may also be considered Best Management Practices (BMPs) pertain to retail agencies, while three measures apply to wholesale agencies, including:
 - i. Water Waste Prevention Ordinances;
 - ii. Metering;
 - iii. Conservation Pricing;
 - iv. Public Education and Outreach;
 - v. Programs to Assess and Manage Distribution System Real Loss;
 - vi. Water Conservation Program Coordination and Staffing Support;
 - vii. Residential High Efficiency Toilet Rebate;
 - viii. Residential High Efficiency Washing Machine Rebate;
 - ix. Residential River-Friendly Landscape Rebate;
 - x. Residential Water Wise House Calls;

⁷⁸ City of Sacramento, 2014. *City of Sacramento 2035 General Plan Update Draft Master Environmental Impact Report*. August 2014. pp. 4.11-10.

- xi. Commercial Water Wise Business Calls;
- xii. Commercial Rebates.

b) Implement Additional Groundwater Pumping

As discussed above, additional groundwater pumping facilities could be constructed to increase groundwater production capacity when American River diversions to FWTP when river flows fall below Hodge flow levels. Under Hodge flow conditions, even full capacity pumping of current groundwater facilities would not provide sufficient water supply to accommodate full buildout under the 2035 General Plan. However, the City could construct additional wells to provide additional groundwater production capacity.

Implementation of this mitigation measure would require environmental analysis to determine the potential for substantial adverse environmental impacts resulting from the construction or operation of these new wells. These impacts could include:

- i. Construction-related impacts to soil, such as topsoil erosion;
- ii. Construction-related air emissions;
- iii. Disturbance of sub-surface cultural artifacts;
- iv. Impacts to hydrology and natural drainage;
- v. Noise impacts resulting from construction and operation of the wells;
- vi. Visual impacts and effects of light trespass;
- vii. Conversion of existing agricultural lands or resources;
- viii. Drawdown of groundwater in the North American Subbasin;
- ix. Exposure to hazardous materials resulting from construction and operational activities.

In addition to these significant environmental impacts, groundwater pumping activities could also contribute to drawdown of groundwater resources and the violation of groundwater management practices, and could adversely affect other regional groundwater pumping activities.

Mitigation measures would need to be specifically tailored to reduce any potentially significant impacts resulting from construction and operation of increased groundwater production facilities to less-than-significant levels. The lead agency would be required to identify and implement mitigation measures for each specific mitigation project.

Level of Significance After Mitigation: Implementation of one or more of the methods listed above could ensure that adequate water supply exists to adequately serve cumulative development under complete buildout of the 2035 General Plan. However, water supply is under the jurisdiction of the City, and as a specific method has not been determined by the City and since several of the methods could still potentially result in substantial adverse environmental effects under implementation of the aforementioned mitigation options, this cumulative impact is considered **significant and unavoidable**.

Impact 3.12-10: Implementation of the project, in combination with other development, could contribute to cumulative increases to discharge flows or water conveyance demand, such that the relocation or construction of new or expanded water conveyance infrastructure or facilities could cause significant environmental effects.

Downtown Sacramento is, broadly speaking, supplied by a system of transmission pipelines up to 42 inches in diameter and smaller distribution mains ranging from 6 to 12 inches in diameter. Transmission pipelines are expressly used to transport large volumes of water, which the distribution mains may be more generally accessed for water demand and fire flow.⁷⁹ These transmission pipelines and distribution mains underlying the project vicinity and serving the downtown area would provide adequate capacity for the cumulative development of buildout of the 2035 General Plan and the project. Although the 2011 RDSP asserted that new distribution mains would be required to support the RDSP's proposed new development in the River District,⁸⁰ the 2035 General Plan was prepared subsequent to the adoption of the RDSP, and the intended development within the General Plan would therefore account for water supply infrastructure needs in the River District. Application of the policies included in the General Plan would reduce potential impacts to utilities infrastructure, cumulative or otherwise, to less-than-significant levels.⁸¹ The impact to cumulative increases in water conveyance infrastructure would be **less than significant**.

Mitigation Measure

None required.

Impact 3.12-11: Implementation of the project, in combination with other development, could result in a determination by the wastewater treatment provider which serves or may serve the development area that it does not have adequate capacity to serve the development's cumulative project demand in addition to the provider's existing commitments.

Anticipated cumulative development within the City of Sacramento, as well as other municipalities and unincorporated areas of Sacramento County which fall within the Regional San service area, would result in a net increase conveyance of wastewater to the SRWWTP. As these areas include wastewater flows that are conveyed through the combined sewer system and separated sewer system, development as described in the 2035 General Plan would increase demand for conveyance and treatment capacity.

⁷⁹ City of Sacramento Department of Utilities, 2011. *2010 Urban Water Management Plan*. October 2011. Carollo Engineers. p. 2-5 and 2-6.

⁸⁰ City of Sacramento Community Development Department and Economic Development Department, 2011. *River District Specific Plan*. Adopted February 15, 2011. p. 77.

⁸¹ City of Sacramento Community Development Department, 2010. *River District Specific Plan Draft Environmental Impact Report*. July 2010. pp. 5.9-1 to 5.9-15.

Development under the 2035 General Plan would increase wastewater flows such that the demand for wastewater treatment at the SRWWTP would also increase. According to the Regional San 2020 Master Plan Executive Summary, the reliable capacity of existing facilities is able to accommodate an ADFW of approximately 207 mgd and a peak 24-hour flow occurring during the wet weather season (PWWF) of 392 mgd. Flows by 2020 are projected at 218 mgd ADFW and 434 mgd PWWF, meaning that existing facilities would be insufficient for increases in wastewater flows caused by future development, resulting in a potentially significant cumulative impact.⁸²

Regional San's 2020 Master Plan outlines improvements required to provide adequate treatment capacity for this increased demand within its service area, as developed by the Sacramento Area Council of Governments population projections. Full buildout of these improvements would produce capacities of 350 mgd ADFW and 833 mgd PWWF,⁸³ ensuring sufficient capacity to account for buildout of projected development within the Regional San service area. The 2020 Master Plan also discusses facilities updates that would ensure treatment compliance with effluent requirements as projected by the RWQCB.

The wastewater contributions of the proposed project to cumulative wastewater treatment demand increases would represent approximately six percent of SRWWTP's full capacity under buildout of the 2020 Master Plan. As a result, the proposed project contribution would not be considerable, resulting in a **less-than-significant** impact.

Mitigation Measure

None required.

Impact 3.12-12: Implementation of the project, in combination with other development, could contribute to cumulative increases to surface runoff flows, such that the relocation or construction of new or expanded stormwater drainage infrastructure or facilities could cause significant environmental effects.

Although full buildout of the 2035 General Plan may contribute to increased impervious surface areas such that surface runoff flows are increased over existing conditions, future development within the policy area would be subject to Policies U 4.1.4, U 4.1.5, and U 4.1.6, including compliance with the requirements of the City's NPDES permit and stormwater design requirements, as well as the implementation of LID controls to prevent flooding onsite or downstream. Moreover, the City of Sacramento shall implement Policies U 4.1.1, U 4.1.2, and U 4.1.3 to ensure that adequate stormwater drainage facilities are designed and constructed to accommodate stormwater runoff within the policy area in ways that are pursuant to existing

⁸² Sacramento Regional County Sanitation District, 2008. *2020 Master Plan Final Executive Summary for the Sacramento Regional Wastewater Treatment Plant*. May 2008. p. 15.

⁸³ Sacramento Regional County Sanitation District, 2008. *2020 Master Plan Final Executive Summary for the Sacramento Regional Wastewater Treatment Plant*. May 2008. p. 14.

plans, account for long-term planning and development, and coordinate with Sacramento County and other agencies relevant to the operation and maintenance of drainage facilities.

The project could potentially increase stormwater runoff from the project site over baseline conditions as a result of increased impervious surface area. However, these flows would be mitigated through compliance with the Stormwater Quality Design Manual for the Sacramento Region and LID practices in compliance with LEED Silver certification standards. Furthermore, future development under the 2035 General Plan would be subject to the policies identified above to account for future needs for stormwater drainage infrastructure and facilities. As a result, the contribution of the project contribution would not be considerable, and impacts to cumulative stormwater drainage facilities would be **less than significant**.

Mitigation Measure

None required.

Impact 3.12-13: Implementation of the project, in combination with other development, could contribute to cumulative increases to energy demand, such that the relocation or construction of new or expanded electrical transmission and distribution infrastructure or facilities could cause significant environmental effects.

Future development under the 2035 General Plan would increase the need for electricity in residential, commercial, and office capacities, and growth in previously undeveloped areas would require the construction of new transmission and distribution facilities, as well as the extension of existing infrastructure. However, future development would be subject to the energy efficiency and reduction standards and regulations delineated in CCR Title 24, State Building Energy Efficiency Standards, as well as in the Green Building Initiative goals of Executive Order B-18-2. These standards would help to reduce impacts associated with increased electricity demand, and while it is currently not specifically known how SMUD would accommodate future electrical demand for complete buildout of the 2035 General Plan and future development within its entire service area, new or expanded utilities infrastructure would be constructed to provide the required service, per the direction of the California Public Utilities Commission.⁸⁴ Furthermore, environmental impacts resulting from the need for utilities installation would be conducted on a project-by-project basis.

However, SMUD is currently undergoing upgrades to its infrastructure in proximity to the project site and to a broader area north of Downtown Sacramento. SMUD has indicated that construction or alteration of the following facilities are anticipated to be required to serve development in the area, including the project:

⁸⁴ City of Sacramento, 2014. *City of Sacramento 2035 General Plan Update Draft Master Environmental Impact Report*. August 2014. p. 4.11-24.

- Underground 21-kV infrastructure and facilities along the southern side of Richards Boulevard, along the entire northern project boundary;
- Underground 21-kV infrastructure and facilities along the west side of North 7th Street along the entire eastern project boundary;
- Underground 21-kV infrastructure and facilities within the project site area, the location of which would depend on specific service requirements and facility designs.

For all of the systems mentioned above, infrastructure and facilities would include, but would not be limited to, underground circuit(s), pad-mounted transformer(s), pad-mounted switchgear and other ancillary infrastructure such as manholes and pull boxes, per project demand requirements.

It is not known at this time the potential environmental impacts resulting from these upgrades. The growth in the city of Sacramento, including development anticipated in the River District, contributes to a potentially significant cumulative impact. The project is one of many developments within the SMUD service area. SMUD is making efforts to upgrade electrical generation and transmission facilities to comply with the State's mandates regarding the energy portfolio, as well as to serve the growing population within the service area. The RBOC would be designed to be energy efficient. While the RBOC would be one of the many developments which would be served by upgrades to the energy infrastructure, it would not have a considerable contribution to this cumulative impact. Therefore, this impact is **less than significant**.

Mitigation Measure

None required.

Impact 3.12-14: Implementation of the project, in combination with other development, could contribute to cumulative increases to telecommunications demand, such that the relocation or construction of new or expanded telecommunications infrastructure or facilities could cause significant environmental effects.

Implementation of the 2035 General Plan would result in the need for expanded telephone and cable services and the subsequent construction of new telecommunication facilities. However, telecommunication utility lines are commonly co-located with other utilities or placed within public rights-of-way to reduce environmental impacts resulting from the construction of telecommunication facilities. Future development under the 2035 General Plan would be subject to Policies U 7.1.2, U 7.1.3, U 7.1.4, and U 7.1.6, which would ensure: the retrofitting of areas within the scope of the 2035 General Plan which currently lack telecommunications infrastructure; the use of state-of-the-art facilities in large-scale planned communities and office and commercial developments; and the maintenance of state-of-the-art facilities and practice, all of which would reduce the need for construction of new telecommunications infrastructure for future development.⁸⁵

⁸⁵ City of Sacramento, 2014. *City of Sacramento 2035 General Plan Update Draft Master Environmental Impact Report*. Prepared August 2014. pp. 4.11-26.

As the City of Sacramento requires that developers assume responsibility for the construction of any utilities infrastructure to support a project, telecommunications infrastructure would be coordinated on an individual project-by-project basis as deemed appropriate by the project developer. Environmental review for the construction of new utility infrastructure would also be conducted on an individual basis for each project. Therefore, cumulative impact to telecommunications infrastructure resulting from buildout of the 2035 General Plan and the project would be **less than significant**.

Mitigation Measure

None required.

Impact 3.12-15: Implementation of the project, in combination with other development, could contribute to cumulative increases in solid waste generation in excess of State or local standards or in excess of the capacity of local infrastructure, or could otherwise impair the attainment of solid waste reduction goals.

The Sacramento County Kiefer Landfill is the primary landfill used for the disposal of solid waste generated in the City of Sacramento, and is anticipated to have adequate capacity to serve the City of Sacramento until 2065. As the project site falls within city limits, this landfill also would serve the RBOC. Assuming total buildout of the development anticipated in the 2035 General Plan, the City's solid waste production would include an additional 181,380 tons annually.⁸⁶ However, compliance with requisite solid waste reduction and diversion mandates of 50 percent would mean that approximately 90,690 tons of solid waste would be deposited in the Kiefer Landfill each year. The 2035 General Plan Master EIR determined that existing regional landfills would have sufficient capacity to accommodate the increase in solid waste production anticipated by the 2035 General Plan, making this cumulative impact less than significant. The 2035 General Plan also presumed development of the River District as a priority investment area, meaning that the solid waste production projections discussed above would encompass much of the waste produced by the project. Available landfill capacity in the Sacramento Region would exist to accommodate solid waste generation increases resulting both from implementation of the project and complete buildout under the 20035 General Plan; therefore, the project contribution would not be considerable, and the cumulative impact would be **less than significant**.

Mitigation Measure

None required.

⁸⁶ City of Sacramento, 2014. *City of Sacramento 2035 General Plan Update Draft Master Environmental Impact Report*. Prepared August 2014. p. 4.11-20.

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CHAPTER 4

Other CEQA Considerations

4.1 Introduction

Section 15126 of the State CEQA Guidelines requires that all phases of a project must be considered when evaluating its impact on the environment, including planning, acquisition, construction, and operation. Further, the evaluation of significant impacts must consider direct and reasonably foreseeable indirect effects of the project over the short-term and long-term. As part of this analysis, the EIR must identify (1) significant environmental effects of the project, (2) mitigation measures proposed to minimize significant effects, (3) significant environmental effects that cannot be avoided if the project is implemented, (4) significant irreversible environmental changes that would result from implementation of the project, (5) growth-inducing impacts of the project, and (6) alternatives to the project.

Sections 3.1 through 3.12 provide a comprehensive presentation of the project's environmental effects, proposed mitigation measures, and conclusions regarding the level of significance of each impact both before and after mitigation. These are also provided in the Executive Summary.

Chapter 5, Project Alternatives, presents a comparative analysis of alternatives to the project. The other CEQA-required analyses described above are presented below.

4.2 Significant and Unavoidable Adverse Impacts

Section 15126.2(b) of the State CEQA Guidelines requires that an EIR describe any significant impacts that cannot be avoided, even with the implementation of feasible mitigation measures. The environmental effects of the project on various aspects of the environment are discussed in detail in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures. Project-specific and cumulative impacts that cannot be avoided if each of the projects are approved as proposed include:

4.2.1 Project-Specific Significant and Unavoidable Impacts

Impact 3.1-2: Implementation of the project would result in a net increase of criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Impact 3.8-1: Construction of the project could generate noise that would conflict with City of Sacramento's noise standards.

Impact 3.11-1: Implementation of the project could worsen conditions at intersections in the City of Sacramento.

Impact 3.11-2: Implementation of the Project could worsen conditions on freeway facilities maintained by Caltrans.

Impact 3.11-4: Implementation of the project could adversely affect public transit operations or fail to adequately provide access to transit.

Impact 3.11-5: Implementation of the project could adversely affect existing or planned bicycle facilities or fail to provide for access by bicycle.

Impact 3.11-6: Implementation of the project could adversely affect existing or planned pedestrian facilities or fail to provide for access for pedestrians.

Impact 3.12-3: Implementation of the project could require or result in the relocation or construction of new or expanded water conveyance infrastructure.

4.2.2 Cumulative Significant and Unavoidable Impacts

Impact 3.1-4: The project, in conjunction with other planned projects, could cumulatively impact a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Impact 3.11-8: Implementation of the project, in combination with other development, could contribute to cumulatively worsened conditions at intersections in the City of Sacramento.

Impact 3.11-9: Implementation of the project, in combination with other development, could contribute to cumulatively worsened conditions on freeway facilities maintained by Caltrans.

Impact 3.11-11: Implementation of the Project, in combination with other development, could adversely affect public transit operations or fail to adequately provide access to transit under cumulative conditions.

Impact 3.11-12: Implementation of the project could adversely affect existing or planned bicycle facilities or fail to provide for access by bicycle under cumulative conditions.

Impact 3.11-13: Implementation of the project could adversely affect existing or planned pedestrian facilities or fail to provide for access for pedestrians under cumulative conditions.

Impact 3.12-9: Implementation of the project, in combination with other development, could contribute to cumulative impacts to water supplies available to the City's service area during normal, dry, and multiple dry years.

4.3 Significant and Irreversible Environmental Changes

Under CEQA, an EIR must analyze the extent to which a project's primary and secondary effects would generally commit future generations to the allocation of nonrenewable resources and to irreversible environmental damage (State CEQA Guidelines section 15126.2(c); 15127). Section 15126.2(c) states:

Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

Generally, a project would result in significant irreversible environmental changes if:

- The primary and secondary impacts would generally commit future generations to similar uses;
- The project would involve a large commitment of nonrenewable resources;
- The project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Development of the project would result in the consolidation of State office space in downtown Sacramento and building approximately 1.4 million gross square feet of office and related uses across multiple new office buildings on a consolidated site. Redevelopment of the RBOC project site to a less developed condition would not be feasible due to the intensity of use that currently and previously existed on the site, the urbanized nature of the surrounding area, and the value of the property as a potential site for urban infill development.

The State CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident associated with either of the projects. While the projects could result in the use, transport, storage, and disposal of hazardous wastes during construction and operation, as described in Section 1.3.1, Issues Previously Determined to be Less Than Significant, all activities would comply with applicable state and federal laws related

to the handling, transport, and disposal of hazardous materials, which significantly reduce the likelihood and severity of accidents that could result in irreversible environmental damage.

Implementation of the project would result in the long-term commitment of resources to urban development. The most notable significant irreversible impacts are increased generation of pollutants from vehicle travel and stationary operations, and worsened conditions for intersections, freeways, transit, bicycles, and pedestrians during construction and operational activities of the project in addition to cumulative development activities. The unavoidable consequences of the project are described in the appropriate sections in Chapter 3, Environmental Setting, Impacts, and Mitigation Measures.

Resources that would be permanently and continually consumed by implementation of the project include water, electricity, natural gas, and fossil fuels; however, the amount and rate of consumption of these resources would not result in the unnecessary, inefficient, or wasteful use of resources. With respect to operational activities, compliance with applicable building codes, including the 2016 Title 24 Energy Efficiency Standards, as well as mitigation measures, planning policies, and standard conservation features, would ensure that natural resources are conserved to the maximum extent feasible. As noted above and elsewhere in Chapters 2 and 3, the RBOC project would be designed to meet or exceed leadership in energy and environmental design (LEED) Silver level, including Zero Net Energy. It is also possible that, over time, new technologies or systems will emerge, or will become more cost-effective or user-friendly, to further reduce the reliance upon nonrenewable natural resources. Nonetheless, construction activities related to the project would result in the irretrievable commitment of nonrenewable energy resources, primarily in the form of fossil fuels (including fuel oil), natural gas, and gasoline for automobiles and construction equipment.

Over the past decade our understanding of global climate change and the role that communities can play in addressing it has grown significantly. There is scientific consensus that recent increases in global temperatures are associated with corresponding increases of greenhouse gases (GHGs). This temperature increase is beginning to affect regional climates and is expected result in impacts to our region and the world. Climate change has profound implications for the availability of the natural resources on which economic prosperity and human development depend. Because climate change is inherently a cumulative effect, the relative contribution from the project to global warming is not currently possible to determine. This issue is discussed in Section 3.5, Greenhouse Gas Emissions and Climate Change.

4.4 Growth-Inducing Effects

As required by section 15126.2(d) of the State CEQA Guidelines, an EIR must discuss ways in which a project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also, the EIR must discuss the characteristics of the project that could encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. Growth can be induced

in a number of ways, such as through the elimination of obstacles to growth, through the stimulation of economic activity within the region, or through the establishment of policies or other precedents that directly or indirectly encourage additional growth. The purpose of this section is to evaluate the potential growth-inducing effects resulting from the implementation of each of the projects in the City of Sacramento, and throughout the region. Additional analysis of the growth-inducing effects from the project is provided in Chapter 3.9, Population and Housing, and also discussed in Chapter 3.7, Land Use and Planning.

In general, a project may foster spatial, economic, or population growth in a geographic area if the project removes an impediment to growth (e.g., the establishment of an essential public service; the provision of new physical or transportation access to an area; a change in zoning or general plan amendment approval); or economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion).

4.4.1 Environmental Effects of Induced Growth

While economic and employment growth at the project site is the intended consequence of the project, growth induced directly and indirectly by the project could also affect the greater Sacramento region. Potential effects caused by induced growth in the region could include: increased traffic congestion; increased air pollutant emissions; loss of agricultural land and open space; loss of habitat and associated flora and fauna; increased demand on public utilities and services, such as fire and police protection, water, recycled water, wastewater, solid waste, energy, and natural gas; and increased demand for housing.

Specifically, an increase in housing demand in the greater Sacramento region could cause significant environmental effects as new residential development would require governmental services, such as schools, libraries, and parks. Indirect and induced employment and population growth would further contribute to the loss of open space because it would encourage conversion to urban uses for housing, commercial space, and infrastructure.

While the project would contribute to direct, indirect, and induced growth in the region, it is not anticipated that growth induced by the project would be of sufficient size to substantially increase demand for development in the region, to the extent that such demand would lead to significant environmental effects. For these reasons, this impact would be considered less than significant.

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CHAPTER 5

Project Alternatives

5.1 Overview

The State CEQA Guidelines require analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the project’s basic objectives and avoid or substantially lessen any of the significant effects of the project.¹ The range of potentially feasible alternatives required in an EIR is governed by a “rule of reason” that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The potential feasibility of an alternative may be determined based on a variety of factors, including economic viability, availability of infrastructure, and other plans or regulatory limitations. Specifically, Section 15126.6(f) (1) of the State CEQA Guidelines states, in part:

Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project’s significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). The State CEQA Guidelines further require that the alternatives be compared to the project’s environmental impacts and that the “no project” alternative is considered.²

An EIR need not evaluate the environmental effects of alternatives in the same level of detail as the project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the project. The requirement that an EIR evaluate alternatives to the project or alternatives that address the location of the project is a broad one; the primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained while reducing the magnitude of, or avoiding, the environmental impacts of the project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the Public Resources Code (PRC) and the CEQA Guidelines direct that the EIR need “set forth

¹ CEQA Guidelines Section 15126.6(a)

² CEQA Guidelines Section 15126.6(d)(e)

only those alternatives necessary to permit a reasoned choice.” The ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency’s decision-making body.³

5.2 Considerations for Selection of Alternatives

5.2.1 Attainment of Project Objectives

The objectives of the project are used to evaluate the reasonableness and feasibility of each alternative. As presented in Chapter 2, Project Description, the objectives for this project are as follows:

- consolidate State office space and address State office space deficiencies in downtown Sacramento, prioritizing building on underutilized State property;
- accommodate staff from State-owned office buildings targeted for renovation or replacement in such a way as to facilitate the vacation, eventual renovation, and re-occupation of these structures while minimizing disruption to State agencies;
- provide a modern, efficient, and safe environment for State employees and the public they serve;
- integrate the new State development with the existing neighborhood;
- develop a sustainable and energy-efficient building;
- encourage and support the use of alternative commute modes by designing the project to have easy access to multiple transit modes;
- maximize the effectiveness of the design-build project delivery method by maintaining sufficient flexibility in the performance criteria to support innovation in the design competition.

5.2.2 Environmental Impacts of the Richards Boulevard Office Complex Project

Sections 3.1 through 3.12 of this Draft EIR address the environmental impacts of implementation of the proposed Richards Boulevard Office Complex (RBOC) project (or project). Potentially feasible alternatives were developed with the objective of avoiding or lessening the significant, and potentially significant, adverse impacts of the project, as identified in Chapter 3 of this Draft EIR and summarized below. If an environmental issue area analyzed in this Draft EIR is not discussed below, it is because no significant impacts were identified for that issue area.

Air Quality

The project’s unmitigated operational emissions would generate oxides of nitrogen (NOx) emissions that would exceed SMAQMD significance thresholds and would be considered significant. Mitigation Measure 3.1-1 would require the implementation of a project-specific air

³ Public Resources Code Section 21081(a)(3)

quality management plan (Appendix D2) which would result in an 82.7 percent reduction in NO_xe emissions after mitigation. This impact would be considered **less than significant**. During project construction, emissions of criteria pollutants would not exceed applicable thresholds except for NO_x in the short-term. Mitigation Measures 3.1-2(a), (b), (c), and (d) require implementation of various actions to reduce emissions from construction equipment, resulting in a sufficient limitation of NO_x emissions to reduce this impact to a **less-than-significant** level with mitigation. In addition, there are no potential violations of the federal or state air quality standards from operational CO emissions. However, in the long-term the project would result in peak mobile source daily emissions of NO_x and PM₁₀, that would exceed the applicable significance thresholds, and be considered **significant and unavoidable**.

The project would expose sensitive receptors to substantial pollutant concentrations. However, with implementation of Mitigation Measure 3.1-3(a) which requires SMAQMD Enhanced Exhaust Control Practices and Mitigation Measure 3.1-3(b) which requires strategies to reduce the cancer risk, the impact would be **less than significant**.

The project, in conjunction with other planned projects, could cumulatively impact a net increase of PM₁₀, a criteria pollutant for which the project region is in non-attainment status. While implementation of Mitigation Measure 3.1-4 would address other criteria pollutants, there are no approved mitigation measures for PM₁₀. The project's contribution to the significant cumulative impact remains considerable and **significant and unavoidable**.

Biological Resources

Construction work occurring within 165 feet of elderberry shrubs could impact Valley Elderberry Longhorn Beetle. Mitigation Measure 3.2-1 would ensure that the project avoids or mitigates for impacts to VELB through implementation of a no-work buffer for activities that may damage or kill an elderberry shrub, and minimizes project activities which could impact the shrubs. Therefore, this impact would be reduced to a **less-than-significant** level.

During construction, the project could result in direct mortality to nesting migratory birds or birds of prey. Mitigation Measure 3.2-2 would ensure that the project avoids impacts to migratory birds and other birds of prey through clearing vegetation outside of the nesting season or conducting preconstruction surveys. In addition, no-work buffers will be established if birds are observed nesting in the vicinity of the construction footprint. Therefore, this impact would be reduced to a **less-than-significant** level.

Cultural Resources

The project has potential for some impacts related to inadvertent discovery of archeological resources, tribal cultural resources, or human remains; however, these impacts may be mitigated to **less than significant** with the implementation of Mitigation Measures 3.3-1 and 3.3-3.

Noise and Vibration

Project related construction activities could conflict with the City of Sacramento Municipal Code in regards to construction activities during nighttime hours. The project is not subject to the restrictions of local jurisdictions, including Section 8.68.080 of the City of Sacramento Municipal Code, which would include submittal of a conditional work application for any required nighttime work. As a practical matter, the State would not apply for such a permit from a local jurisdiction. The significance criteria for this analysis applies the standards of the City Noise Ordinance and, as the State would not apply for a local permit to engage in nighttime construction activity, the potential for nighttime construction work is conservatively identified as significant and unavoidable.

Transportation and Circulation

The project was determined to lead to **significant** impacts regarding the following transportation-related topics under project and/or cumulative conditions: intersection level of service; freeway facilities maintained by Caltrans due to worsened conditions of queuing lengths; transit operations and access; existing bicycle facilities and access; planned pedestrian facilities and access; and construction-related traffic impacts. Mitigation measures are provided for these impacts; however, even with implementation of all mitigation, these impacts would remain **significant and unavoidable**.

The project could cause construction-related traffic impacts; however, Mitigation Measure 3.11-7 would require the preparation of a detailed Construction Traffic Management Plan which would ensure that construction-related traffic impacts would be reduced to **less than significant**.

Utilities and Infrastructure

The project would result in **significant** impacts related to the relocation or construction of new or expanded water conveyance infrastructure and to water supply in the cumulative condition. As part of Mitigation Measure 3.12-1, a water study would be conducted to ensure that the water supply infrastructure associated with the project could meet water demand and fire flow pressure requirements to adequately serve the project. Any improvements required to meet these requirements would be identified and carried out by DGS in order to ensure the quality and ability of the infrastructure to adequately supply water to the project. Application of Mitigation Measure 3.12-1 would reduce the impact related to water supply infrastructure capacity to serve the project to a **less-than-significant** level. The City of Sacramento would have sufficient capacity through existing water rights to supply domestic water through buildout of the 2035 General Plan for both the project and other development; however, the City would be unable to divert sufficient water supplies to meet this goal using only existing facilities and infrastructure. This is a significant impact. While Mitigation Measure 3.12-9 would require the City to address water supply needs; water supply is under the jurisdiction of the City. A specific method to address future water supply has not been determined by the City and since several of the methods could still potentially result in substantial adverse environmental effects, this cumulative impact is considered **significant and unavoidable**.

5.3 Alternatives Considered but Dismissed from Further Evaluation

As described above, State CEQA Guidelines Section 15126.6(c) provides that the range of potential alternatives for the project shall include those that could feasibly accomplish most of the basic objectives of the project, and could avoid or substantially lessen one or more of the significant effects. Alternatives that fail to meet the fundamental project purpose need not be addressed in detail in an EIR.

In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by lead agency decisionmaker(s).⁴ At the time of action on the project, the decisionmaker(s) may consider evidence beyond that found in this EIR in addressing such determinations. The decision-maker(s), for example, may conclude that a particular alternative is infeasible (i.e., undesirable) from a policy standpoint, and may reject an alternative on that basis provided that the decision-maker(s) adopts a finding, supported by substantial evidence, to that effect, and provided that such a finding reflects a reasonable balancing of the relevant economic, environmental, social, and other considerations supported by substantial evidence.

The EIR should also identify any alternatives that were considered by the lead agency, but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination. There were no alternatives considered by DGS that are not evaluated further in this Draft EIR.

5.4 Alternatives Selected for Further Consideration

The following alternatives are evaluated in this Draft EIR.

- **Alternative 1: No Project Alternative** assumes that the project site will remain a vacant fenced lot, with no structures or other facilities, other than a small pump house on the northwest corner of the site. The project site would remain as it is left after the State Printing Plant and Textbook Warehouse Relocation and Demolition Project (Demolition Project) is complete.
- **Alternative 2: Reduced Employees Alternative** assumes that the project would retain the same uses but the site would be less intensely developed. In this alternative, it is assumed that only the California Department of Tax and Fee Administration (CDTFA) would be relocated to the project site, with accommodations for up to 2,400 staff onsite.

⁴ Public Resources Code, Section 21081(a)(3).

- **Alternative 3: More Onsite Parking Alternative** assumes that the site design will include enough additional parking to reduce the mode share of ride hailing trips to zero.
- **Alternative 4: River District Specific Plan Street Network Alternative** assumes that the site design will include two east-west extensions across the project site to accommodate extended Bannon Street and North C Street, and one north-south extension of North 6th Street through the project site.

Further details on these alternatives, and an evaluation of environmental effects relative to the project, are provided below.

5.4.1 Alternative 1: No Project Alternative

Under Alternative 1, the No Project Alternative, no action would be taken by DGS and the project site would remain unchanged from baseline conditions. The lot would remain dirt and would be fenced off to prevent trespassing. Although the Ten Year Sequencing Plan identifies this location for a new office complex, no development would occur. The staff that are currently in locations that need to be renovated would need to be relocated to other locations throughout the Sacramento region. The site would remain undeveloped. The No Project Alternative would not meet the project objectives for consolidation of State office space, prioritizing building on underutilized State property, accommodating staff from State-owned buildings targeted for renovation or replacement, providing a modern and efficient environment, etc. While this alternative would not meet the objectives, CEQA requires that DGS evaluate this alternative in the EIR.

Under the No Project Alternative, there would be no discretionary action by the State, and thus no impact. However, for purposes of comparison with the action alternatives, conclusions for each technical area are characterized as “impacts” that are greater than, similar to, or less than the project in order to provide some understanding of how conditions differ in this alternative.

Aesthetics, Light, and Glare

Under the No Project Alternative, no new development would occur. There would be no alteration of the visual character of the project site; views of the area from surrounding vantage points would not change; and no new sources of light, glare, or shadow would be created. In comparison, the project would result in four new office buildings, a central plant structure, and a parking garage in an area that is bare under baseline conditions. Because the project would be a qualifying infill project as defined by Public Resources Code Section 21099[d][1]), aesthetic impacts would not be considered significant effects on the environment significant despite the considerable and inherent visual impact of the high-rise building. However, the No Project Alternative would not introduce new sources of light to the project area and, therefore, the No Project Alternative would result in **lesser** impacts than the project with regard to visual impacts.

Air Quality

Because the No Project Alternative would involve no construction disturbances, new facilities, or new vehicular trip generation, this alternative would not generate new construction- or operations-related air emissions. By comparison, the project would result in a significant impact related to construction emissions of NOx. After mitigation, this impact would be reduced to less-than-significant levels. Implementation of the No Project Alternative would not result in this air quality impact; therefore, this alternative would result in **less** of an impact than the proposed project.

Biological Resources

The No Project Alternative would not include any development and would thus not disturb any biological resources. While the project would reduce impacts to both valley elderberry longhorn beetle and nesting migratory birds and birds of prey through mitigation measures, the No Project Alternative would avoid even potential impacts by not including construction activities that could potentially impact these species. Therefore, the No Project Alternative would result in **less** of an impact than the project with regard to biological resources.

Cultural and Tribal Cultural Resources

Under the No Project Alternative, impacts to cultural and tribal cultural resources would have been mitigated by the Demolition Project. While the project has potential for some additional impacts related to inadvertent discovery of archeological resources, tribal cultural resources, or human remains; these impacts may be mitigated to less than significant with Mitigation Measures 3.3-1 and 3.3-3. However, without development of the project site, the risk of encountering previously undiscovered archaeological and tribal cultural resources onsite would be eliminated. As such, the No Project Alternative would have **lesser** impacts on cultural and tribal cultural resources than the project.

Energy

Under the No Project Alternative, there would be no construction nor operation activities. The site would remain bare and would not use minimal energy to operate the small pump house. Under the project, the demands for energy usage could include impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation, that would result in a less-than-significant impacts. However, implementation of the project would create an increase in energy demand compared to the No Project Alternative. Therefore, the No Project Alternative would result in **less** of an impact than the project with regard to energy.

Geology, Soils, and Seismicity

The No Project Alternative would not include any ground disturbance. There would be no potential for increased erosion or increased risk from seismic or soils hazards. While the project site is within a mapped mineral resource zone, the site is in an urban area where extraction of mineral resources is not viable. While the project is not anticipated to result in any significant

impacts related to geology, soils, and seismicity, the No Project Alternative would not result in changes to the soil conditions or erosion. As such, the No Project Alternative would have **lesser** impacts on geology, soils, and seismicity than the project.

Greenhouse Gas Emissions and Climate Change

Because the No Project Alternative would involve no construction, new facilities, or new vehicular trip generation, this alternative would not generate new construction- or operations-related greenhouse gas (GHG) emissions. By comparison, the project would result in construction and operational GHG emissions; however, these emissions would be less than significant because both construction and operation of the proposed office building would include GHG efficiency measures (e.g., proximity to transit, solar power generation, Zero Net Energy) consistent with State and local policies and regulations for the purpose of reducing GHG emissions and enabling achievement of the statewide reduction targets. However, because the No Project Alternative would not result any new GHG emissions, this alternative would result in **less** of an impact than the project with regard to climate change. However, the No Project Alternative also precludes the benefits of consolidating State employees in a new highly energy-efficient and GHG-emissions-efficient building and supporting renovation of 450 N Street, which would be expected to increase the energy efficiency of that building and reduce its GHG emissions.

Hazards and Hazardous Materials

Under the No Project Alternative, impacts related to hazards and hazardous materials would have been mitigated by the Demolition Project. In both alternatives, there would be no additional impact. As such, the No Project Alternative would have **similar** impacts on hazards and hazardous materials as the project.

Hydrology and Water Quality

Under the No Project Alternative, there would be no potential for construction-related releases of sediment and contaminants into surface waters or groundwater, and no changes in stormwater generation, drainage patterns, or flooding. There are no impacts related to seiche or tsunami for the project site. Under baseline conditions, the project site would be undeveloped and recharge of groundwater would be possible through the permeable soil. However, groundwater is more affected by the proximity to the Sacramento and American rivers and the project site is located in an urban area that is not considered important for groundwater recharge.

Various stormwater pollution prevention devices and best management practices (BMPs) would be implemented during construction and operation of the project. The project would be required to comply with existing State and local regulations regarding the City's NPDES permits. Implementation of BMPs and compliance with State and local requirements would result in similar runoff and water quality during storm events as under existing conditions. Neither the project nor the No Project Alternative would result in significant impacts related to hydrology and water quality. However, because construction of the proposed project would result in ground

disturbance, excavation, and would likely encounter groundwater, hydrology and water quality impacts of the No Project Alternative would be **less** than those of the proposed project.

Land Use and Planning

The No Project Alternative would not support the Sacramento Region Blueprint, 2016 MTS/SCS, City of Sacramento 2035 General Plan, Central City Community Plan, or River District Specific Plan, all of which call for infill development in downtown Sacramento, intensifying uses on underutilized sites near transit, increased opportunities for pedestrian and bicycle use, prioritizing energy and water-efficient buildings and reduction of carbon emissions, and locating jobs closer to housing. This alternative would not address State office space deficiencies in downtown Sacramento, increase use of underutilized State property, develop an energy-efficient office complex near transit lines, or allow for relocation of State employees from other downtown buildings that are in need of renovation or replacement (such as the building at 450 N Street).

In comparison, the project would intensify development on an underutilized site, integrating a new office building into the central city by designing the project to have easy access to multiple transportation modes. While the project would be inconsistent with some specific General Plan goals, objectives, and policies; these inconsistencies do not themselves create a significant environmental impact under the thresholds established in CEQA Guidelines Appendix G, because not all land use goals and policies at issue are “adopted for the purpose of avoiding or mitigating an environmental effect.” These policies are, instead, expressions of community planning and organization preferences, and the City of Sacramento may modify these preferences without necessarily creating a significant adverse impact on the environment.

Because the No Project Alternative would conflict with the goals for infill and more connectivity, this alternative would have **greater** impacts as the project.

Noise and Vibration

Under the No Project Alternative, no new construction activities would occur, no new noise-generating land uses would be developed, and no additional traffic would be generated. Therefore, there would be no increase in the potential noise conflicts under the No Project Alternative. By comparison, the project would result in potentially significant construction-related noise impacts, and transportation-related noise impacts. Implementation of the No Project Alternative would avoid these noise impacts; therefore, this alternative would result in **less** of an impact than the project with regard to noise.

Population and Housing

The No Project Alternative would not generate any new residents, jobs, or homes in the city of Sacramento. In comparison, the project would allow space for up to 6,000 State employees, and up to 700 temporary construction jobs during peak construction periods; however, the project-related increase in employment would not induce population growth such that there would be an additional demand for housing that could not be met by existing or planned housing in the region.

Because the No Project Alternative would generate no new residents, jobs, or homes in Sacramento, it would result in **less** population and housing impacts than the project.

Public Services

The No Project Alternative would not generate increased demands for fire, police, solid waste disposal, or parks and recreation or school facilities. By contrast, the project would create minor increases in demand for fire, police, solid waste disposal, and parks and recreation facilities, primarily by increasing the net number of employees in the downtown area. Under the project, increased demands for public services would be less than significant. However, implementation of the project would create an incremental increase in service demand that would not occur under the No Project Alternative. Therefore, the No Project Alternative would result in **less** of an impact than the project with regard to public services.

Transportation and Circulation

The No Project Alternative would not include any new development and would not generate any new traffic-related impacts. In comparison, the project would result in significant impacts to the following transportation or circulation related topics under project and/or cumulative conditions: intersection level of service (LOS); freeway facilities maintained by Caltrans due to worsened conditions of queuing lengths; transit operations and access; existing bicycle facilities and access; planned pedestrian facilities and access; and construction-related traffic impacts. Construction of the project would temporarily disrupt traffic in the vicinity of the project site, potentially through lane closures, lane narrowing, and detours, and these localized and temporary impacts would be minimized through implementation of a Construction Traffic Management Plan in accordance with City of Sacramento Code. The No Project Alternative would avoid any transportation impacts, resulting in **less** impacts than the project.

Utilities and Infrastructure

The No Project Alternative would not result in additional demand for water, wastewater treatment, stormwater conveyance, electricity, or natural gas; nor would it result in the need for new facilities and infrastructure to support additional demand. By comparison, the project would result in significant impacts to the following transportation or circulation related topics under project and/or cumulative conditions: the relocation or construction of new or expanded water conveyance infrastructure; and the construction of new or expanded energy transmission or distribution facilities. Because the No Project Alternative would have no new demand for potable water, stormwater/surface-runoff management, wastewater treatment, and wastewater conveyance infrastructure, it would result in **less** of an impact than the project.

5.4.2 Alternative 2: Reduced Employees Alternative

Under Alternative 2, the Reduced Employees Alternative, DGS would design and build an office complex to provide for only the employees of CDTF. The 2,400 employees under this alternative would require approximately 479,000 gross square feet of office space. The amenity

space would also decrease to 72,500 square feet for a total buildout of 551,000 gross square feet of buildings. While the overall program would decrease, the project would still include four buildings, one of which could be a high-rise of up to 29 stories and 418 feet tall. Parking would remain at 1,420 spaces which would include a garage and surface parking. Other than the overall decrease in square footage and employees, the rest of the project description would remain substantially similar.

Under the Reduced Employees Alternative, the site would be developed in its entirety. The buildings would cover a similar footprint; however, the floor-area-ratio (FAR) would decrease from approximately 2 FAR to less than 0.75 FAR. The site amenities would be similar in type but would decrease in overall size.

Under this alternative, DGS would be able to move employees from buildings (such as 450 N Street) that are to be renovated into a modern, efficient, and safe working environment. This alternative would still allow the State to integrate the development into the existing River District neighborhood and develop sustainability and energy-efficient buildings while encouraging alternative commute modes. While the alternative would allow the State to consolidate office space and address deficiencies, the benefit would be less as fewer employees could be moved from existing spaces which may result in a lag for the State on when the other office projects in the Ten Year Sequencing Plan could be accomplished.

Aesthetics, Light, and Glare

Under the Reduced Employees Alternative, the alternative would not qualify as an employment center project because the estimated FAR would be less than 0.75. Under Public Resources Code Section 21099 (d), the project qualifies as an employment center project on an infill site within a transit priority area; therefore, the EIR does not need to consider aesthetic impacts resulting from the project as significant impacts on the environment.

Because the alternative would result in an FAR under 0.75, the alternative does not qualify as an employment center project; therefore, aesthetic impacts would need to be addressed.

The project site is situated in a developed area that is largely industrial and commercial in nature, and no scenic vistas are located in the vicinity of the project site. There would be no impact related to scenic vistas. The closest scenic highway is State Route (SR) 160, south of the southern city limit of Sacramento and outside of view of the project site; therefore, the alternative would not damage scenic resources within a state scenic highway. The project site is in an urbanized area; therefore, there is no impact related to degradation of visual character or the quality of public views. Finally, the alternative would create new sources of light and glare similar to surrounding uses.

Because the EIR does not need to consider aesthetic impacts for the project and the alternative would result in less-than-significant impacts related to aesthetics, the impacts would be **similar** under both the Reduced Employees Alternative and the project.

Air Quality

Similar to the project, the Reduced Employees Alternative would include construction of four new office buildings, a parking lot, garage, and other ancillary uses which would generate significant (but mitigable) construction-related air emissions. After mitigation, construction-related emissions would be less than significant for both the project and this alternative.

Operations- and transportation-related air emissions would be less than the project because the number of employees would be less than half of the project's, as would the size of the child-care and ancillary facilities. Like the project, the Reduced Employees Alternative would be served by a wide range of commute travel modes, including by extensive transit use. Because there would be less construction and fewer trips, the air quality impacts for this alternative would be **less** than the project.

Biological Resources

The Reduced Employees Alternative would include the same kind of site disturbance as the project, resulting in the development of the office complex along with a parking garage, parking lot, and interior streets. As with the project, this development has the potential to affect both valley elderberry longhorn beetle and nesting migratory birds and birds of prey; however, these potential impacts can be mitigated to less than significant. Because the Reduced Employees Alternative would have a similar site disturbance as the project, this would result in **similar** impacts.

Cultural and Tribal Cultural Resources

Under the Reduced Employees Alternative, impacts to cultural and tribal cultural resources would have been mitigated by the Demolition Project. In both alternatives, there would be no additional impact. As such, the Reduced Employees Alternative would have **similar** impacts on cultural and tribal cultural resources as the project.

Energy

Under the Reduced Employees Alternative, there would be fewer employees, resulting in a reduction in energy demand. Under the project, the demands for energy usage could include impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation, that would result in a less-than-significant impacts. However, implementation of the project would create a larger increase in energy demand than under the Reduced Employees Alternative. Therefore, the Reduced Employees Alternative would result in **less** of an impact than the project with regard to energy.

Geology, Soils, and Seismicity

Under the Reduced Employees Alternative, impacts to geology, soils, and seismicity would include the same amount of ground disturbance, if not less than, the project. There would be no potential for increased erosion or increased risk from seismic or soils hazards, as the project would comply with existing regulatory frameworks addressing earthquake safety issues and

adherence with CBC, design standards, and permit conditions. While the project site is within a mapped mineral resource zone, the site is in an urban area where extraction of mineral resources is not viable. In addition, as the design standards, and construction standards would also remain the same as the project, it is not anticipated that the Reduced Employees Alternative would result in impacts related to geology, soils, and seismicity. As such, the EIR does not need to consider geology, soils, and seismicity impacts for the project and the alternative would result in less-than-significant impacts related to geology, soils, and seismicity, the impacts would be **similar** under both the Reduced Employees Alternative and the project.

Greenhouse Gas Emissions and Climate Change

Under the Reduced Employees Alternative, impacts related to GHG emissions and climate change would remain as analyzed for the project, with potentially less impacts, due to a reduction in the number of employees at the project. As stated in the project analysis, GHG emissions from the project would be below SMAQMD's proposed per-service population significance threshold, and the project would be consistent with the applicable criteria for determining CAP consistency. Under the alternative, it is assumed that operations- and transportation-related GHG impacts would be less than the project because the number of employees would be less than half of the project's, as would the size of the facilities on site. Like the project, the Reduced Employees Alternative would be served by a wide range of commute travel modes, including by extensive transit use. With less construction and fewer trips, the GHG impacts for this alternative would be less than the project. Therefore, with the associated impacts for the project considered less than significant, and with a reduction in the number of employees under the Reduced Employees Alternative, the impacts under the Reduced Employees Alternative would be **less** than the project.

Hazards and Hazardous Materials

Under the Reduced Employees Alternative, potential impacts from hazards and hazardous materials would include the same kind of site disturbance as the project, resulting in the development of the office complex along with a parking garage, parking lot, and interior streets. As with the project, development under the Reduced Employees Alternative impacts related to hazards and hazardous materials from the project was determined would result in less-than-significant impacts related to hazards and hazardous materials. Therefore, impacts would be **similar** under both the Reduced Employees Alternative and the project.

Hydrology and Water Quality

Under the Reduced Employees Alternative, there would be fewer employees, and less floor area, and it is assumed that potential impacts to water quality, control plans, groundwater supply, groundwater recharge, erosion, sedimentation, flood flow, and site drainage plans would remain the same as anticipated for the proposed project. Under the project, impacts for hydrology and water quality would result in a less-than-significant impact. However, implementation of the project would have the potential to impact hydrology and water quality more than under the Reduced Employees Alternative. With less employees, and overall square footage for the

proposed project reduced, it is assumed that impacts related to hydrology and water quality would be **similar** under both the Reduced Employees Alternative and the project.

Land Use and Planning

Under the Reduced Employees Alternative, there would be fewer employees, and less floor area. It is assumed that potential impacts to land use and planning would remain similar to the project, as similar construction activities for development would continue to occur, including office buildings, a parking lot, garage, and other ancillary uses. Under the project, land use and planning for the RBOC design and development would result in a less-than-significant impact. The assumed land uses for the proposed project would remain the same under the Reduced Employees Alternative, and the site would be developed in its entirety, with the buildings covering a similar footprint, and providing similar type amenities at the site, but there would be a decrease in the overall size. Under the Reduced Employees Alternative, the FAR would decrease from approximately 2 FAR to less than 0.75 FAR. With the alternative to result in a FAR under 0.75, the alternative does not qualify as an employment center project. However, a change in this designation does not alter or differ from the less-than-significant impact assumptions for the proposed project in that implementation under the Reduced Employee Alternative would not physically divide an established community, or conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Therefore, the Reduced Employees Alternative would result in **similar** impacts to the project with regard to land use and planning.

Noise and Vibration

Similar to the project, the Reduced Employees Alternative would include construction of four new office buildings, a parking lot, garage, and other ancillary uses which would generate potentially significant construction-related noise impacts. Construction-related noise would remain similar; however, because there would be less floor space, it is likely that the period of time that construction noise is present would be less. After mitigation, construction-related noise impacts would remain potentially significant for both the project and this alternative. This alternative includes fewer employees which would reduce the amount of traffic related to the project. Therefore, the transportation-related impacts would be less than the project. Like the project, the Reduced Employees Alternative would be served by a wide range of commute travel modes, including by extensive transit use. With less construction and fewer trips, noise impacts for this alternative would be **less** than the project.

Population and Housing

Under the Reduced Employees Alternative, there would be fewer employees, resulting in a reduction of population and potential housing demand. In addition, under the Reduced Employees Alternative, as similar construction activities would continue to occur for office buildings, a parking lot, garage, and other ancillary uses, the assumed non-residential land uses for the proposed project, specifically office uses, would remain the same. With the alternative to result in a reduction of employment populations, it is also assumed that there would be less potential for

housing needs generated, or population growth inducement. Under the project, population and housing growth would result in a less-than-significant impact. However, implementation of the project would create a larger increase in population growth and housing demand than under the Reduced Employees Alternative. Therefore, a reduction in employees under this alternative would not alter the impact assumptions of less than significant made for the proposed project, and the Reduced Employees Alternative would result in **less** of an impact than the project with regard to population and housing.

Public Services

Under the Reduced Employees Alternative, there would be fewer employees, resulting in a reduction of demand on public services. Under the project, the demands for public services would result in a less-than-significant impact. However, implementation of the project would create a larger increase in service demand than under the Reduced Employees Alternative. Therefore, the Reduced Employees Alternative would result in **less** of an impact than the project with regard to public services.

Transportation and Circulation

Under the Reduced Employees Alternative, there would be fewer employees while parking onsite would remain the same. Under the project, there are significant impacts to the following transportation or circulation related topics under project and/or cumulative conditions: intersection LOS; freeway facilities maintained by Caltrans due to worsened conditions of queuing lengths; transit operations and access; existing bicycle facilities and access; planned pedestrian facilities and access; and construction-related traffic impacts. This alternative includes fewer employees and the same number of parking spaces. This would enable a higher percentage of employees to park onsite and fewer using alternative modes of travel. This would reduce the impacts on: transit operations and access; intersection LOS; freeway facility impacts; and existing bicycle facilities. Because there would be less construction and fewer trips from a reduction in the number of employees, the transportation impacts for this alternative would be **less** than the project.

Utilities and Infrastructure

Under the Reduced Employees Alternative, there would be fewer employees, and less floor area constructed, resulting in a likely reduction of demand on utility services with utility usage reduced at a per employee level. Under the project, the demands for utility services would result in a less-than-significant impact. However, implementation of the alternative would create a similar need for infrastructure as with the project, with construction resulting in the development of the office complex along with a parking garage, parking lot, and interior streets. Therefore, the Reduced Employees Alternative would result in less of an impact than the project with regard to utility services, and impacts would be assumed to remain similar with regard to infrastructure. As such, the Reduced Employees Alternative would result in **less** impacts.

5.4.3 Alternative 3: More Onsite Parking Alternative

Under Alternative 3, the More Onsite Parking Alternative, DGS would continue to build the RBOC project on the underutilized State property, and consolidate State office space while addressing State office space deficiencies in downtown Sacramento. The main difference between the project and this alternative would be that additional onsite parking would be developed. DGS would continue to design and build an office complex to provide for the same number of employees, (6,000) as was assumed under the project, and accommodate staff from other State-owned office buildings targeted for renovation or replacement. Additional onsite parking would be provided as part of this alternative to meet the potential needs of employees at the site. As with the project, the More Onsite Parking Alternative would provide a modern, efficient, and safe environment for State employees and the public, while integrating development with the existing River District neighborhood. This alternative would continue to allow the State to develop sustainable and energy-efficient buildings, but would focus more on providing parking onsite with a smaller emphasis towards encouraging alternative commute modes, since more parking would be provided. The alternative would continue to allow the State to consolidate office space and address deficiencies, and the benefit would remain the same for the State in accomplishing the Ten Year Sequencing Plan.

Under the More Onsite Parking Alternative, the site would be developed in its entirety. The buildings would cover a similar footprint; a similar FAR of approximately 2 FAR, and similar site amenities overall. The overall program for the project would remain the same and would still include four buildings, one of which could be a high-rise of up to 29 stories and 418 feet tall. Parking would increase by 436 spaces to approximately 1,856 spaces which would include a garage and surface parking. Other than the overall increase in onsite parking, the rest of the project description would remain substantially similar.

Aesthetics, Light, and Glare

Under the More Onsite Parking Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would assume additional parking as part of the site design. With all of the same project components, including construction of four new office buildings, a parking lot, garage, and other ancillary uses, the alternative would continue to qualify as an employment center project because the estimated FAR would be greater than 0.75. Under Public Resources Code Section 21099 (d), the project qualifies as an employment center project on an infill site within a transit priority area; therefore, the EIR does not need to consider aesthetic impacts resulting from the project as significant impacts on the environment. Because the alternative would result in an FAR over 0.75, the alternative qualifies as an employment center project; therefore, aesthetic impacts would not need to be addressed.

The project site is situated in a developed area that is largely industrial and commercial in nature, and no scenic vistas are located in the vicinity of the project site. There would be no impact related to scenic vistas. The closest scenic highway is SR 160, south of the southern city limit of

Sacramento and outside of view of the project site; therefore, the alternative would not damage scenic resources within a state scenic highway. The project site is in an urbanized area; therefore, there is no impact related to degradation of visual character or the quality of public views. Finally, the alternative would create new sources of substantial light and glare. However, these would be mitigated, as all new construction would be required to comply with local anti-glare and reflective glass standards as set forth in the City's 2035 General Plan and the River District's Design Guidelines, which includes façade guidance under Private Realm Design Guidelines Part D, Massing and Building Configuration. Compliance with these standards, as reviewed by the Planning and Design Commission, would minimize any potentially adverse effects.

Because the EIR does not need to consider aesthetic impacts for the project and the alternative would result in less-than-significant impacts related to aesthetics, the impacts would be **similar** under both the More Onsite Parking Alternative and the project.

Air Quality

Under the More Onsite Parking Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would assume additional parking as part of the site design. Under the project, construction of four new office buildings, a parking lot, garage, and other ancillary uses would generate significant construction-related air emissions. After mitigation, short-term and long-term construction-related emissions would remain significant for both the project and this alternative.

Operations- and transportation-related air emissions would be similar to the project because the number of employees assumed would remain the same as the project's, as would the size of the facilities on the site. However, with additional onsite parking, it would be assumed that mode share of ride hailing trips would be reduced to zero. In addition, with mitigations put in place, both the project and the alternative would comply with the applicable air quality plans and best management practices, and impacts to applicable air quality plans would be considered less than significant. There are no potential violations of the NAAQS or CAAQS from operational CO emissions thus this will be considered less than significant.

However, the development of government office complex pursuant to the proposed RBOC would result in peak mobile source daily emissions of NO_x and PM₁₀, that would exceed the significance thresholds specified by the SMAQMD.

Like the project, the More Onsite Parking Alternative would be served by a wide range of commute travel modes, including by extensive transit use. With site design assumed to include enough additional parking to reduce the mode share of ride hailing trips to zero, the transportation-related air quality impacts for this alternative would be **less** than the project.

Biological Resources

Under the More Onsite Parking Alternative, there would be the same kind of site disturbance, and the same assumed development of the site as the project. However, the main difference between

this alternative and the project, is that the alternative would assume additional parking as part of the site design. As with the project, this development has the potential to affect both valley elderberry longhorn beetle and nesting migratory birds and birds of prey; however, these potential impacts can be mitigated to less than significant. Because the More Onsite Parking Alternative would have a similar site disturbance as the project, this would result in **similar** impacts.

Cultural and Tribal Cultural Resources

Under the More Onsite Parking Alternative, impacts to cultural and tribal cultural resources would have been mitigated by the Demolition Project. In both alternatives, there would be no additional impact. As such, the More Onsite Parking Alternative would have **similar** impacts on cultural and tribal cultural resources as the project.

Energy

Under the More Onsite Parking Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would assume additional parking as part of the site design. Under the project, the demands for energy usage could include impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation, that would result in less-than-significant impacts. As the difference between this alternative and the project is that the alternative would assume additional parking as part of the site design, the implementation of the project would create a similar energy demand to the More Onsite Parking Alternative. Therefore, the More Onsite Parking Alternative would result in **similar** impacts to the project with regard to energy.

Geology, Soils, and Seismicity

Under the More Onsite Parking Alternative, there would be the same amount of ground disturbance, and the same assumed development of the site as the project. However, the main difference between this alternative and the project, is that the alternative would assume additional onsite parking as part of the site design, with no additional ground disturbance. As the project analysis assumes that impacts related to geology, soils, and seismicity would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the More Onsite Parking Alternative.

Greenhouse Gas Emissions and Climate Change

Under the More Onsite Parking Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would assume additional parking as part of the site design. As stated in the project analysis, GHG emissions from the project would be below SMAQMD's proposed per-service population significance threshold, and the project would be consistent with the applicable criteria for determining CAP consistency. As with the project, the More Onsite Parking Alternative would be served by a wide range of commute travel modes, including by extensive transit use. With site design assumed to include enough additional parking to reduce the mode share of ride hailing trips to zero, the transportation-related GHG impacts for this alternative would be less than the project. Therefore,

with the associated impacts related to GHG emissions for the project considered less than significant, and with a reduction in the number of mode share of ride hailing trips, the impacts under the More Onsite Parking would remain as analyzed for the project, and be **similar** to project.

Hazards and Hazardous Materials

Under the More Onsite Parking Alternative, there would be the same assumed development of the site, and the same amount of site disturbance as the project. However, the alternative would include additional parking as part of the site design. It is anticipated that the inclusion of additional onsite parking would not induce substantial changes to hazards and hazardous materials impacts. As the project analysis assumes that impacts related to hazards and hazardous materials would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the More Onsite Parking Alternative.

Hydrology and Water Quality

Under the More Onsite Parking Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would include additional parking as part of the site design. It is anticipated that the inclusion of additional onsite parking would not induce substantial changes to hydrology and water quality impacts. As the project analysis assumes that impacts related to hydrology and water quality would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the More Onsite Parking Alternative.

Land Use and Planning

Under the More Onsite Parking Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would include additional parking as part of the site design. It is anticipated that the inclusion of additional onsite parking would not induce substantial changes to land use and planning impacts. As the project analysis assumes that impacts related to land use and planning would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the More Onsite Parking Alternative.

Noise and Vibration

Similar to the project, the More Onsite Parking Alternative would include all of the same components of the project, but would assume additional parking as part of the site design. Under the project, construction of four new office buildings, a parking lot, garage, and other ancillary uses would generate potentially significant construction-related noise impacts. Under the More Onsite Parking Alternative, construction-related noise would remain similar; however, because there would be additional parking onsite, it is likely that the period of time that construction noise is present would be greater. After mitigation, construction-related noise impacts would remain potentially significant for both the project and this alternative. This alternative includes the same amount of employees which would generate a similar amount of traffic related to the project.

However, like the project, the More Onsite Parking Alternative would be served by a wide range of commute travel modes, including by extensive transit use. With site design assumed to include enough additional parking to reduce the mode share of ride hailing trips to zero, the transportation-related noise impacts for this alternative would be **less** than the project.

Population and Housing

Under the More Onsite Parking Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would include additional parking as part of the site design. It is anticipated that the inclusion of additional onsite parking would not induce substantial changes to population or housing impacts. As the project analysis assumes that impacts related to land use and planning would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the More Onsite Parking Alternative.

Public Services

Under the More Onsite Parking Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would assume additional parking as part of the site design. It is anticipated that the inclusion of additional onsite parking would not induce substantial changes to public service demand. As the project analysis assumes that impacts related to public services would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the More Onsite Parking Alternative.

Transportation and Circulation

Under the More Onsite Parking Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would assume additional parking as part of the site design. Under the project, there are significant impacts to the following transportation or circulation related topics under project and/or cumulative conditions: intersection LOS; freeway facilities maintained by Caltrans due to worsened conditions of queuing lengths; transit operations and access; existing bicycle facilities and access; planned pedestrian facilities and access; and construction-related traffic impacts. It is anticipated that this alternative includes additional onsite parking, which would induce substantial changes to transportation and circulation demand for the project. This alternative includes the same number of employees, with an additional number of parking spaces. This would enable a higher percentage of employees to park onsite and fewer using alternative modes of travel. This would reduce the impacts on: transit operations and access; intersection LOS; freeway facility impacts; and existing bicycle facilities. The transportation impacts for this alternative would be **less** to the project.

Utilities and Infrastructure

Under the More Onsite Parking Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would assume additional parking as part of the site design. It is anticipated that the inclusion of additional onsite

parking would not induce substantial changes to utilities and infrastructure impacts. As the project analysis assumes that impacts related to utilities and infrastructure would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the More Onsite Parking Alternative.

5.4.4 Alternative 4: River District Specific Plan Street Network Alternative

Under Alternative 4, the River District Specific Plan Street Network Alternative, DGS would continue to build the RBOC project on the underutilized State property, and consolidate State office space while addressing State office space deficiencies in downtown Sacramento. The main difference between the project and this alternative would be that under the alternative, the project would include the street network for the site as specified in the River District Specific Plan. This includes the two east-west extensions for Bannon Street and North C Street, and one north-south extension of North 6th Street.

DGS would continue to design and build an office complex to accommodate the same number of employees, (6,000) as was assumed under the project, and hold staff from other State-owned office buildings targeted for renovation or replacement. An additional street network would be provided as part of this alternative to provide further connectivity with the existing River District neighborhood. As with the project, the River District Specific Plan Street Network Alternative would provide a modern, efficient, and safe environment for State employees and the public, while further integrating development with the existing River District neighborhood. This alternative would continue to allow the State to develop sustainable and energy-efficient buildings, but would further focus on providing an established street network in line with the River District Specific Plan, and the alternative would continue to encourage alternative commute modes, likely to utilize the added street network. In addition, this alternative would continue to allow the State to consolidate office space and address deficiencies, with the benefits to remain the same for the State in being able to accomplish their Ten Year Sequencing Plan.

The buildings would cover a similar footprint; a similar FAR of approximately 2 FAR, and similar site amenities overall. The overall program for the project would remain the same and would still include four buildings, one of which could be a high-rise of up to 29 stories and 418 feet tall. Parking would increase to approximately 1,420 spaces which would include a garage and surface parking. Other than the roadway network, the rest of the project description would remain substantially similar.

Aesthetics, Light, and Glare

Under the River District Specific Plan Street Network Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would include the street network for the site as specified in the River District Specific Plan. This includes the two east-west extensions for Bannon Street and North C Street, and one

north-south extension of North 6th Street. With all of the same project components, and similar FAR, the alternative would continue to qualify as an employment center project.

The project site is situated in a developed area that is largely industrial and commercial in nature, and no scenic vistas are located in the vicinity of the project site. There would be no impact related to scenic vistas. The closest scenic highway is State Route 160, south of the southern city limit of Sacramento and outside of view of the project site; therefore, the alternative would not damage scenic resources within a state scenic highway. The project site is in an urbanized area; therefore, there is no impact related to degradation of visual character or the quality of public views. Finally, the alternative would create new sources of substantial light and glare. However, these would be mitigated, as all new construction would be required to comply with local anti-glare and reflective glass standards as set forth in the City's 2035 General Plan and the River District's Design Guidelines. Compliance with these standards, as reviewed by the Planning and Design Commission, would minimize any potentially adverse effects.

Because the EIR does not need to consider aesthetic impacts for the project and the alternative would result in less-than-significant impacts related to aesthetics, the impacts would be **similar** under both the River District Specific Plan Street Network Alternative and the project.

Air Quality

Under the River District Specific Plan Street Network Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would include the street network for the site as specified in the River District Specific Plan. This includes the two east-west extensions for Bannon Street and North C Street, and one north-south extension of North 6th Street. Under the project, construction of four new office buildings, a parking lot, garage, and other ancillary uses would generate significant construction-related air emissions. After mitigation, short-term and long-term construction-related emissions would remain significant for both the project and this alternative.

Operations- and transportation-related air emissions would be similar to the project because the number of employees assumed would remain the same as the project's, as would the size of the facilities on the site. However, with the added street network, there is potential for better access and transportation connectivity to and from the site. In addition, with mitigations put in place, both the project and the alternative would comply with the applicable air quality plans and best management practices, and impacts to applicable air quality plans would be considered less than significant. There are no potential violations of the NAAQS or CAAQS from operational CO emissions thus this will be considered less than significant.

However, the development of government office complex pursuant to the proposed RBOC would result in peak mobile source daily emissions of NO_x and PM₁₀, that would exceed the significance thresholds specified by the SMAQMD.

Like the project, the River District Specific Plan Street Network Alternative would be served by a wide range of commute travel modes, including by extensive transit use. With site design assumed to include the addition of two east-west extensions for Bannon Street and North C Street, and one north-south extension of North 6th Street, connectivity to and from the site would facilitate access to transit and better connectivity at the site. However, it is assumed that transportation-related air quality impacts, would remain **similar** to the project.

Biological Resources

Under the River District Specific Plan Street Network Alternative, there would be the same kind of site disturbance, and the same assumed development of the site as the project. However, the main different between this alternative and the project, is that the alternative would assume the addition of a street network as specified in the River District Specific Plan. As with the project, this development has the potential to affect both valley elderberry longhorn beetle and nesting migratory birds and birds of prey; however, these potential impacts can be mitigated to less than significant. Because the River District Specific Plan Street Network Alternative would have a similar site disturbance as the project, this would result in **similar** impacts.

Cultural and Tribal Cultural Resources

Under the River District Specific Plan Street Network Alternative, impacts to cultural and tribal cultural resources would have been mitigated by the Demolition Project. In both alternatives, there would be no additional impact. As such, the River District Specific Plan Street Network Alternative would have **similar** impacts on cultural and tribal cultural resources as the project.

Energy

Under the River District Specific Plan Street Network Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the main different between this alternative and the project, is that the alternative would assume the addition of a street network as specified in the River District Specific Plan. Under the project, the demands for energy usage could include impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation, that would result in less-than-significant impacts. As the only difference between this alternative and the project is that the alternative would include the addition of a street network through the site, the implementation of the project would create a similar energy demand to the River District Specific Plan Street Network Alternative. Therefore, the River District Specific Plan Street Network Alternative would result in **similar** impacts to the project with regard to energy.

Geology, Soils, and Seismicity

Under the River District Specific Plan Street Network Alternative, there would be the same amount of ground disturbance, and the same assumed development of the site as the project. However, the main different between this alternative and the project, is that the alternative would assume the addition of a street network as specified in the River District Specific Plan. As the project analysis assumes that impacts related to geology, soils, and seismicity would result in

less-than-significant impacts, it is also assumed that the impacts would be **similar** under the River District Specific Plan Street Network Alternative.

Greenhouse Gas Emissions and Climate Change

Under the River District Specific Plan Street Network Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would include the street network for the site as specified in the River District Specific Plan. This includes the two east-west extensions for Bannon Street and North C Street, and one north-south extension of North 6th Street.

Under the project, construction of four new office buildings, a parking lot, garage, and other ancillary uses would generate significant construction-related air emissions. After mitigation, short-term and long-term construction-related emissions would remain significant for both the project and this alternative.

As stated in the project analysis, GHG emissions from the project would be below SMAQMD's proposed per-service population significance threshold, and the project would be consistent with the applicable criteria for determining CAP consistency. As with the project, the River District Specific Plan Street Network Alternative would be served by a wide range of commute travel modes, including by extensive transit use. Operations- and transportation-related GHG emissions would be similar to the project because the number of employees assumed would remain the same as the project's, as would the size of the facilities on the site. However, with the added street network, there is potential for better access and transportation connectivity to and from the site, and transportation-related GHG impacts for this alternative would be considered less than the project. Therefore, with the associated impacts related to GHG emissions for the project considered less than significant, and with improved mobility to and from the site, the impacts under the River District Specific Plan Street Network Alternative would remain as analyzed for the project, and be **similar** to project.

Hazards and Hazardous Materials

Under the River District Specific Plan Street Network Alternative, there would be the same amount of ground disturbance, and the same assumed development of the site as the project. However, the main different between this alternative and the project, is that the alternative would assume the addition of a street network as specified in the River District Specific Plan. It is anticipated that the inclusion of the additional street network would not induce substantial changes to hazards and hazardous materials impacts. As the project analysis assumes that impacts related to hazards and hazardous materials would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the River District Specific Plan Street Network Alternative.

Hydrology and Water Quality

Under the River District Specific Plan Street Network Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the main different between this alternative and the project, is that the alternative would assume the addition of a street network as specified in the River District Specific Plan. It is anticipated that the inclusion of the additional street network would not induce substantial changes to hydrology and water quality impacts. As the project analysis assumes that impacts related to hydrology and water quality would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the River District Specific Plan Street Network Alternative.

Land Use and Planning

Under the River District Specific Plan Street Network Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the main different between this alternative and the project, is that the alternative would assume the addition of a street network as specified in the River District Specific Plan. Under the project, impacts to land use and land use planning were assumed to be less than significant. It is anticipated that the inclusion of an additional street network would not induce substantial changes to land use and planning impacts, but would in fact meet local planning goals specified in the River District Specific Plan. Therefore, it is assumed that the impacts would be **less** under the River District Specific Plan Street Network Alternative.

Noise and Vibration

Similar to the project, the River District Specific Plan Street Network Alternative, would include all of the same development components of the project, including the same number of employees as the project. However, the main different between this alternative and the project, is that the alternative would assume the addition of a street network as specified in the River District Specific Plan. Under the project, construction of four new office buildings, a parking lot, garage, and other ancillary uses would generate potentially significant construction-related noise impacts. Under the River District Specific Plan Street Network Alternative, construction-related noise would remain similar; however, because there would be the addition of a new street network, it is likely that the period of time that construction noise is present would be greater. After mitigation, construction-related noise impacts would remain potentially significant for both the project and this alternative.

This alternative includes the same amount of employees which would generate a similar amount of traffic related to the project. In addition, site design is assumed to include the addition of two east-west extensions for Bannon Street and North C Street, and one north-south extension of North 6th Street, connectivity to and from the site would facilitate access to transit and better connectivity at the site. It is assumed that this could lead to increased traffic related noise impacts at the site. However, as with the project, the River District Specific Plan Street Network Alternative would be served by a wide range of commute travel modes, including by extensive transit use.

Therefore, with the associated impacts related to transportation related noise impacts for the project considered less than significant, and with improved mobility to and from the site, the impacts under the River District Specific Plan Street Network Alternative would remain as analyzed for the project, and be **similar** to project.

Population and Housing

Under the River District Specific Plan Street Network Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would include the addition of a street network as specified in the River District Specific Plan. Under the project, impacts to population and housing were assumed to be less than significant. It is anticipated that the inclusion of an additional street network would not induce substantial changes to population and housing related impacts or growth, but would in fact provide better connection to the surrounding neighborhood, and help meet local and regional goals specified in the various planning documents for mobility. As the project analysis assumes that impacts related to population and housing would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the River District Specific Plan Street Network Alternative.

Public Services

Under the River District Specific Plan Street Network Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would assume the addition of a street network as specified in the River District Specific Plan. It is anticipated that the inclusion of a new street network would not induce substantial changes to public service demand, and in fact would likely facilitate better access to the site for public services. As the project analysis assumes that impacts related to public services would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the River District Specific Plan Street Network Alternative.

Transportation and Circulation

Under the River District Specific Plan Street Network Alternative, there would be same development components of the project, including the same number of employees as the project. However, the main difference between this alternative and the project, is that the alternative would assume the addition of a street network as specified in the River District Specific Plan. Under the project, there are significant impacts to the following transportation or circulation related topics under project and/or cumulative conditions: intersection LOS; freeway facilities maintained by Caltrans due to worsened conditions of queuing lengths; transit operations and access; existing bicycle facilities and access; planned pedestrian facilities and access; and construction-related traffic impacts.

It is anticipated that this alternative includes the same amount of employees which would generate a similar amount of traffic related to the project. In addition, site design is assumed to include the addition of two east-west extensions for Bannon Street and North C Street, and one

north-south extension of North 6th Street, connectivity to and from the site would facilitate access to transit and better connectivity at the site. It is assumed that this could induce substantial changes to transportation and circulation access to the project site. However, as with the project, the River District Specific Plan Street Network Alternative would be served by a wide range of commute travel modes, including by extensive transit use. It is assumed that impacts related to alternative transportation modes would remain similar to the project, with potential for less impacts related to operations and access. However, overall impacts would likely remain the same for: intersection LOS; freeway facility impacts; and existing bicycle facilities. Therefore, with the associated impacts related to transportation for the project considered significant, and with improved mobility to and from the site, the impacts under the River District Specific Plan Street Network Alternative would be **less** than those analyzed for the project.

Utilities and Infrastructure

Under the River District Specific Plan Street Network Alternative, there would be the same assumed development of the site, and the same number of employees as the project. However, the alternative would assume the addition of a street network as specified in the River District Specific Plan. It is anticipated that the inclusion of a new street network would not induce substantial changes to utilities and infrastructure impacts. As the project analysis assumes that impacts related to utilities and infrastructure would result in less-than-significant impacts, it is also assumed that the impacts would be **similar** under the River District Specific Plan Street Network Alternative.

5.5 Environmentally Superior Alternative

Because the No Project Alternative (described above in Section 5.4.1) would avoid all adverse impacts resulting from construction and operation of the RBOC project analyzed in Chapter 3, it is the environmentally superior alternative. However, the No Project Alternative would not meet the project objectives as presented above in Section 5.2.1. When the environmentally superior alternative is the No Project Alternative, the State CEQA Guidelines (Section 15126.6[e][2]) require selection of an environmentally superior alternative from among the other action alternatives evaluated. As illustrated in **Table 5-1**, Alternative 2, Reduced Employees, would be environmentally superior action alternative because this alternative would significantly reduce the transportation-related impacts, avoiding several significant and unavoidable impacts. The reduced degree of construction and reduced building size would also reduce the employee population and reduce the emissions of criteria air pollutants and GHGs generated by the construction and operation of the project.

TABLE 5-1
SUMMARY OF ENVIRONMENTAL EFFECTS OF THE ALTERNATIVES
IN COMPARISON TO THE PROPOSED RBOC PROJECT

Environmental Topic	Proposed Project	Alt 1 – No Project	Alt 2 – Reduced Employees	Alt 3 – More Onsite Parking	Alt 4 – RDSP Street Network
Aesthetics, Light, and Glare	Less than Significant	Less	Similar	Similar	Similar
Air Quality	Significant and Unavoidable	Less	Less	Less	Similar
Biological Resources	Less than Significant	Less	Similar	Similar	Similar
Cultural Resources	Less than Significant	Less	Similar	Similar	Similar
Energy	Less than Significant	Less	Less	Similar	Similar
Geology, Soils, and Seismicity	Less than Significant	Less	Similar	Similar	Similar
Greenhouse Gas Emissions and Climate Change	Less than Significant	Less	Less	Similar	Similar
Hazards and Hazardous Materials	Less than Significant	Less	Similar	Similar	Similar
Hydrology and Water Quality	Less than Significant	Similar	Similar	Similar	Similar
Land Use and Planning	Less than Significant	Greater	Similar	Similar	Less
Noise and Vibration	Significant and Unavoidable	Less	Less	Less	Similar
Population and Housing	Less than Significant	Less	Less	Similar	Similar
Public Services	Less than Significant	Less	Less	Similar	Similar
Transportation and Circulation	Significant and Unavoidable	Less	Less	Less	Less
Utilities and Infrastructure	Significant and Unavoidable	Less	Less	Similar	Similar

CHAPTER 6

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CHAPTER 7

Acronyms and Abbreviations

°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
AB	Assembly Bill
ABC	Alcoholic Beverage Control
ACC	Advanced Clean Cars
ACHP	Advisory Council on Historic Preservation
ACS	American Community Survey
ADA	Americans with Disabilities Act
ADFW	average dry weather flow
ADT	average daily traffic
AFY	acre-feet per year
ALS	Advanced Life Support
amsl	above mean sea level
AQMP	Air Quality Management Plan
Basin Plan	Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin
BCE	before common era
BCE	Board of Chiropractic Examiners
BCSH	Business, Consumer Services and Housing
bgs	below ground surface
BMP	Best Management Practice
BNSF	Burlington Northern and Santa Fe Railway
BP	before present
BREA	Bureau of Real Estate Appraisers
Btu	British thermal unit
CAA	Clean Air Act
CAC	Capitol Area Committee
CADA	Capitol Area Development Authority
CAFE	Corporate Average Fuel Economy
CAISO	California Independent System Operator
CalEEMod	California Emission Estimator Model
CALGreen	California Green Building Standards Code
CALOES	California Office of Emergency Services

CALPADS	California Longitudinal Pupil Achievement Data System
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CA SDWA	California Safe Drinking Water Act
CBA	Board of Accountancy
CBC	California Building Code
CBD	Central Business District
CBOT	Board of Occupational Therapy
CCAA	California Clean Air Act
CCCP	City of Sacramento's Central City Community Plan
CCR	California Code of Regulations
CCSP	City of Sacramento's Central City Specific Plan
CDE	California Department of Education
CDFW	California Department of Fish and Wildlife
CDTFA	California Department of Tax and Fee Administration
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFL	compact-fluorescent
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH ₄	methane
CHP	California Highway Patrol
CHRB	California Horse Racing Board
CHSC	California Health and Safety Code
City	City of Sacramento
CNDDB	California Department of Fish and Wildlife's Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CPS	Capitol Protection Section of the California Highway Patrol
CPTED	Crime Prevention Through Environmental Design
CPUC	California Public Utilities Commission
CRB	Court Reporters Board
CRPR	California Rare Plant Rank
CVRWQCB	Central Valley Regional Water Quality Control Board

CWA	Federal Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBO	Business Oversight
DCA	Department of Consumer Affairs
Delta	Sacramento – San Joaquin Delta
Demolition Project	State Printing Plant and Textbook Warehouse Relocation and Demolition Project
DFEH	Department of Fair Employment and Housing
DGS	California State Department of General Services
DMM	Demand Management Measure
DOC	California Department of Conservation
DOE	Department of Energy
DOF	California Department of Finance
DPF	Diesel Particulate Filters
DPM	Diesel Particulate Matter
DRE	Department of Real Estate
DRS	Disposal Reporting System
DWR	California Department of Water Resources
EDD	State of California Employment Development Department
EGUSD	Elk Grove Unified School District
EIR	Environmental Impact Report
EMFAC	California Air Resources Board’s Emissions Factors
EMS	Emergency Medical Services
EPA	Environmental Protection Agency
ES	Elementary School
ESA	Environmental Site Assessment
ESA	Environmental Science Associates
EUI	Energy Use Index
FAR	Floor Area Ratio
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMD	Facilities Maintenance Division
FPD	Fire Protection District
FTA	Federal Transit Administration
FWTP	E.A. Fairbairn Water Treatment Plant
FY	fiscal year
GHG	greenhouse gas
gpd	gallons per day
g/mile	grams per mile

gpm	gallons per minute
GSF	gross square feet
GSP	Groundwater Sustainability Plan
GVW	Gross Vehicle Weight
GVWR	Gross Vehicle Weight Rating
GWP	Global Warming Potential
HAP	Hazardous Air Pollutant
HARP	Hotspots Analysis Reporting Program
HCD	Housing and Community Development
HCM	Transportation Research Board's <i>Highway Capacity Manual, 6th Edition</i>
HCP	habitat conservation plan
HFC	hydroflouorocarbon
HOV	High Occupancy Vehicle
HRA	health risk assessment
HS	High School
HVAC	Heating, Ventilation, and Air Conditioning
Hz	hertz
I-5	Interstate 5
IPCC	International Panel on Climate Change
IPM	integrated pest management
IRP	integrated resource plan
IS/MND	Initial Study/Mitigated Negative Declaration
IWMA	California Integrated Waste Management Act
IWMP	Integrated Waste Management Plan
kWh	Kilowatt-Hours
JHS	Junior High School
JPA	Joint Powers Authority
L _{dn}	Day Night Average Level
LED	light emitting diode
LEED	Leadership in Energy and Environmental Design
L _{eq}	energy-equivalent sound level
LEV	Low-Emission Vehicle
LID	low impact development
LOS	Level of Service
LRT	light rail transit
LUST	leaking underground storage tank
LVW	Loaded Vehicle Weight
MBTA	Migratory Bird Treaty Act
MCLG	maximum contaminant level goal
MCL	maximum contaminant level

mgd	million gallons per day
MICR	Million Increase in Cancer Risk
MLD	Most Likely Descendent
MMTCO ₂ e	million metric tons of CO ₂ e
MOU	Memorandum of Understanding
mph	miles per hour
MPO	Metropolitan Planning Organization
MS4	municipal separate storm sewer system
MSS	Mobile Source Strategy
MT	metric tons
MTIP	Metropolitan Transportation Improvement Program
MTP	Metropolitan Transportation Plan
MTP/SCS	Metropolitan Transportation Plan/Sustainable Communities Strategy
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NESHAP	National Emission Standards for Hazardous Air Pollutant
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO ₂	nitrogen dioxide
NOI	notice of intent
NOP	notice of preparation
NO _x	nitrogen oxides
NO _x e	nitrogen oxide equivalents
NPDES	National Pollution Discharge Elimination System
NPDWR	national primary drinking water regulations
NSDWR	national security secondary drinking water regulations
O ₃	ozone
OB	Office Building Zoning Designation
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OPR	Governor's Office of Planning and Research
OPT	Board of Optometry
OSHA	Occupation Safety and Health Administration
OSP	California Office of State Publishing
PCC	Public Contract Code
PD	Proposed for Delisting by the United States Fish and Wildlife Service
PDWF	peak dry weather flow
PFC	Perfluorocarbon

PG&E	Pacific Gas & Electric
PHEV	plug-in hybrid electric vehicles
PIA	Priority Investment Area
PM	particulate matter
PM _{2.5}	particulate matter in size fractions of 2.5 microns or less in diameter
PM ₁₀	particulate matter in size fractions of 10 microns or less in diameter
POU	Publicly Owned Utility
ppb	parts per billion
ppd	pounds per day
ppm	parts per million
PPV	Peak Particle Velocity
PRC	Public Resource Code
PWWF	peak wet weather flow
R-5	High-rise Residential Zone
RAST	Risk Assessment Standalone Tool
RBOC	Richards Boulevard Office Complex
RCB	Respiratory Care Board
RCNM	FHWA's <i>Roadway Construction Noise Model</i>
RDSP	River District Specific Plan
REC	Recognized Environmental Condition
Regional San Reporting Rule	Sacramento Regional County Sanitation District Greenhouse Gas Reporting Rule
RHNA	Regional Housing Needs Assessment
RHNP	Regional Housing Needs Plan
RMP	Regional Monitoring Program
RMS	root mean square
RMX	Residential Mixed Use Zoning Designation
ROG	reactive organic gases
RPS	Renewable Portfolio Standard
RT	Regional Transit
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
Sacramento DPR	City of Sacramento Department of Parks and Recreation
SacRT	Sacramento Regional Transit
SACRTD	Sacramento Regional Transit District
SASD	Sacramento Area Sewer District
SB	Senate Bill
SCC	Sacramento Convention Center
SCS	Sustainable Community Strategy
SCUSD	Sacramento City Unified School District

SDWA	Safe Drinking Water Act
SF ₆	sulfur hexafluoride
SFD	Sacramento Fire Department
SGMA	Sustainable Groundwater Management Act
SHPO	State Historic Preservation Officer
SHRA	Sacramento Housing and Redevelopment Authority
SIP	State Implementation Plan
SLM	sound level meter
SLPAHADB	Speech Pathology
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMUD	Sacramento Municipal Utility District
SO ₂	sulfur dioxide
SPD	Special Planning District
SQIP	Stormwater Quality Improvement Plan
SR	State Route
SRFECC	Sacramento Regional Fire/EMS Communications Center
SRRE	Source Reduction and Recycling Element
SRWWTP	Sacramento Regional Wastewater Treatment Plant
SSC	Seismic Safety Commission
SSWD	Sacramento Suburban Water District
STAA	Service Transportation Assistance Act
STC	sound transmission class
SVAB	Sacramento Valley Air Basin
SWMP	Storm Water Management Plan
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
SWRCB-DDW	State Water Resources Control Board Division of Drinking Water
TAC	toxic air contaminant
TAZ	traffic analysis zone
TDM	Transportation Demand Management
TDS	total dissolved solids
TMDL	total maximum daily load
tpy	tons per year
TRUSD	Twin Rivers Unified School District
UAIC	United Auburn Indian Community
UARP	SMUD's Upper American River Project
UP	Union Pacific Railroad
USBR	U.S. Bureau of Reclamation
US Census	United States Census
US EPA	U.S. Environmental Protection Agency
USFWS	United States Fish and Wildlife Service

USGS	U.S. Geological Survey
UST	Underground Storage Tank
UWMP	urban water management plan
UWMPA	Urban Water Management Planning Act
VdB	commonly used to express root mean square amplitude
VELB	Valley Elderberry Longhorn Beetle
VMB	Veterinary Medical Board
VMT	vehicle miles traveled
VOC	volatile organic compound
Warren-Alquist Act	Warren-Alquist Energy Resources Conservation and Development Act
WAFR	Water Available for Replenishment
WDR	Waste Discharge Requirement
WFA	Water Forum Agreement
WRF	Water Reclamation Facility
WSA	Water Supply Assessment
ZEV	Zero-Emission Vehicle
ZNE	Zero Net Energy

CHAPTER 8

References

1 Introduction

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4 Other CEQA Considerations

None

5 Project Alternatives

None