

Volume I



Township 9 (PO6-047)
Draft Environmental Impact Report
SCH No. 2006072077

Prepared for:
City of Sacramento

Prepared by:
EIP Associates, a division of PBS&J

February 2007

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* Appendices C–N are provided on a CD in the back of this Draft EIR. Bound copies of Appendices C–N will also be available for public review at the following locations:

City of Sacramento Development Services Department
North Permit Center
2101 Arena Boulevard, Suite 200
Sacramento, CA 95834
(Open to the public from 7:30 AM to 3:30 PM and until 5:00 PM with prior arrangement)

City Hall
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1.0 INTRODUCTION

1.0 INTRODUCTION

PROJECT BACKGROUND

In March 2006, Capitol Station 65, LLC filed an application with the City of Sacramento Development Services Department for land use entitlements for the development of an approximately 65-acre mixed-use development in the Richards Boulevard Area Plan (RBAP) area in the City of Sacramento. Since the submittal of the development application, the project has been renamed Township 9. The term "proposed project," as used in this EIR, refers to the Township 9 project (P06-047). There is no physical difference between the former Capitol Station 65 project and the Township 9 project; only the name of the project has changed. The proposed project is described in detail in Chapter 2, Project Description.

PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

This Draft Environmental Impact Report (EIR) has been prepared in conformance with the California Environmental Quality Act (CEQA) of 1970 (as amended) to evaluate the environmental impacts associated with the development and operation of the Township 9 project.

CEQA requires that a local agency prepare an EIR on any project it proposes to approve that may have a significant effect on the environment. 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 an objective and informational document that fully discloses the potential environmental effects of a proposed project. The EIR process is specifically designed to objectively evaluate and disclose potentially significant direct, indirect, and cumulative impacts of a proposed project; to identify alternatives that reduce or eliminate a project's significant effects; and to identify feasible measures that mitigate significant effects of a project. In addition, CEQA requires that an EIR identify those adverse impacts that remain significant after mitigation.

EIR PROCESS

In accordance with CEQA regulations, a Notice of Preparation (NOP) was released July 17, 2006 for agency and public review. The NOP comment period closed on August 15, 2006. The NOP was distributed to responsible agencies, interested parties, and landowners within 1,000 feet of the project site. The purpose of the NOP was to provide notification that an EIR for the project was being prepared and to solicit guidance on the scope and content of the document. A summary of the comments received on the NOP is in Chapter 3. A public scoping meeting was held on August 1, 2006. Responsible agencies and members of the public were invited to attend and provide input on the scope of the EIR.

This Draft EIR is being circulated for public review and comment for a period of 45 days. During this period, the general public, organizations, and agencies can submit comments to the lead agency on the Draft EIR's accuracy and completeness. The 45-day public review period for the Township 9 project Draft EIR will be from Friday, March 2 through Monday, April 16 at 5:00 PM.

Upon completion of the public review period, a Final EIR will be prepared that will include written comments on the Draft EIR received during the public review period and the City's responses to those comments. The Final EIR will also include the Mitigation Monitoring Program (MMP). The Final EIR will address any revisions to the Draft EIR made in response to public comments. The Draft EIR and Final EIR together will comprise the EIR for the proposed project.

Before the City of Sacramento can approve the project, it must first certify that the EIR has been completed in compliance with CEQA, that the City Council (decision-making body) has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the City. The City Council also would be required to adopt Findings of Fact, and for those impacts determined to be significant and unavoidable, adopt a Statement of Overriding Considerations.

LEAD, RESPONSIBLE AND TRUSTEE AGENCIES

Lead Agency

The City of Sacramento is the lead agency for preparation of the Township 9 environmental analysis. In conformance with Sections 15050 and 15367 of the State CEQA Guidelines, the City of Sacramento has been designated the "lead agency" which is defined as the "public agency which has the principal responsibility for carrying out or disapproving a project." The lead agency is also responsible for scoping the analysis, preparing the EIR and responding to comments received on the Draft EIR. Prior to making a decision to approve a project, the lead agency is required to certify that the EIR has been completed in compliance with CEQA, that the decision-making body reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the lead agency.

Responsible Agencies

Responsible agencies are state and local public agencies other than the lead agency that have some authority to carry out or approve a project or that are required to approve a portion of the project for which a lead agency is preparing or has prepared an EIR or Initial Study/Negative Declaration. The following agencies are identified as those that would potentially act as responsible agencies for the proposed project:

- California Air Resources Board
- Office of Historic Preservation
- State Reclamation Board
- Sacramento Air Quality Management District
- State Water Resources Control Board
- Central Valley Regional Water Quality Control Board

Trustee Agencies

Trustee agencies under CEQA are designated public agencies with legal jurisdiction over natural resources that are held in trust for the people of California and that would be affected by a project, whether or not the agencies have authority to approve or implement the project. The California Department of Fish and Game has been identified as a trustee agency with potential jurisdiction over the proposed project. The U.S. Army Corps of Engineers (Corps) and U.S. Fish

and Wildlife Service would not serve as either responsible or trustee agencies under CEQA for the proposed project. These federal agencies do, however, have permitting authority over the project site.

REQUIRED PERMITS AND APPROVALS

Project approval requires the City of Sacramento to approve the proposed project and to issue required City permits or affirm compliance with other agency requirements. Below are summarized the discretionary actions sought by the project applicant for the Township 9 project that the City of Sacramento will consider during its review. A detailed description of required permits and approvals is included in Chapter 2, Project Description.

- EIR Approval
- Mitigation Monitoring Plan
- Development Agreement
- Rezone
- Designation of a Planned Unit Development (PUD) and adoption of Development Guidelines and Schematic Plan
- Tentative Map
- Design Commission Review
- Preservation Commission Review
- Water Supply Assessment

PUBLIC REVIEW OF DRAFT EIR AND LEAD AGENCY CONTACT

Upon completion of the Draft EIR, the City will provide public notice of the document's availability for public review and invite comment from the general public, agencies, organizations, and other interested parties. Copies of the Draft EIR will be available at the following locations:

City of Sacramento Development Services Department
North Permit Center
2101 Arena Boulevard, Suite 200
Sacramento, CA 95834
(Open to the public from 7:30 am to 3:30 pm and until 5:00 pm with prior arrangement)

City Hall
915 I Street
Development Services Department, 3rd Floor
Sacramento, CA 95814

Sacramento Public Library
828 I Street
Sacramento, CA 95814

The public review and comment period is 45 days. Comments may be submitted both in written form and orally at the public hearing. Notice of the time and location of the hearing will be published prior to the hearing. All comments or questions regarding the Draft EIR should be addressed to:

Jennifer Hageman, Senior Planner
City of Sacramento, Development Services Department
2101 Arena Boulevard, Suite 200
Sacramento, CA 95834
(916) 808-5538

Following the public review period, a Final EIR will be prepared. The Final EIR will respond to written comments received during the public review period and to oral comments made at any public hearing. The City will review and consider the Final EIR prior to their decision to approve, revise or reject the proposed project.

SCOPE OF THIS EIR

This EIR is a "Project EIR," pursuant to Section 15161 of the CEQA Guidelines. A Project EIR examines the environmental impacts of a specific project. This type of EIR focuses on the changes in the environment that would result from implementation of the project, including construction and operation.

The City of Sacramento, as lead agency, identified in the Initial Study for this EIR potentially significant impacts that could result from implementation of the proposed project. Based on the Initial Study (see Appendix A), the City determined that this EIR address the following technical issue areas:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazardous Materials and Public Safety
- Hydrology and Water Quality
- Noise and Vibration
- Public Services
- Public Utilities
- Transportation and Circulation

The specific topics evaluated are described in each of the technical sections presented in Chapter 6. Land Use Consistency and Compatibility and Population and Housing are not considered technical issues and are addressed in Chapters 4 and 5, respectively.

Issues not addressed further in this EIR that were identified as being less than significant or less than significant with mitigation in the Initial Study (see Appendix A for more detailed discussions) include:

- Affect agricultural resources or operations – The proposed project site is currently developed with urban uses and there are no agricultural resources or operations on the site.
- Displace existing housing – no housing exists on the project site.
- Expose structures and people to flood hazards – Effective February 2005, the Corps certified area flood protection improvements as achieving 100-year flood protection. Accordingly, the proposed project site is not considered to be in a 100-year flood hazard zone. Therefore, the proposed project would not result in a substantial risk to people or property due to flooding.
- Change currents, or the course or direction of water movement – The proposed project would not affect water movement or flow because there are no structures proposed in the American River.
- Change local climate – The existing and proposed structures are not tall enough, or of a mass, to affect significantly air movement and/or temperature changes through shading by buildings and there are no proposed land uses that emit large quantities of humidity or heated/cooled air.
- Create objectionable odors – The project would develop land uses that are typical in an urban environment; uses that include residential, office, retail, and restaurant. Restaurant uses could produce some odors, but restaurants typically do not produce odors that people would consider offensive.
- Result in rail, waterborne or air traffic impacts – The proposed project is not located near a railroad or an airport and would not include any development that would affect water travel.
- Result in or expose people to potential impacts involving seismic hazards.
- Increase fire hazards in areas with flammable brush, grass, or trees – The project site is located in a developed, urban environment adjacent to the American River and American River Parkway recreation area. The project site is not intermixed with wildlands.
- Affect a scenic vista or adopted view corridor – The project site is not located in a designated scenic vista or an adopted view corridor.
- Restrict existing religious or sacred uses within the potential impact area – No sacred uses or churches exist on the project site and no religious practices would be restricted by construction of the proposed project.
- Disturb paleontological resources – While the project site has previously been disturbed, construction activities, such as construction of the sub-grade components of the project, may uncover paleontological resources. Implementation of Mitigation Measure Cult-1 would reduce this impact to a less-than-significant level. Mitigation Measure Cult-1 is included in the Initial Study (see Appendix A) and in Table 3-1, of Chapter 3, Summary

of Impacts and Mitigation Measures, in this DEIR. The project applicant has agreed to implement Mitigation Measure Cult-1.

HOW TO USE THIS REPORT

This report includes 10 principal parts: Project Description, Summary, Land Use Consistency and Compatibility, Population and Housing, Environmental Analysis (Setting, Impacts, and Mitigation Measures), Alternatives, CEQA Considerations, References, Report Preparation, and Appendices.

The **Project Description** (Chapter 2) describes the location of the project, existing conditions on the project site, and the nature and location of specific elements of the proposed project, as well as requested project entitlements and/or approvals.

The **Summary** (Chapter 3) presents an overview of the results and conclusions of the environmental evaluation. This section identifies impacts of the proposed project and available mitigation measures.

Land Use Consistency and Compatibility (Chapter 4) addresses the land use and planning implications of the project and discusses consistency and compatibility with adopted land use policies.

Population and Housing (Chapter 5) identifies, estimates, and evaluates population and housing changes that would be caused by development of the proposed project that have the potential to cause physical environmental effects.

The **Environmental Analysis** (Chapter 6) includes a topic-by-topic analysis of impacts that would or could result from implementation of the proposed project or alternatives. Topics discussed are those identified in the Initial Study Checklist as requiring further analysis (see Appendix A). The analysis is organized in 11 topical sections. Each section is organized into two major subsections: Environmental Setting and Regulatory Setting (existing conditions), and Impacts and Mitigation Measures, including cumulative impacts and mitigation measures.

Alternatives (Chapter 7) includes a description of the project alternatives. An EIR is required by CEQA to provide adequate information for decision makers to make a reasonable choice between alternatives based on the environmental aspects of the proposed project and alternatives. The impacts of the alternatives are qualitatively compared to those of the proposed project. This chapter also identifies the environmentally superior alternative.

CEQA Considerations (Chapter 8) discusses issues required by CEQA: unavoidable adverse impacts, irreversible environmental changes, growth inducement, and a summary of cumulative impacts.

The **References** (Chapter 9) used throughout the Draft EIR are included in this chapter.

Report Preparation (Chapter 10) includes a list of preparers of the Draft EIR.

The **Appendices** contain a number of reference items providing support and documentation of the analyses performed for this report.

2.0 PROJECT DESCRIPTION

2.0 PROJECT DESCRIPTION

INTRODUCTION

The Township 9 project (proposed project) is a proposed mixed-use development in the Richards Boulevard Area Plan (RBAP) area in the City of Sacramento (see Figure 2-1). The RBAP comprises approximately 1,050 acres bounded by the Sacramento River on the west, the American River on the north, the Union Pacific rail line on the south, and Sutter's Landing Park on the east. The RBAP establishes policies and standards which guide the distribution, location, and intensity of new development in the area; standards and design guidelines which are intended to enhance the character of new development and compatibility between the different uses planned for the area; policies and guidelines that provide direction on expanding existing uses; policies and actions for establishing new housing in the area; and policies and standards related to the provision of community facilities, including schools, parks and open space, police and fire facilities, child care and social service facilities. The project site is located in the central portion of the RBAP in an area designated RB-3: Riverfront Central planning sub-area. The project location, project objectives, and specific project elements are described in detail below.

PROPOSED PROJECT

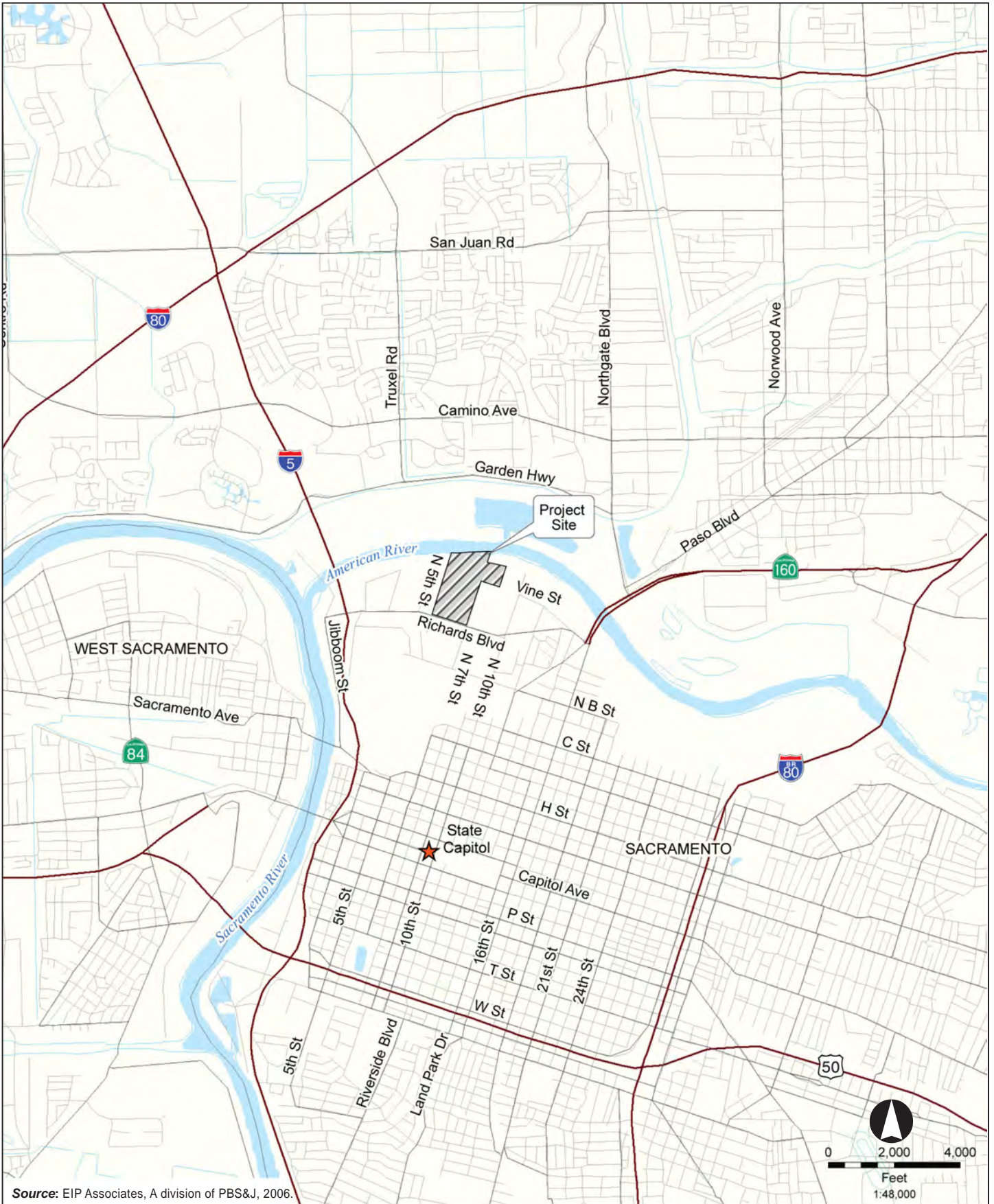
Project Location and Setting

The approximately 65-acre Township 9 site is generally bounded by Richards Boulevard to the south, the American River to the north, North 5th Street to the west, and North 7th Street to the east (see Figure 2-2). There are 13 parcels on the project site. The applicant is seeking a lot line adjustment between the proposed project site and the approximately 20- to 40-foot-wide parcel to the east. Surrounding land uses consist of the American River to the north, industrial uses to the south, industrial and office uses to the east and west. Regional access to the project site is provided by Interstate 5 (I-5) and State Route 160 (SR 160). Local access is provided by Richards Boulevard (See Figure 2-1). Existing transit facilities in the project vicinity include the Sacramento Amtrak Station at 4th and I Streets, approximately 1.8 miles from the project site; the Sacramento Regional Transit (RT) Blue Line light rail route along 12th Street, with the La Valentina light rail station approximately 1.2 miles from the project site on 12th Street between D and E Streets; and RT bus service on Richards Boulevard, North B Street, 7th Street, and 12th Street.

The Sacramento Regional Radio Communications System (SRRCS), the Automated Local Evaluation in Real Time (ALERT) system, and the State of California Public Safety Microwave Network are telecommunication microwave systems that serve federal, state, county, and City agencies. These emergency and weather communication systems are located on the rooftops of many downtown Sacramento buildings. Some microwaves from these systems cross the project site. Potential interference with microwaves is not considered to be an environmental impact and is therefore not evaluated in this EIR.

Existing Uses on the Project Site

The site is predominantly covered with commercial structures and impervious surfaces. Vegetation is sparse and consists of shrubs and trees located sporadically across the site. A portion of the site, approximately 12 acres, is located on the water side of the American River



Source: EIP Associates, A division of PBS&J, 2006.

FIGURE 2-1
Project Location

D51214.01

Township 9





Source: Carter-Burgess, 2006.



A Division of **PBS**

FIGURE 2-2
Illustrative Site Plan

D51214.01

Township 9

01089 | JCS | 07

levee, within the American River Parkway. Existing uses on the project site include industrial, warehouse, commercial, and office uses. Current active businesses on the property include offices of the project applicant, cold storage, concrete storage and delivery, a livestock feed supplier, hay-bail compression and delivery, and a warehouse occupied by the Sacramento Habitat for Humanity. A number of the existing buildings on the project site are considered historic structures. Potential project effects to historical resources are addressed in Section 6.4, Cultural Resources.

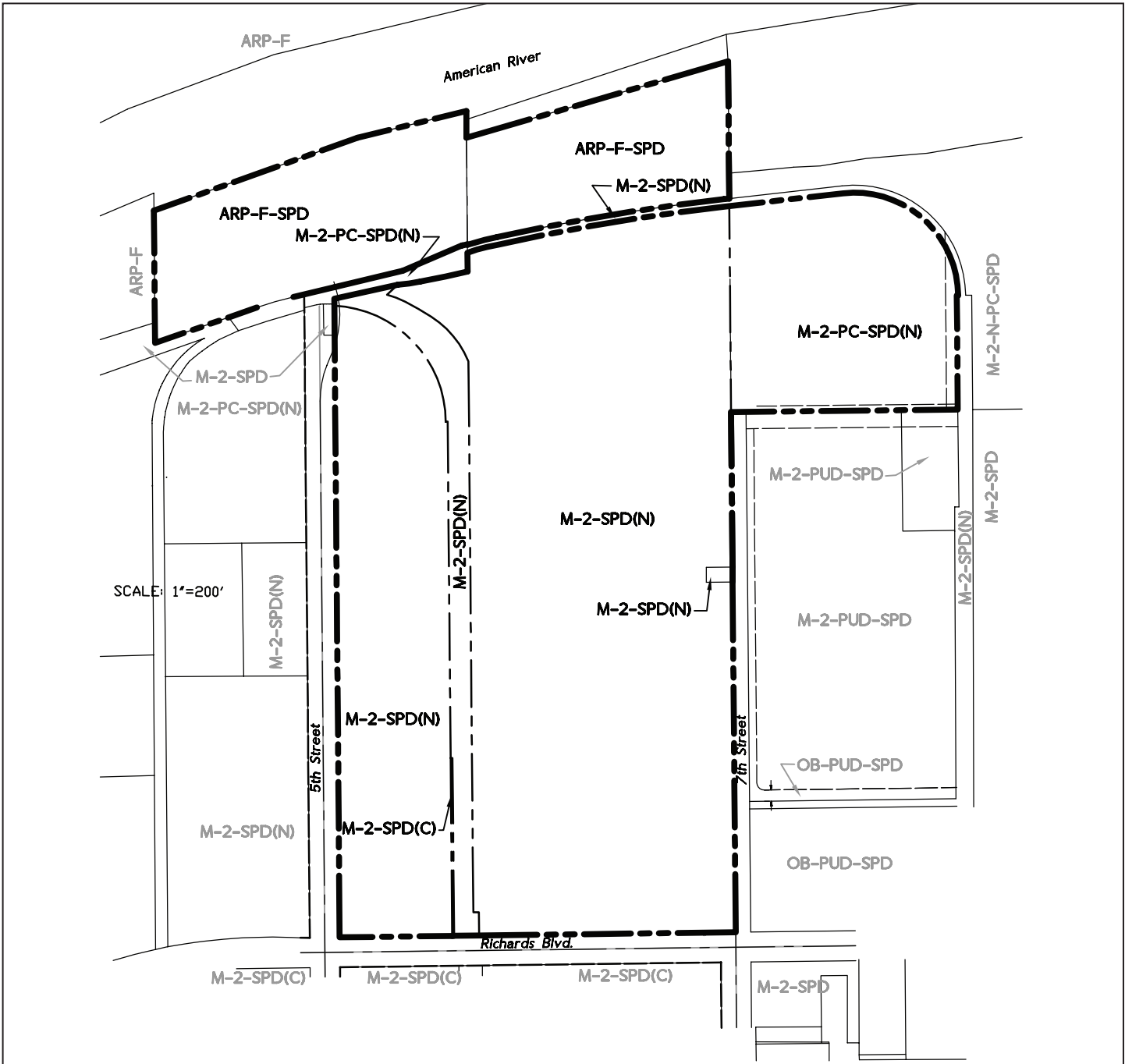
Existing Land Use Designations and Zoning

The City of Sacramento's General Plan land use designation for the project site is Special Planning District (SPD). The RBAP designations for the project site are Industrial/Residential (IR), Transit-Oriented Office (O), and Open Space (OS). Existing zoning consists of American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Parkway Corridor Overlay Zone; Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)). Existing zoning for the project site is shown on Figure 2-3. Existing land use designations and zoning are defined in Chapter 4, Land Use Consistency and Compatibility.

Project Objectives

The overarching goal of the proposed Township 9 project is the orderly and systematic development of an integrated, transit oriented, mixed-use community that is generally consistent with the goals and policies of the City's General Plan, the Central City Community Plan (CCCP), the RBAP, and the American River Parkway Plan, and is compatible with site characteristics. In support of this overarching goal, the project applicants have developed the following objectives for the proposed project:

- Create a transit-oriented, pedestrian-friendly, mixed-use, live-work development that is a logical extension of the downtown area north to the American River;
- Incorporate a riverfront park and river trail into the project to enhance both the project's and City's goals of increasing public use and enhancing the appearance of the riverfront;
- Integrate employment opportunities with residential neighborhoods of varying unit densities throughout the project area;
- Create a residential development near the major employment centers of downtown Sacramento;
- Provide for construction of a transit line and Richards Boulevard Light Rail Station along the planned Downtown-Natomas-Airport (DNA) light rail transit line with densities that would support the feasibility of a light rail line;
- Design a project that promotes using various modes of transportation by locating high-density residential development within a quarter-mile of the proposed light rail station;
- Develop the project site in a manner consistent with and supportive of Sacramento Area Council of Government's (SACOG's) Blueprint plan;
- Provide neighborhood and community retail near residential development to shorten or reduce the number of vehicle trips;



EXISTING ZONING DESIGNATIONS

ZONING DESIGNATIONS	LAND USE DESCRIPTIONS
M-2-SPD (N)	HEAVY INDUSTRIAL ZONE - CENTRAL RICHARDS BLVD
M-2-PC-SPD (N)	HEAVY INDUSTRIAL ZONE - AMERICAN RIVER PARKWAY CORRIDOR - NORTH RICHARDS BLVD
ARP-F-SPD	AMERICAN RIVER PARKWAY - FLOOD ZONE / PARKWAY CORRIDOR OVERLAY ZONE

Source: NOLTE, February, 2007.



FIGURE 2-3
Existing Zoning

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- Incorporate urban parks, plazas and open space into the project design in a manner that provides community connectivity;
- Make efficient and economically viable use of an infill development opportunity;

The City has developed the following objectives for the proposed project:

- Stimulate planned development along the waterfront, in turn creating a more inviting and safer waterfront environment for its residents;
- Increase office and retail job opportunities in the City and the residential component that accompanies such jobs;
- Provide and encourage public access to the American River waterfront; and
- Enhance the City's supply of housing that provides a range of housing opportunities available to residents from a wide range of economic levels.

Project Elements

The proposed project includes two development scenarios. Scenario A includes the development of approximately 2,981 dwelling units and approximately 146,194 gross square feet of neighborhood-serving retail and restaurant uses. Scenario B would develop approximately 839,628 gross square feet of office use (instead of residential) on proposed lots fronting Richards Boulevard (lots 13, 14, and 17). Under Scenario B, the number of dwelling units would be reduced to approximately 2,350. The approximately 146,194 gross square feet of neighborhood-serving retail and restaurant uses would remain unchanged under Scenario B. Land use plans for both development scenarios are shown on Figures 2-4 and 2-5. Tables 2-1 and 2-2 summarize proposed project uses by lot for both development scenarios.

The project would include residential/retail structures, a network of public streets, aboveground and subgrade parking facilities, public and private open space areas, a river trail, and a riverfront pavilion with a tower structure, an overlook, and an outdoor performance facility. The project would also include space for a transit station and tracks for future construction by Sacramento RT. Specific project elements are discussed in detail below.

Residential Uses

Proposed residential uses include apartments, condominiums, townhomes, and live/work units. Buildings would range from 2 to 15 stories with a maximum height of 180 feet. Under Scenario A, approximately 2,981 residential units are proposed. Under Scenario B, approximately 2,350 residential units would be developed.

Office Uses (Scenario B)

Under Development Scenario B, 839,628 square feet of office uses would be developed in place of residential units on lots 13, 14, and 17. No office use is proposed under Scenario A. The tallest structure under this scenario would be a 15-story, 235-foot-tall office building (with ground-floor retail) on lot 13.

Retail and Restaurant Uses

Retail uses would be located in the ground floor of residential buildings and would include a mix of restaurant uses such as coffee and sandwich shops, fast-food establishments, and bars.

TABLE 2-1

**LAND USE SUMMARY
DEVELOPMENT SCENARIO A**

Lot	Net Ac	Restaur. GSF	Retail GSF	Office GSF	Res. GSF	Apt	Condo	Townh	Live/ Work	Total DU's	DU/ac	Stories	Total GSF	Prkg Provided
1A	2.03	3,000	1,956	0	191,584	58	86	0	0	144	71	4-12	196,540	200
1B	2.21	0	0	0	347,080	104	157	0	0	261	118	4-12	347,080	200
1C	1.91	0	6,083	0	132,597	40	60	0	0	100	52	4-12	138,680	500
3	2.79	3,000	10,380	0	377,270	113	170	0	0	283	102	4-12	390,650	520
4	1.55	3,000	7,200	0	218,640	66	99	0	0	165	106	4-12	228,840	0
5A	2.40	0	0	0	259,560	78	117	0	0	195	81	4-12	259,560	450
5B	2.37	3,000	4,352	0	248,258	75	112	0	0	187	79	4-12	255,610	125
6	2.94	0	5,570	0	323,871	103	155	0	0	258	88	8-12	329,440	380
7	2.51	0	5,840	0	168,760	0	89	31	3	123	49	2-5	174,600	68
8	2.07	0	3,232	0	119,208	0	49	31	3	83	40	2-5	122,440	68
10	2.84	0	8,005	0	173,695	56	83	0	0	139	49	3-4	181,700	372
11	2.63	0	7,200	0	164,700	46	68	20	2	136	52	2-5	171,900	44
12	2.17	3,000	9,554	0	137,096	0	92	20	2	114	53	2-5	149,650	44
13	2.46	3,000	14,405	0	278,635	84	126	0	0	210	85	8-15	296,040	520
14	2.44	3,000	14,670	0	263,870	79	119	0	0	198	81	8-12	281,540	265
15	2.14	3,000	9,170	0	106,480	39	0	31	3	73	34	2-5	118,650	64
16	2.17	3,000	4,640	0	126,560	55	0	31	3	89	41	2-5	134,200	64
17	2.49	3,000	3,937	0	297,123	89	134	0	0	223	90	8-12	304,060	250
Grand Total	42.1	30,000	116,194	0	3,934,986	1,085	1,716	164	16	2,981	71		4,081,180	4,134

Notes:

Lots 2 and 9 are open space.

GSF = Gross Square Footage DU = Dwelling Units DU/ac = Dwelling Units per Acre 304060.

Source: Carter & Burgess, 2007.

TABLE 2-2

**LAND USE SUMMARY
DEVELOPMENT SCENARIO B**

Lot	Net Ac	Restaur. GSF	Retail GSF	Office GSF	Res. GSF	Apt	Condo	Townh	Live/ Work	Total DU's	DU/ac	Stories	Total GSF	Prkg Provided
1A	2.03	3,000	1,956		191,584	58	86	0	0	144	71	4-12	196,540	200
1B	2.21	0	0		347,080	104	157	0	0	261	118	4-12	347,080	200
1C	1.91	0	6,083		132,597	40	60	0	0	100	52	4-12	138,680	550
3	2.79	3,000	10,380		377,270	113	170	0	0	283	102	4-12	390,650	520
4	1.55	3,000	7,200		218,640	66	99	0	0	165	106	4-12	228,840	0
5A	2.40	0	0		259,560	78	117	0	0	195	81	4-12	259,560	450
5B	2.37	3,000	4,352		248,258	75	112	0	0	187	79	4-12	255,610	125
6	2.94	0	5,570		323,871	103	155	0	0	258	88	8-12	329,440	380
7	2.51	0	5,840		168,760	0	89	31	3	123	49	2-5	174,600	68
8	2.07	0	3,232		119,208	0	49	31	3	83	40	2-5	122,440	68
10	2.84	0	8,005		173,695	56	83	0	0	139	49	3-4	181,700	372
11	2.63	0	7,200		164,700	46	68	20	2	136	52	2-5	171,900	44
12	2.17	3,000	9,554		137,096	0	92	20	2	114	53	2-5	149,650	44
13	2.46	3,000	14,405	278,635	0	0	0	0	0	0	0	8-15	296,040	870
14	2.44	3,000	14,670	263,870	0	0	0	0	0	0	0	8-12	281,540	870
15	2.14	3,000	9,170		106,480	39	0	31	3	73	34	2-5	118,650	64
16	2.17	3,000	4,640		126,560	55	0	31	3	89	41	2-5	134,200	64
17	2.49	3,000	3,937	297,123	0	0	0	0	0	0	0	8-12	304,060	500
Grand Total	42.1	30,000	116,194	839,628	3,095,358	833	1,337	164	16	2,350	56		4,081,180	5,389

Notes:

Lots 2 and 9 are open space.

GSF = Gross Square Footage DU = Dwelling Units DU/ac = Dwelling Units per Acre.

Source: Carter & Burgess, 2007.



Source: Carter::Burgess, 2007.



FIGURE 2-4
Land Use Plan (Scenario A)



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Source: Carter::Burgess, 2007.



FIGURE 2-5
Land Use Plan (Scenario B)



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Other neighborhood-serving uses such as hair salons, dry cleaning, small grocery stores, flower shops, and office-type services would also be provided. Retail/restaurant uses proposed total approximately 146,194 square feet under either Scenario A or Scenario B.

Parking Facilities

Parking facilities would include parking structures and may also include subgrade parking. Under Scenario A, the project would include approximately 4,134 parking spaces. Under Scenario B, the project would include approximately 5,389 parking spaces. The project would achieve City code requirements for parking. It is anticipated that the project would make use of joint parking arrangements where parking required for one parcel could be provided on an adjacent or adjoining parcel within the project site. On an interim basis, parking requirements for individual parcels could be met through the use of temporary surface parking that would be provided on-site on adjacent lots within the project site as well as off-site on adjacent parcels located outside of the project boundaries.

Parking structures would likely be cast-in-place concrete construction. Parking facilities on major street frontages (e.g., Richards Boulevard, North 5th Street, and North 7th Street) would be integrated into residential / retail buildings. On minor internal street frontages, parking garages could be exposed to view but would have architectural finishes and design treatment, continuous landscaping or planters, and be subject to design review.

If subgrade parking is developed, it would be limited to one level below existing grade and would not occur within the first block adjacent to the levee. Within the first block parcels, the subgrade parking would be built on existing grade with earthen fill placed against it to create the subgrade condition. The facilities would likely be cast-in-place concrete construction.

Parks and Open Space

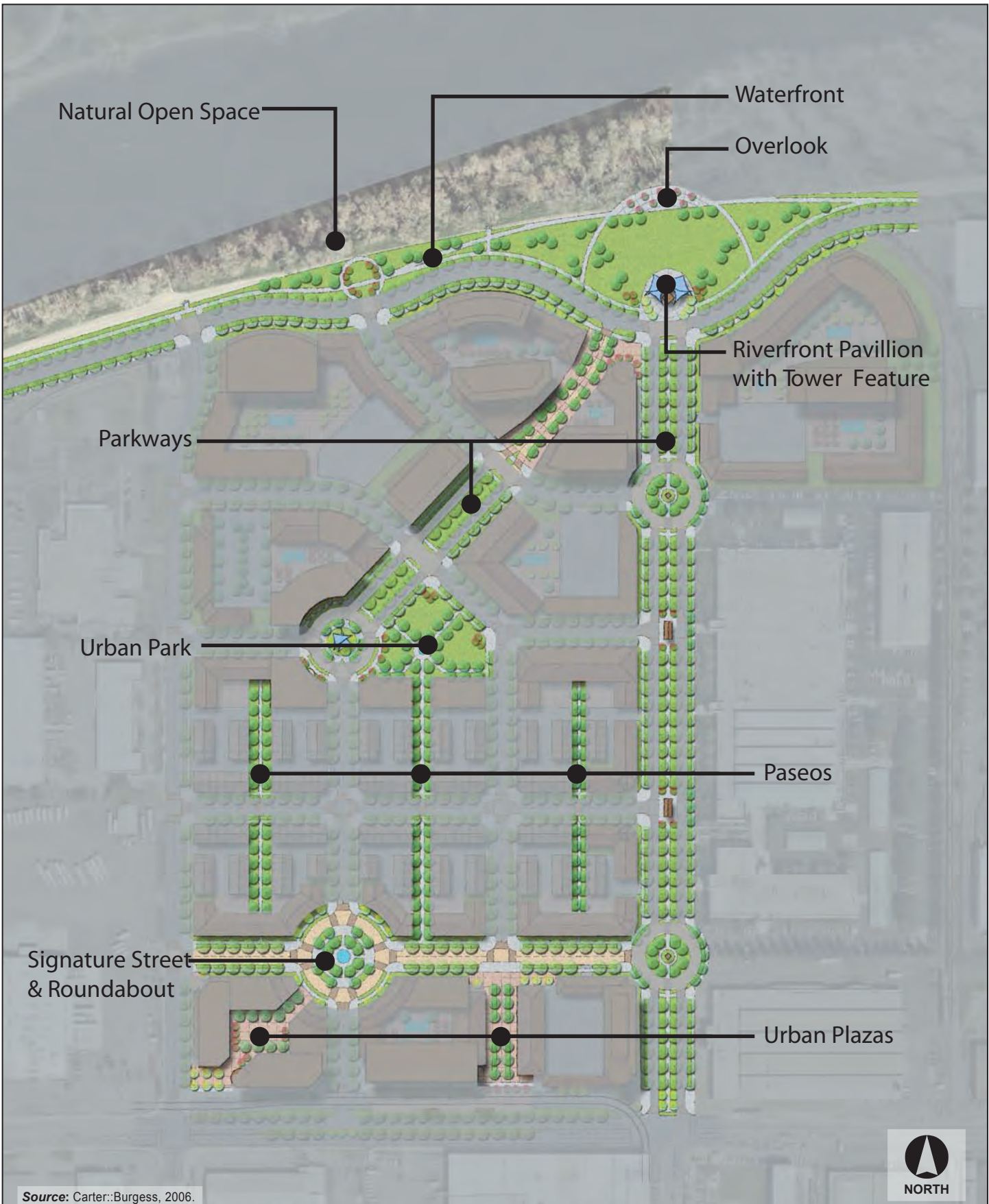
The project would include approximately 27 acres of public open spaces and approximately 3,920 square feet of private open spaces. Public open spaces would include urban parks and plazas, parkways, and natural open space along the American River. Private open spaces would consist of central courtyards that would serve as common open space for residential buildings. Although these courtyards would probably not be open to the public, they would serve residents as relief from the higher density nature of the project. The locations of public open spaces are shown on Figure 2-6.

Riverfront Pavilion

A riverfront pavilion is proposed at the terminus of North 7th Street as it approaches the waterfront. Pavilion uses could include an outdoor performance venue, a tower structure, an overlook onto the American River, and other public urban park uses (see Figure 2-6). The pavilion uses would rely upon on-street parking along the proposed Riverfront Drive, (see Figure 2-2) nearby internal streets within the project site, and on adjacent properties up and down the river.

Outdoor Performance Venue

The informal lawn seating capacity of the outdoor performance venue would be approximately 2,500 to 3,000 people. The park area surrounding the riverfront pavilion would be open from dawn to 10 p.m., but events at the outdoor performance venue would be limited to evenings and



Source: Carter::Burgess, 2006.



FIGURE 2-6
Proposed Parks and Open Spaces

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weekends and would be conducted pursuant the restrictions and permitting requirements of Chapter 8.68, Noise Control, of the Sacramento Municipal Code.

Tower

The tower structure would be an approximately 150-foot-tall feature that would be oriented towards downtown and would provide a visual landmark identifying the termination of North 7th Street. The design of the tower is a cable-supported fabric structure. The fabric would be transparent depending upon if the fabric is a teflon-coated fiberglass or polyvinyl chloride (PVC). The fabric would be either white or possibly colored depending upon the material. The tower structure would also include a light feature consisting of a controlled neon or laser light source that would operate from dusk until dawn. One lighting concept being considered is to use neon and cold cathode lighting applied to the entire height of the tower itself. Although this type of lighting feature may be bright to look at, it does not cast light beyond a very small area. The second lighting concept being evaluated is to illuminate the fabric portion of the structure. Any light feature would include cut-off shields that screen the light from shining to the north or onto the riverfront area of the proposed development. In both cases, glare and night sky light can be avoided. The possibility of projected media such as laser light shows could potentially be included, but not necessarily as permanent features, as a part of the tower feature. These features would be treated as any other light source and shielded from the river.

Low-level down lighting for security purposes is also proposed as a part of the proposed tower. The average lighting levels would be between 1 to 5 foot candles, with increased levels of approximately 50 foot candles during special events and facility maintenance.

Aviation navigation lighting is not required for the proposed tower structure. According to Title 14 of the Code of Federal Regulations, aircraft are prohibited from flying within 1,000 feet of the highest obstacle in a populated area.¹

Overlook

The overlook would be an up to 230-foot-wide cast-in-place concrete construction that could extend up to 60 feet from the centerline of the levee toward the American River. The overlook would not exceed the waterside toe of the levee. The overlook may be in the form of a cantilever that would be supported at the top of the levee, or the overlook could be supported by a retaining wall at its northern edge. If the overlook is a cantilever, all of the construction would be done at the top of the levee. If the overlook is supported by a retaining wall, construction activity would take place no further than 10 feet from the wall location toward the American River. The retaining wall included within the overlook would be designed with neutral colors to blend into the natural features of the American River Parkway. In addition, native plants and shrubs would be planted along the base of the wall.

Landscaping

Proposed on-site landscaping would include trees, shrubs, groundcover and/or turf and irrigation within street planter areas, medians, paseos and parks. Landscaped areas may include water features such as fountains.

1 Memo from Carter-Burgess, December 15, 2006, p. 2.

Two Rivers Trail and Levee Improvements

The existing American River levee would be adapted to accommodate the Two Rivers Trail, a bicycle trail that runs between I-5 and SR 160. The existing trail and proposed park facilities would provide public access to the river. The Township 9 project proposes no change to the grade of the trail, which currently runs along the top of the levee. The levee improvements would be accomplished through grading operations that would place earthen fill against the existing levee that gently slopes away from the levee toward Richards Boulevard. The goal of this improvement is to minimize the visual and physical barrier of the levee and make the waterfront accessible to the public. The slope would meet existing ground at an average of 450 feet south of the existing levee. Since the adjacent properties do not incorporate this concept into their design, this improvement would need to conform to the existing topography on the east and west sides of the site. In most cases this would be accomplished by placing a slope of earthen fill down to existing ground level. The exception is that a retaining wall would be required along North 5th Street on the east side of the existing pump station. Starting at the levee and going south, the retaining wall would range in height from 13-feet to 2-feet. The existing access road to the pump station would need to be reconstructed in conjunction with the retaining wall design. Part of the project would also include rebuilding the connection from North 5th Street. The improvements would meet or exceed the City standards for the trail through this site and could include a wider pavement width that accommodates more users and a meandering alignment that works with the park uses planned within the project site. The final alignment and design elements would be planned with City input.

Transit Space

The project would include an allowance for a transit station and tracks to be constructed by Sacramento Regional Transit. The project applicant proposes to create a 60-foot-wide easement over the south edge of lots 13, 14, and 17 subject to an agreement between the applicant and Regional Transit. It is anticipated that the air rights above the transit area would be maintained by the project applicant with the possibility of future structures being constructed. The planning, approval, environmental clearance, and construction of the station and tracks are not part of the proposed project.

Infrastructure

Roadways and Circulation

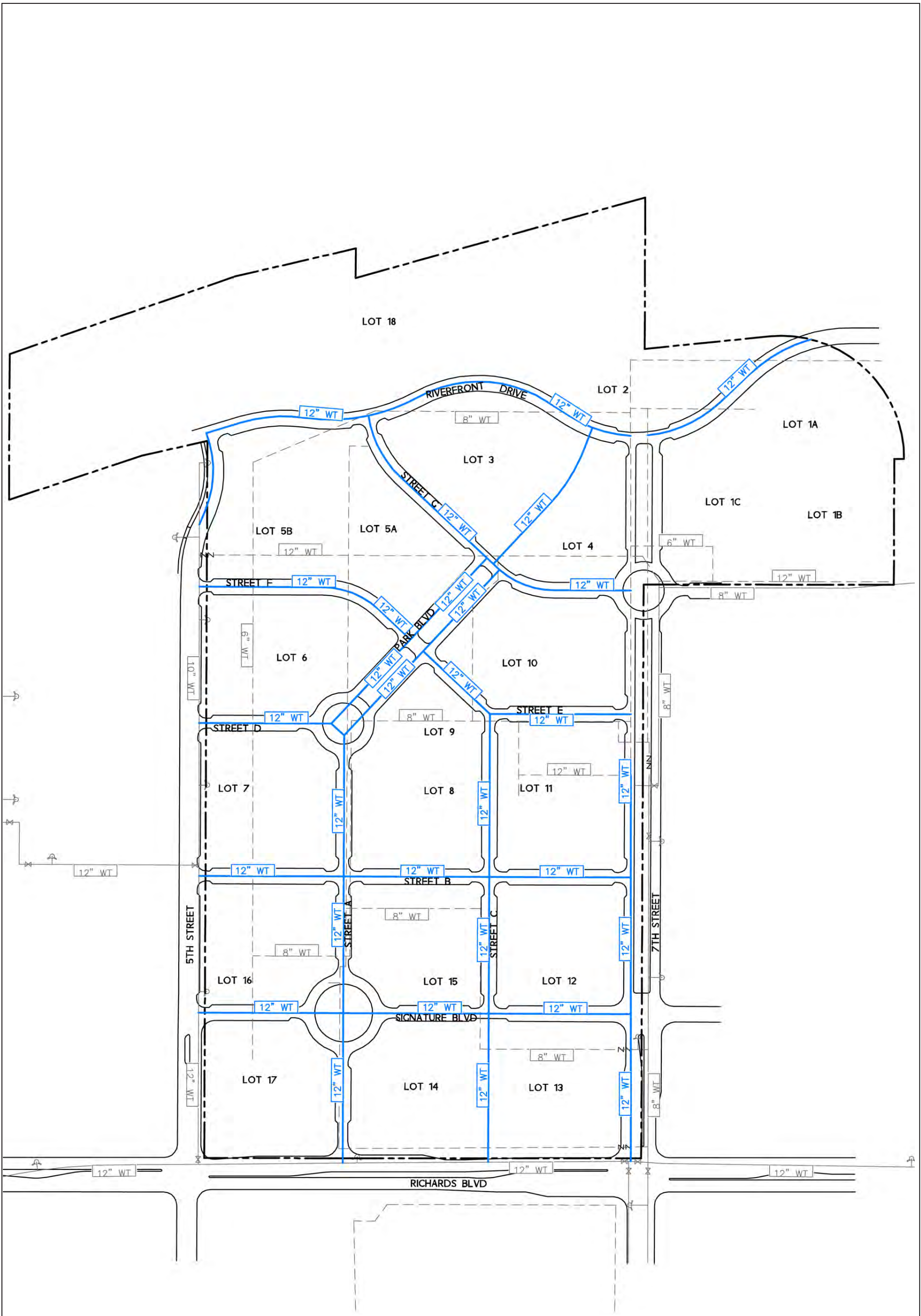
The project would construct a network of public streets to provide vehicle and bicycle access throughout the project site (see Figure 2-2). In addition, the project would provide sidewalks along all public streets to encourage pedestrian activity.

Water Supply Distribution

Installation of the water distribution system would occur in phases, corresponding to the construction phasing of the project (see discussion of project phasing below). The proposed water distribution system is presented on Figure 2-7. The water system for the project would consist of 12-inch water distribution lines within the street rights-of-way with connections to existing City transmission mains in North 5th Street, North 7th Street, and Richards Boulevard.

Wastewater Collection

Wastewater from the project site would be conveyed to the existing pipelines in North 5th Street and North 7th Street, eventually flowing to the 33-inch main in Richards Boulevard. The pipe



Source: NOLTE, February, 2007.



FIGURE 2-7
Proposed Water Distribution System

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system internal to the project would consist of 8-inch to 10-inch pipes located within public streets. The existing pipelines on the north half of North 7th Street would need to be replaced. The proposed sanitary sewer system is presented on Figure 2-8.

Storm Drain Collection

The storm drainage system would be a gravity-fed system of pipelines connecting to the existing system at multiple locations on North 5th Street, North 7th Street, and Richards Boulevard. The pipe system internal to the project would consist of 12-inch to 24-inch pipes with drop inlets to collect drainage from roadways. Additional drop inlets would also be constructed in North 5th and North 7th Streets to accompany the new street intersections. Installation of the drainage system would occur in phases, corresponding to the construction phasing of the project (see phasing discussion below). The proposed storm drainage system is presented on Figure 2-9. Prior to discharge to the existing storm drain system, runoff from the 65 acre project site would be treated per the City's NPDES permit requirements issued by the state.

Electric, Gas, Telephone, and Cable Utilities

The project applicant anticipates that the following service providers would serve the proposed project:

Electric – Sacramento Municipal Utility District (SMUD)

Natural Gas – Pacific Gas and Electric (PG&E)

Telephone – AT&T

Cable Television – Comcast Cable

Infrastructure presently exists for these utilities on and in the vicinity of the project site. Development of the project would necessitate the construction of an on-site distribution system to convey these services to uses on the project site. It is anticipated that upgrading/upsizing of existing utilities would occur on streets immediately adjacent to the project site (i.e., Richards Boulevard, North 5th Street, and North 7th Street) in order to serve the project.

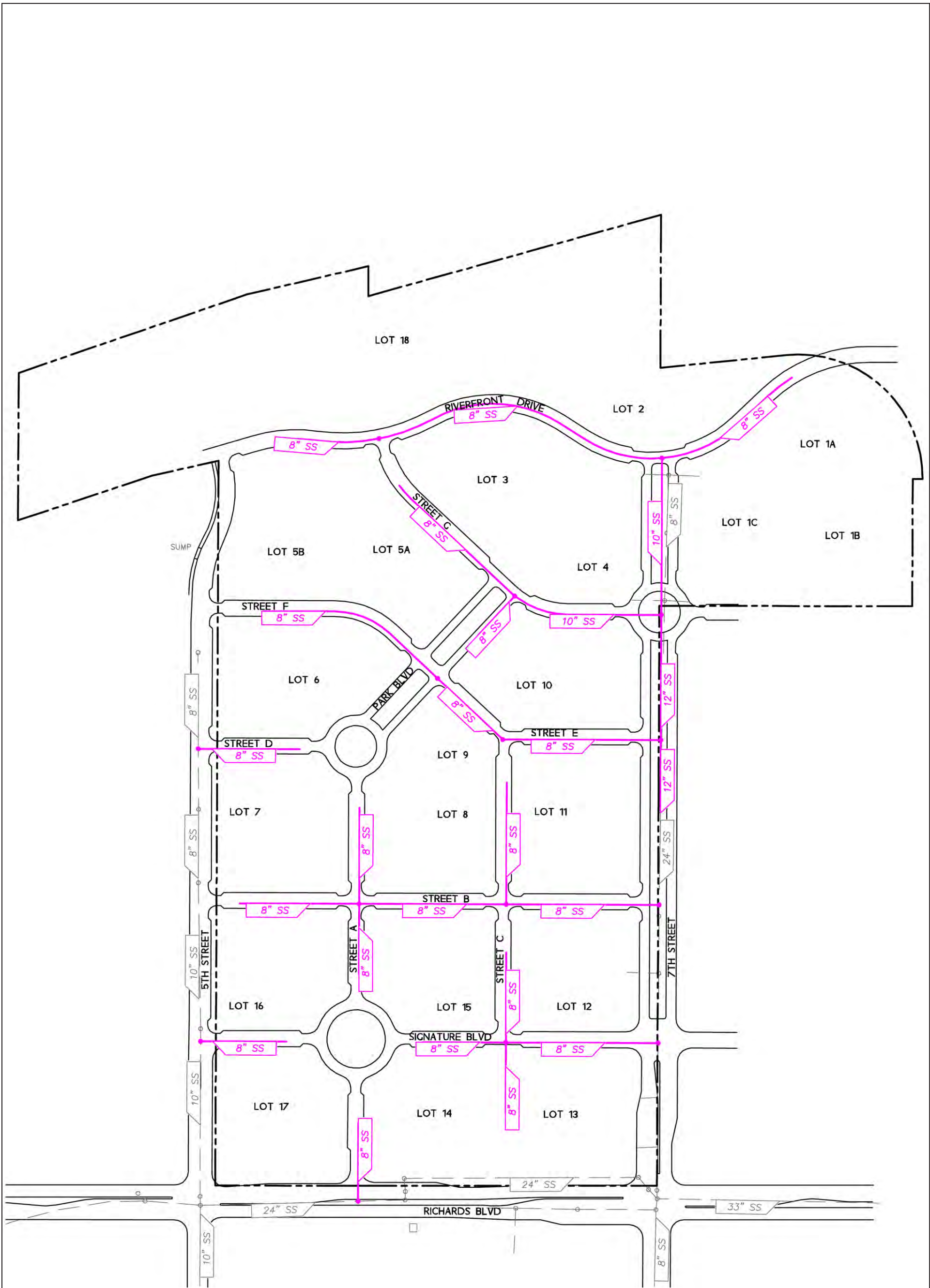
Energy Conservation Features

Proposed office uses under Scenario B would include lighting conservation efforts and other energy conservation measures. Lighting conservation efforts would include occupancy sensors to automatically turn off lights when not in use, lighting reflectors, electronic ballasts, and energy-efficient lamps. Conservation efforts are expected to include improved HVAC systems with microprocessor-controlled energy-management systems.

Construction Considerations

Site Preparation and Grading

All existing structures on the project site, totaling approximately 1.4 million square feet, would be demolished to accommodate the proposed project. All trees and shrubs on the project site would be removed. As with the construction phasing plan, market conditions could expedite or extend the schedule or require an additional phase(s).



Source: NOLTE, February, 2007.



FIGURE 2-8
Proposed Sanitary Sewer System

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Source: NOLTE, February, 2007.



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FIGURE 2-9
Proposed Storm Drainage System

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All construction staging areas would be located on the proposed project site. The proposed grading plan is presented on Figure 2-10. The northern end of the project site would require approximately 133,000 cubic yards of fill to backfill against the levee in order to make the site more level for development. Currently it is planned that fill would be obtained from excavations on-site, particularly in lots 13, 14, and 17 where below grade parking structures are proposed. These excavations would be approximately 14 feet in depth. Additional fill would be obtained from minor excavations across the remainder of the site. Imported fill may be needed if on-site material is found to be unsuitable or insufficient. Potential additional sources for the imported fill have been identified and include downtown City of Sacramento construction sites. Haul routes would be identified after the tentative map is approved and prior to construction. Haul routes would use existing roadways. No temporary roads would be constructed. The proposed project would require a grading permit, which would be reviewed and approved by the City Department of Utilities.

Temporary Recycling Facility

The project would include the operation of a temporary portable recycling facility. The recycling facility would be in operation for approximately six weeks during demolition activities. The facility would be used to recycle material from the demolition of buildings and paved areas on-site. These materials could include brick, tile, concrete, and asphalt, as well as other materials. Some material would be re-used on the project site for new buildings and some would be hauled off-site. Recycled materials hauled off-site would be taken to various recycling facilities. Any wood removed from the site would be hauled to either the co-generation plant or Kiefer Landfill. The recycling operation would be located in the open area along the north end of North 5th Street or on the North end of North 7th Street on the east side of the street. A temporary access off of North 5th Street or North 7th Street would be used for truck traffic. The recycling facility location may be moved if phasing of the project changes.

SMAQMD staff has indicated that the stationary source permit for operation of the proposed temporary recycling facility would include an emissions cap, which would be determined by SMAQMD based on the anticipated operational emissions. SMAQMD would monitor the operation of the facility and the operator would not be able to exceed the emissions cap. In addition, obtaining the permit would require that a SMAQMD engineer review the equipment and the operation of the facility and determine how best to minimize air emissions. The applicant has submitted the permit application and is coordinating with SMAQMD.

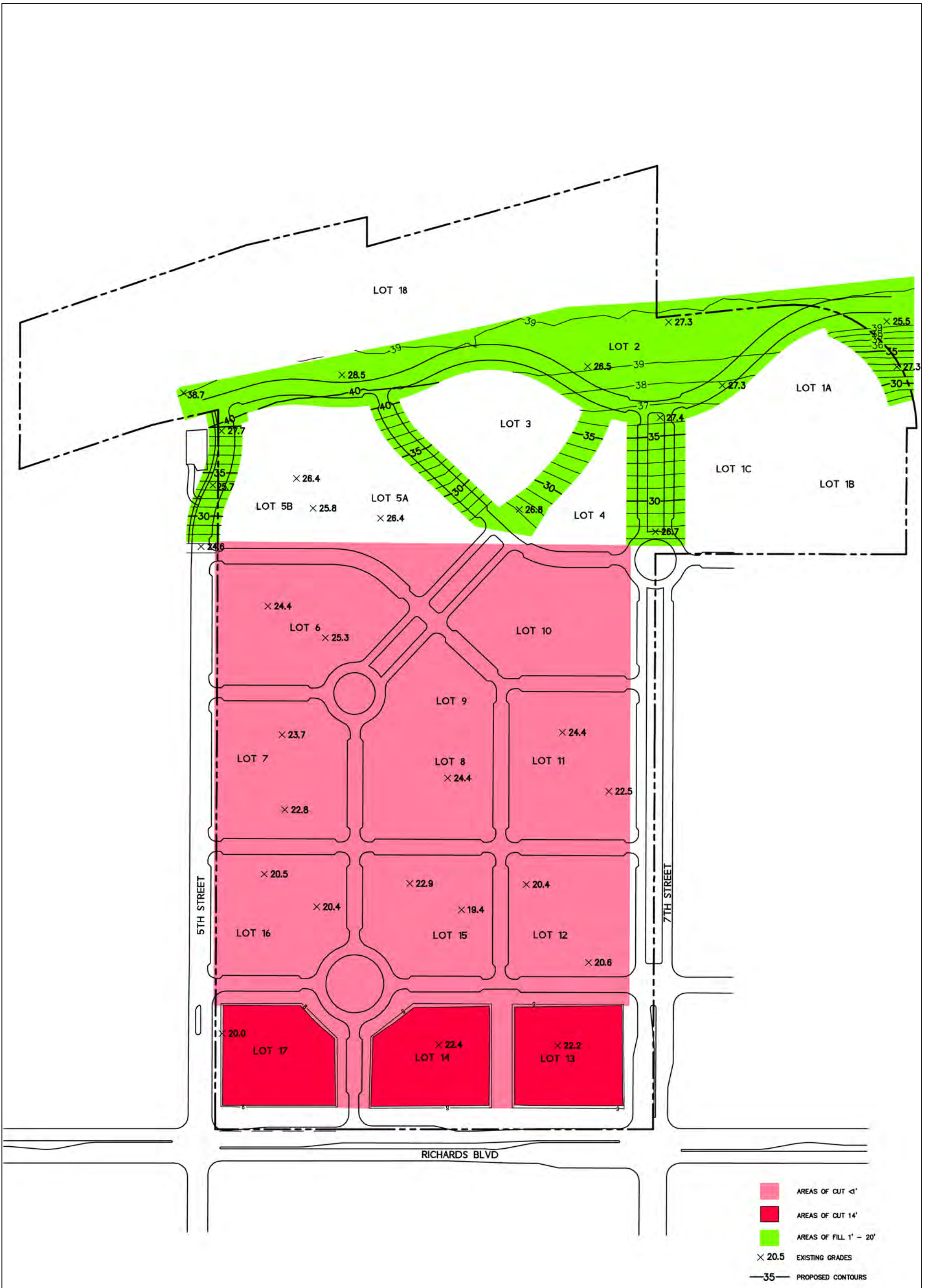
Project Phasing

The project applicant anticipates that construction of the proposed project would be done in four phases. Construction is anticipated to occur from summer 2007 through summer 2016. Market conditions could expedite or extend the schedule or require an additional phase(s). The proposed phasing plan is presented on Figure 2-11.

REQUIRED PERMITS AND APPROVALS

City of Sacramento

Project approval requires the City of Sacramento to approve the proposed project and to issue required permits or affirm compliance with agency requirements. Described below are the discretionary actions sought by the project applicant for the Township 9 project that the City of Sacramento will consider during its review. This EIR is intended to be used in conjunction with the consideration of the following entitlements.



- AREAS OF CUT <1'
- AREAS OF CUT 14'
- AREAS OF FILL 1' - 20'
- × 20.5 EXISTING GRADES
- 35- PROPOSED CONTOURS



Source: NOLTE, February, 2007.

FIGURE 2-10
Proposed Grading Plan



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Source: NOLTE, January, 2007.



FIGURE 2-11
Proposed Phasing Plan



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EIR Approval

Before the City can approve the proposed project, it must certify that the Township 9 EIR was completed in compliance with CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the City of Sacramento. Approval of the EIR also require adoption of a Mitigation Monitoring Plan (MMP), which will specify the methods for monitoring mitigation measures required to eliminate or reduce the project's significant effects on the environment. The City Council will also be required to adopt Findings of Fact, and for those impacts determined to be significant and unavoidable, adopt a Statement of Overriding Considerations.

Development Agreement (DA)

The City and the project applicant will enter into a development agreement for allocation of infrastructure costs, park dedication requirements and turn key agreements.

Rezone

The project would require approval of a rezone to change the zoning designations (as identified in Title 17 of the Sacramento Municipal Code) on the proposed project site. Existing zoning on the project site consists of American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)). The project would require approval of a rezone to the following designations: Residential Mixed Use (RMX-PUD) and Open Space (AOS-PUD). There would be no rezoning of the portion of the project site zoned ARP-F-SPD. Proposed zoning is described in Chapter 4, Land Use Consistency and Compatibility, and is shown on Figure 2-12.

Designation of a Planned Unit Development (PUD) and adoption of Development Guidelines and Schematic Plan

The proposed project will require approval of a PUD designation for the parcels proposed as RMX-PUD and A-OS-PUD, as shown on Figure 2-12. A PUD is a development of land that is under unified control and is planned and developed in phases or as a whole in a single development operation. The purpose of a PUD is to provide greater flexibility in the design of integrated developments than is otherwise possible through strict application of zoning regulations. The intent of a PUD is to encourage the design of well-planned facilities that offer a variety of land use types and integrated open space areas through creative and imaginative planning. PUDs can include all or a portion of a residential neighborhood, an employment center, or a mixed residential/employment development.

Tentative Map

The project would require approval of a Tentative Map to subdivide approximately 65 gross acres into 20 lots. Existing and proposed lot lines are shown on Figures 2-13 and 2-14.

Design Commission Review

The proposed project would require Design Commission approval of the Township 9 Planned Unit Development (PUD) Guidelines and Schematic Plan. The Design Commission would review and make recommendation to the City Council of the Planned Unit Development Guidelines and Schematic Plan.



PROPOSED ZONING DESIGNATIONS

ZONING DESIGNATIONS	LAND USE DESCRIPTIONS
RMX-PUD	RESIDENTIAL MIXED USE
A-OS-PUD	OPEN SPACE
ARP-F-SPD	AMERICAN RIVER PARKWAY / PARKWAY CORRIDOR OVERLAY ZONE



Source: NOLTE, January, 2007.

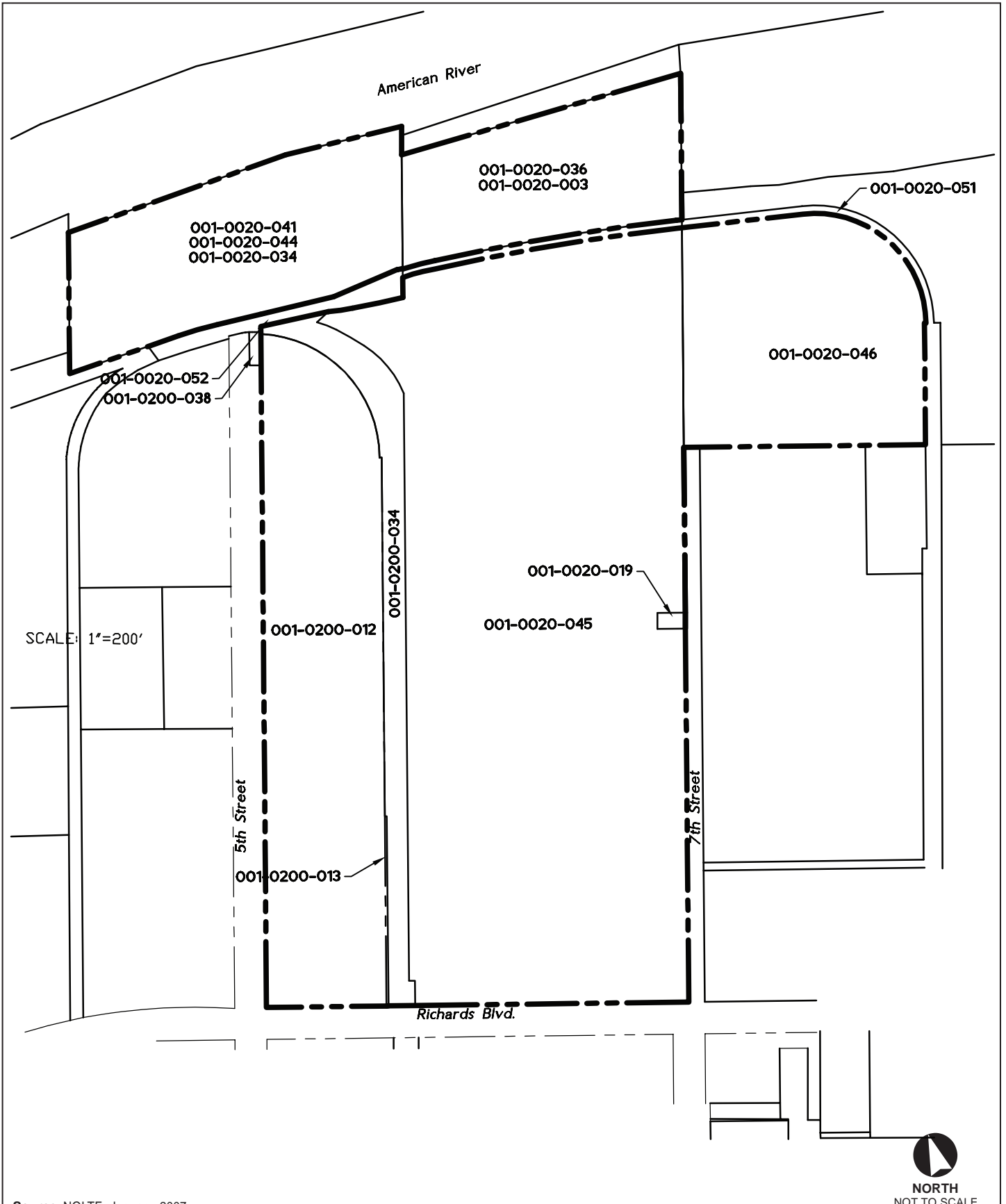
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FIGURE 2-12
Proposed Zoning

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Source: NOLTE, January, 2007.

FIGURE 2-13
Existing Lot Lines

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Source: NOLTE, January, 2007.



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FIGURE 2-14
Proposed Lot Lines

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Preservation Commission Review

The proposed project involves demolition of structures on the site that are 50+ years old; therefore, the review process under Article VIII of the Historic Preservation Chapter 17.134 of the City Code, related to review and potential listing of the structures in the Sacramento Register, would be required.

Water Supply Assessment

The City will approve the Water Supply Assessment prepared for the proposed project and provide a written verification consistent with SB 610/221 requirements.

Other Agency Approvals

- The Sacramento Metropolitan Air Quality Management District (SMAQMD) would issue a permit for the temporary recycling facility and a permit to operate.
- The State Water Resources Control Board would issue a Construction Storm Water Discharge permit.
- The State Reclamation Board would issue a permit prior to beginning work within floodways, levees, and ten feet landward of the landside of a levee toe.

3.0 SUMMARY OF IMPACTS AND MITIGATION MEASURES

3.0 SUMMARY OF IMPACTS AND MITIGATION MEASURES

PROJECT UNDER REVIEW

The Township 9 project (proposed project) is a proposed mixed-use development in the Richards Boulevard Area Plan (RBAP) area in the City of Sacramento. The proposed project includes two development scenarios. Scenario A includes the development of approximately 2,981 dwelling units and approximately 146,194 gross square feet of neighborhood-serving retail and restaurant uses. Scenario B would develop approximately 839,628 gross square feet of office use (instead of residential) on proposed lots fronting Richards Boulevard (lots 13, 14, and 17). Under Scenario B, the number of dwelling units would be reduced to approximately 2,350. The approximately 146,194 gross square feet of neighborhood-serving retail and restaurant uses would remain unchanged under Scenario B. The project would include residential/retail structures, a network of public streets, aboveground and subgrade parking facilities, public and private open space areas, a river trail, and a riverfront pavilion with an observation tower, an overlook, and an outdoor performance facility. The project would also include space for a transit station and tracks for future construction by Sacramento RT.

The approximately 65-acre project site is generally bounded by Richards Boulevard to the south, the American River to the north, North 5th Street to the west, and North 7th Street to the east. Surrounding land uses consist of the American River to the north, industrial uses to the south, industrial and office uses to the east, and industrial uses to the west.

SUMMARY OF IMPACTS

Effects Found to be Less Than Significant

As shown in Table 3-1, a number of project impacts identified in the EIR were found to be less than significant, requiring no mitigation. These impacts are found in the following sections: 6.1 (Aesthetics, Light, and Glare), 6.2 (Air Quality), 6.3 (Biological Resources), 6.5 (Geology and Soils), 6.6 (Hazardous Materials and Public Safety), 6.6 (Hydrology and Water Quality), 6.8 (Noise and Vibration), 6.9 (Public Services), 6.10 (Public Utilities), and 6.11 (Transportation and Circulation). In the course of drafting the EIR for this project, it was determined that numerous other identified impacts could be reduced to a less-than-significant level with implementation of the proposed mitigation measures described herein.

Environmental Impacts and Mitigation

Under CEQA, a significant effect on the environment 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 (CEQA Guidelines, Section 15382). Implementation of the proposed project would result in significant impacts to some of these resources, which are fully analyzed in Sections 6.1 through 6.11 of this document and summarized in Table 3-1 (provided at the end of this Chapter).

This EIR discusses mitigation measures that could be implemented by the City and/or the project applicant to reduce potential adverse impacts to a level that is considered less than significant. Such mitigation measures are noted in this document and are found in the following sections: 6.1 (Aesthetics, Light, and Glare), 6.2 (Air Quality), 6.3 (Biological Resources),

6.4 (Cultural Resources), 6.5 (Geology and Soils), 6.6 (Hazardous Materials and Public Safety), 6.8 (Noise and Vibration), 6.9 (Public Services), and 6.11 (Transportation and Circulation). However, even with the application of feasible mitigation measures, some impacts could not be reduced to less-than-significant levels. The significant and unavoidable impacts that were identified for both project-level and cumulative impacts are shown below.

Project-Specific Significant and Unavoidable Impacts

Impact Number

- 6.2-3 Activities associated with the operation of the proposed project would generate emissions of particulate matter.
- 6.4-1 The proposed project could cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5.
- 6.8-1 Construction of the proposed project would temporarily expose existing receptors to increased noise levels.
- 6.8-2 Ground-borne vibration from construction activity could cause structural damage to nearby buildings.
- 6.11-1 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.
- 6.11-2 The proposed project would add traffic to the study roadway segments that result in substandard levels of service.
- 6.11-3 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E.
- 6.11-4 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline.
- 6.11-5 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.

Cumulative Significant and Unavoidable Impacts

Impact Number

- 6.2-7 Operation of the proposed project would increase cumulative levels of ozone precursors.
- 6.2-9 Operational activities associated with the proposed project would contribute to cumulative levels of particulate matter in the vicinity of the project site.
- 6.4-3 The proposed project, in combination with other development in the City of Sacramento, could cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5.
- 6.11-12 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.

- 6.11-13 The proposed project would add traffic to the study roadway segments.
- 6.11-14 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E under near term conditions.
- 6.11-15 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline under both Scenario A and Scenario B.
- 6.11-16 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.
- 6.11-18 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.
- 6.11-19 The proposed project would add traffic to the study roadway segments that results in substandard levels of service.
- 6.11-20 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E under near term conditions.
- 6.11-21 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline under both Scenario A and Scenario B.
- 6.11-22 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.

ALTERNATIVES TO THE PROPOSED PROJECT

The EIR analyzes the following alternatives to the proposed project:

- **No Project / No Development Alternative**, which assumes that the proposed project would not be built and there would be no new development of the site. This alternative assumes the existing buildings and uses on the site would remain.
- **No Project/Existing Zoning Alternative**, which assumes that the proposed project site would be developed consistent with currently allowable land uses, zoning, and development intensities.
- **Reduced Density/Reduced Height Alternative**, which assumes that the proposed project site would be developed at a lower density than the proposed project through a reduction in the maximum allowable building height.
- **Historical Resources Alternative – Preservation of Building 3**, which assumes that the proposed project site would be developed as proposed, except that one existing building on the project site (identified as Building 3 in section 6.4, Cultural Resources, in this EIR) that has been determined to be a contributor to a historical resource would be retained and rehabilitated for contemporary use.

POTENTIAL AREAS OF CONCERN

Responses to the NOP were received from the California Department of Transportation (Caltrans), the Sacramento Metropolitan Air Quality District (SMAQMD), and the State of

California Department of Water Resources (DWR). A copy of the NOP and responses to the NOP are included in Appendix B of this Draft EIR in accordance with CEQA. The NOP responses are summarized below.

- The NOP response from Caltrans stated that the proposed project should include the completion of a Traffic Impact Study with appropriate and feasible mitigation measures to reduce any significant impacts. The response also included a recommendation that the project include pedestrian accessibility near future light rail facilities on Richards Boulevard and that the project include pedestrian and bicycle accessibility to the City of Sacramento's proposed Two Rivers trail along the southern levee of the American River.
- The NOP response from the SMAQMD recommended the preparation and endorsement by the SMAQMD of an Air Quality Mitigation Plan to identify and reduce by 15 percent any significant project construction or operational air quality impacts.
- The NOP response from the DWR stated that the project applicant would be required to obtain an encroachment permit from the Reclamation Board if the project would encroach on an Adopted Plan of Flood Control.

SUMMARY TABLE

Table 3-1 (Summary of Impacts and Mitigation Measures), has been organized to correspond with the environmental issues discussed in Chapter 6. The summary table is arranged in four columns:

1. Environmental impacts ("Impact").
2. Level of significance without mitigation ("Significance").
3. Mitigation measures ("Mitigation Measure").
4. The level of significance after implementation of mitigation measures ("Residual Significance").

If an impact is determined to be significant or potentially significant, mitigation measures are identified, where appropriate and feasible. More than one mitigation measure may be required to reduce the impact to a less-than-significant level. This EIR assumes that all applicable plans, policies, and regulations would be implemented, including, but not necessarily limited to, City General Plan Policies, laws, and requirements or recommendations of the City of Sacramento. Applicable plans, policies, and regulations are identified and described in the Regulatory Setting of each issue area and within the relevant impact analysis. A description of the organization of the environmental analysis, as well as key foundational assumptions regarding the approach to the analysis, is provided in Chapter 6, Introduction to the Analysis.

TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
Initial Study					
Cult-1 Would the proposal disturb paleontological resources?	PS	PS	Cult-1 (A & B) <i>Should paleontological resources be identified at any project construction sites during any phase of construction, the project manager shall cease operation at the site of the discovery and immediately notify the City of Sacramento Development Services Department. The project applicant shall retain a qualified paleontologist to provide an evaluation of the find and to prescribe mitigation measures to reduce impacts to a less-than-significant level. In considering any suggested mitigation proposed by the consulting paleontologist, the City of Sacramento Development Services Department shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, specific plan policies and land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for paleontological resources is carried out.</i>	LS	LS
6.1 Aesthetics					
6.1-1 Development of the proposed project could have a demonstrable negative aesthetic effect.	LS	LS	6.1-1 (A & B) <i>None required.</i>	NA	NA
6.1-2 The proposed project would create new sources of light and glare that could adversely affect on-site and adjacent uses.	PS	PS	6.1-2 (A & B) a) <i>The project contractor shall include a configuration of exterior light fixtures that emphasize close spacing and lower intensity light that is directed downward in order to minimize glare on adjacent uses and minimize impacts to night sky views.</i>	LS	LS

LS = Less than Significant S = Significant PS = Potentially Significant SU = Significant and Unavoidable NA = Not Applicable

TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			b) <i>The project contractor shall not use highly reflective mirrored glass walls as a primary building material for façades to reduce glare on adjacent uses. Instead, Low E glass shall be used in order to reduce the reflective qualities of the building, while maintaining energy efficiency.</i>		
6.1-3 Cumulative development in the same viewshed as the proposed project site could result in a demonstrable negative aesthetic effect.	LS	LS	6.1-3 (A & B) <i>None required.</i>	NA	NA
6.1-4 The proposed project, in combination with cumulative development surrounding the project site, would create new sources of light and glare.	PS	PS	6.1-4 (A & B) <i>Implement Mitigation Measure 6.1-2(a) and (b).</i>	LS	LS
6.2 Air Quality					
6.2-1 Construction of the proposed project would generate emissions of ozone precursors.	S	S	6.2-1 (A & B) a) <i>The project shall provide a plan, for approval by the lead agency and the SMAQMD, demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, would achieve a project wide fleet-average 20% NO_x reduction and 45% particulate reduction compared to the most recent CARB fleet average at time of construction. The SMAQMD shall make the final decision on the emission control technologies to be used by the project construction equipment; however, 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;</i>	LS	LS

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p>b) <i>The project applicant and/or contractor shall submit to SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that shall be used an aggregate of 40 or more hours during any phase of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project applicant and/or contractor shall provide SMAQMD with the anticipated construction timeline, including start date and name and phone number of the project manager and on-site foreman;</i></p> <p>c) <i>The project applicant and/or contractor shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40% opacity (or Ringelmann 2.0) shall be repaired immediately 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 by contractor personnel certified to perform opacity readings, and a monthly summary of the visual survey results shall be submitted to the SMAQMD throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no</i></p>		

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.</i></p> <p>d) <i>Limit vehicle idling time to five minutes or less.</i></p> <p>e) <i>The project applicant shall pay into the SMAQMD's construction mitigation fund to offset construction-generated emissions of NO_x that exceed SMAQMD's daily emission threshold of 85 lbs/day. The project applicant shall coordinate with the 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 current SMAQMD Fee of \$14,300/ton of NO_x emissions generated. This fee shall be paid prior to issuance of building permits. Detailed construction information for the proposed project is not yet available. However, based upon the preliminary URBEMIS emissions modeling, the expected payment for remaining construction related construction NO_x emissions over the significance threshold would be \$165,612 under either Scenario A or Scenario B. Fees may be paid on a per/acre basis, in which case the average fee would be approximately \$2,548/acre for both Scenarios A and B. If the projected construction equipment or phases change, the applicant shall coordinate with the SMAQMD to determine if the mitigation fee needs to be recalculated.</i></p>		

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
6.2-2 Construction of the proposed project would generate emissions of particulate matter.	S	S	<p>6.2-2 (A & B) <i>The project applicant shall require in all construction contracts that the following measures are implemented during all phases of construction and demolition activities:</i></p> <p>a) <i>Demolition contractors shall ensure that all exterior surfaces of buildings are wetted during building demolition activities. The material from any building demolition shall be completely wetted during any period when the material is being disturbed, such as during the removal from the construction site.</i></p> <p>b) <i>All piles of demolished material shall be wetted and covered until removed from the site.</i></p> <p>c) <i>Maintain two feet of freeboard space on haul trucks.</i></p> <p>d) <i>All operations shall expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry brushes is expressly prohibited.</i></p> <p>e) <i>Wheel washers for exiting trucks shall be installed or the wheels of all trucks and equipment leaving the site shall be washed off.</i></p> <p>f) <i>Water all exposed soil with sufficient frequency as to maintain soil moistness.</i></p>	LS	LS

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			g) <i>During clearing, grading, earth-moving, or excavation operations, fugitive dust emissions shall be controlled by watering exposed surfaces two times per day, watering haul roads three times per day or paving of construction roads, or dust-preventive measures. All onsite unpaved roads and offsite unpaved access roads shall be effectively stabilized of dust emissions using water or a chemical stabilizer or suppressant.</i> h) <i>Onsite vehicle speeds on unpaved roads shall be limited to 15 mph.</i> i) <i>Excavation and grading activities shall be suspended when winds exceed 20 mph.</i>		
6.2-3 Operation of the proposed project would contribute to emissions of ozone precursors.	S	S	6.2-3 (A & B) <i>The project applicant shall implement the emission reduction strategies contained in the endorsed Air Quality Mitigation Plan. Documentation confirming implementation of Air Quality Mitigation Plan shall be provided to the SMAQMD and City prior to issuance of occupancy permits.</i>	SU	SU
6.2-4 Activities associated with the operation of the proposed project would generate emissions of particulate matter.	LS	LS	6.2-4 (A & B) <i>None required.</i>	NA	NA
6.2-5 The proposed project would increase traffic volumes that, in turn, would contribute to CO concentrations near roadways and intersections.	LS	LS	6.2-5 (A & B) <i>None required.</i>	NA	NA
6.2-6 Construction of the proposed project would increase cumulative levels of ozone precursors.	S	S	6.2-6 (A & B) <i>Implement Mitigation Measures 6.2-1(a) through (e).</i>	LS	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
6.2-7 Operation of the proposed project would increase cumulative levels of ozone precursors.	S	S	6.2-7 (A & B) <i>Implement Mitigation Measure 6.2-3.</i>	SU	SU
6.2-8 Construction of the proposed project would increase cumulative levels of particulate matter in the vicinity of the project site.	S	S	6.2-8 (A & B) <i>Implement Mitigation Measures 6.2-2(a) through (i).</i>	LS	LS
6.2-9 Operational activities associated with the proposed project would contribute to cumulative levels of particulate matter in the vicinity of the project site.	S	S	6.2-9 (A & B) <i>None available.</i>	SU	SU
6.2-10 The proposed project, in conjunction with other future developments, would contribute to cumulative CO levels in the vicinity of the project site.	LS	LS	6.2-10 (A & B) <i>None required.</i>	NA	NA
6.3 Biological Resources					
6.3-1 Proposed demolition and construction activities could result in the disturbance of nesting habitat for Swainson's hawks.	PS	PS	6.3-1 (A & B) a) <i>Prior to any demolition/construction activities that occur between February 15 and September 15 the applicant shall have a qualified biologist conduct surveys for nesting Swainson's hawk in the riparian area along the American River and within a half mile¹ of demolition/ construction activities. If no active Swainson's hawk nests are identified on or within half mile of construction activities, a letter report summarizing the survey results shall be sent to the City of Sacramento and no further mitigation is required.</i>	LS	LS

1 Swainson's Hawk Technical Advisory Committee. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. May 31, 2000.

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			b) <i>If active nests are found, measures consistent with the CDFG Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsonii) in the Central Valley of California² shall be implemented as follows:</i> <ol style="list-style-type: none"> 1. <i>Nest trees shall not be removed unless there is no feasible way of avoiding their removal.</i> 2. <i>If there is no feasible alternative to removing a nest tree, a Management Authorization (including conditions to offset the loss of the nest tree) shall be obtained from CDFG with the tree removal period (generally between October 1 and February 1) to be specified in the Management Authorization.</i> 3. <i>No intensive disturbances (e.g., heavy equipment operation associated with construction, use of cranes or draglines, new rock crushing activities) or other project-related activities that could cause nest abandonment or forced fledging, shall be initiated within 1,320 feet (¼ mile) (buffer zone as defined in the CDFG Staff Report) of an active nest between February 15 and September 15 or until August 15 if a Management Authorization or Biological Opinion is obtained from CDFG for the project. The 1,320 foot buffer zone could be adjusted in consultation with CDFG.</i> 		

2 California Department of Fish and Game, *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo Swainsonii) in the Central Valley of California*, 1994.

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p>4. <i>If demolition/construction activities are unavoidable within the buffer zone, the project applicant shall retain a qualified biologist to monitor the nest to determine if abandonment occurs. If the nest is abandoned and the nestlings are still alive, the project proponent shall retain the services of a qualified biologist to reintroduce the nestling(s) (recovery and hacking). Prior to implementing, any hacking plan shall be reviewed and approved by the Environmental Services Division and Wildlife Management Division of the CDFG.</i></p>		
<p>6.3-2 Proposed demolition and construction activities could result in the disturbance of nesting habitat for protected avian species, including raptors.</p>	PS	PS	<p>6.3-2 (A & B) a) <i>Between March 1 and August 1, the applicant shall have a qualified biologist conduct nest surveys 30 days prior any demolition/construction activities that are within 500 feet of potential nest trees. A pre-construction survey shall be submitted to CDFG and the City of Sacramento that includes, at a minimum: (1) a description of the methodology including dates of field visits, the names of survey personnel with resumes, and a list of references cited and persons contacted; and (2) a map showing the location(s) of any bird nests observed on the project site. If no active nests of MBTA, CDFG or USFWS covered species are identified then no further mitigation is required.</i></p>	LS	LS

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p>b) <i>Should active nests of protected bird species be identified in the survey conducted in accordance with Mitigation Measure 6.3-2(a), the applicant, in consultation with the City of Sacramento and CDFG, shall delay construction in the vicinity of active nest sites during the breeding (March 1 through August 1) while the nest is occupied with adults and/or young. A qualified biologist shall monitor any occupied nest to determine when the nest is no longer used. If the construction cannot be delayed, avoidance shall include the establishment of a non-disturbance buffer zone around the nest site. The size of the buffer zone will be determined in consultation with the CDFG, but will be a minimum of 100 feet. The buffer zone shall be delineated by highly visible temporary construction fencing.</i></p> <p>c) <i>No intensive disturbance (e.g. heavy equipment operation associated with construction, use of cranes or draglines, new rock crushing activities) or other project-related activities that could cause nest abandonment or forced fledging, shall be initiated within the established buffer zone of an active nest between March 1 and August 1.</i></p> <p>d) <i>If demolition/construction activities are unavoidable within the buffer zone, the project applicant shall retain a qualified biologist to monitor the nest site to determine if construction activities are disturbing the adult or young birds. If abandonment occurs the biologist shall consult with CDFG or USFWS for the appropriate salvage measures. This could include taking any nestlings to a local wildlife rehabilitation center.</i></p>		

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
6.3-3 Development of the proposed project could result in the loss of foraging habitat for Swainson's hawk.	LS	LS	6.3-3 (A & B) <i>None required.</i>	NA	NA
6.3-4 Development of the proposed project could result in the loss of habitat or potential disturbance of valley elderberry longhorn beetle (VELB).	S	S	6.3-4 (A & B) a) <i>Prior to any demolition/construction activities, the project applicant shall retain a qualified biologist to conduct a survey to identify and document all potential VELB habitat. Survey and evaluation methods shall be performed consistent with the USFWS's 1999 VELB survey and mitigation guidelines.³ The survey shall include a stem count of stems greater than or equal to one inch in diameter and an assessment of historic or current VELB use.</i> b) <i>The proposed project shall be designed to avoid ground disturbance within 100 feet of the dripline of elderberry shrubs identified in the survey (conducted consistent with Mitigation Measure 6.3-4(a)) as having stems greater than or equal to one inch in diameter. The 100 foot buffer could be adjusted in consultation with the USFWS. If avoidance is achieved, a letter report confirming avoidance shall be sent to the City of Sacramento and no further mitigation is required.</i>	LS	LS

3 United States Fish and Wildlife Service, *Conservation Guidelines for the Valley Elderberry Longhorn Beetle*, 1999.

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TABLE 3-1

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			c) <i>If disturbance within 100 feet of the dripline of the elderberry shrub with stems greater than or equal to one inch in diameter is unavoidable, then the project applicant shall retain the services of a qualified biologist to develop a formal VELB mitigation plan in accordance with the most current USFWS mitigation guidelines for unavoidable take of VELB habitat pursuant to either Section 7 or Section 10(a) of the Federal Endangered Species Act. Prior to implementation by the applicant the mitigation plan shall be reviewed and approved by the USFWS.</i> d) <i>If the VELB is delisted by the USFWS prior to the initiation of any ground disturbing, demolition, or construction activities, the project applicant shall proceed consistent with any requirements that accompany the VELB delisting notice.</i>		
6.3-5 Development of the proposed project would include removal of trees that could be protected by the City of Sacramento Tree Preservation Ordinance.	PS	PS	6.3-5 (A & B) a) <i>Prior to approval of final project design, the project applicant shall retain a certified arborist to survey trees on the proposed project site, including potential laydown/construction areas, to identify and evaluate trees that shall be removed. If the arborist's survey does not identify any protected trees that would be removed or damaged as a result of the proposed project, a letter report confirming that project design would avoid loss of protected trees shall be sent to the City of Sacramento and no further mitigation is required.</i>	LS	LS

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p>b) <i>If protected trees (or their canopy) are identified that can not be avoided by project design, measures shall be taken to avoid impacts on protected trees, as detailed in the City's tree ordinance. Protected trees that are lost as a result of the project shall be replaced according to the provisions of the ordinance (Section 12.64.040), which generally requires a 1-inch-diameter replacement for each inch lost. Tree replacement shall occur after project construction and shall be monitored by a qualified arborist.</i></p> <p>c) <i>All native oaks greater than 6 inches in diameter at 48 inches above grade that are approved for removal or are critically damaged during construction shall be replaced by a greater number of the same species. At a minimum, one tree shall be planted for each inch in the diameter of the removed tree at 48 inches above grade. The exact size and number of replacement trees shall be determined by the City of Sacramento Tree Service Division. A qualified arborist shall monitor trees during construction and the following spring and monitor the growth and survival of the newly planted trees. All revegetation plans shall require monitoring the newly transplanted trees for at least 5 years and the replacement of all transplanted trees that die during that period.</i></p>		

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
6.3-6 Development of the proposed overlook could result in the disturbance or loss of riparian vegetation on the water side of the levee.	PS	PS	<p>6.3-6 (A & B)</p> <p>a) Once the overlook design is finalized and before any ground clearing activities related to the overlook, the applicant shall retain a qualified biologist to conduct a vegetation survey of the overlook foot print and construction area to assess the extent of the potential impacts to riparian vegetation.</p> <p>b) Project design shall minimize the removal of riparian vegetation to only the amount needed to achieve the construction of the overlook.</p> <p>c) If the overlook is supported by a retaining wall, construction activity shall take place no further than 10 feet from the wall location toward the American River. If the overlook is a cantilever, all of the construction shall be done at the top of the levee.</p> <p>d) Trimming or removal of any trees in the riparian area shall be accomplished consistent with Mitigation Measures 6.3-1, 6.3-2 and 6.3-5.</p> <p>e) For unavoidable removal of elderberry shrubs implement Mitigation Measure 6.3-4.</p>	LS	LS
6.3-7 Construction of the proposed project could adversely affect special status bats.	PS	PS	<p>6.3-7 (A & B)</p> <p>a) Prior to demolition activities, the project proponent shall retain a qualified biologist to conduct a focused survey for bats and potential roosting sites within the project site. If no roosting sites or bats are found within the project site, a letter report confirming absence shall be sent to the City of Sacramento and no further mitigation is required.</p>	LS	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p>b) <i>If bats are found roosting at the site outside of nursery season (May 1st through October 1st), then they shall be evicted as described under (c) below. If bats are found roosting during the nursery season, then they shall be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats shall be evicted as described under (c). Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. A 250-foot (or as determined in consultation with CDFG) buffer zone shall be established around the roosting site within which no construction shall occur.</i></p> <p>c) <i>Eviction of bats shall be conducted using bat exclusion techniques, developed by Bat Conservation International (BCI) and in consultation with CDFG, that allow the bats to exit the roosting site but prevent re-entry to the site. This would include but not be limited to the installation of one way exclusion devices. The devices shall remain in place for seven days and then the exclusion points and any other potential entrances shall be sealed. This work shall be completed by a BCI recommended exclusion professional.</i></p>		
6.3-8 Proposed lighting along River Front Drive and the Two Rivers Trail would create new sources of light that could adversely affect wildlife use of adjacent riparian habitat.	PS	PS	6.3-8 (A & B) <i>Implement Mitigation Measure 6.1-2(a).</i>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
6.3-9 Implementation of the project in combination with potential development in the region would contribute to cumulative impacts associated with significant effects to special-status wildlife and habitat loss.	S	S	6.3-9 (A & B) <i>Implement Mitigation Measures 6.3-1, 6.3-2 and 6.3-4 through 6.3-7.</i>	LS	LS
6.4 Cultural Resources					
6.4-1 The proposed project could cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5.	S	S	6.4-1 (A & B) a) <u>Documentation / Recordation</u> <i>Prior to any demolition and removal activities, the project applicant shall retain a professional who meets the Secretary of the Interior's Standards for Architectural History to prepare written and photograph documentation of the Bercut-Richards cannery complex.</i> <i>The documentation for the property shall be prepared based on the National Park Services' (NPS) Historic American Building Survey (HABS) / Historic American Engineering Record (HAER) Historical Report Guidelines. The proposed documentation standards shall meet the intent of NPS – Advisory Council on Historic Preservation (AHP) revised policy for developing alternate forms of documentation for properties meeting a criterion of less than nationally significant. The documentation prepared for former Bercut-Richards Packing Company property shall not be reviewed by NPS or transmitted to the Library of Congress and therefore, will not be a full-definition, HABS/HAER dataset. This type of documentation is based on a combination of both HABS/HAER standards (Levels II and III) and NPS new policy for NR-NHL photographic documentation as outlined in the</i>	SU	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>National Register of Historic Places and National Historic Landmarks Survey Photo Policy Expansion (March 2005).</i></p> <p><i>The written historical data for this documentation shall follow HABS / HAER Level II standards and shall be derived from the reports titled Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814, prepared by JRP Historical Consulting LLC in 2006 and Historical Research Study of the Historic Bercut-Richards Packing Company Site and Surrounding Sacramento Area, prepared by Lisa C. Prince in 2006. Both reports are on file with the City of Sacramento Development Services Department.</i></p> <p><i>Additional information may come from oral histories that, as determined feasible by the City Preservation Director, could be conducted as part of this Mitigation Measure (see Oral History Project below).</i></p> <p><i>The written data shall be accompanied by a sketch plan of the property. Efforts should also be made to locate original construction drawings or plans of the property during the period of significance. If located, these drawings should be photographed, reproduced, and included in the dataset.</i></p> <p><i>Either HABS / HAER standard large format or digital photography shall be used. If digital photography is used, the ink and paper combinations for printing photographs must be in compliance with NR-NHL photo expansion policy and have a permanency rating of approximately 115 years. Photographs</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>shall be labeled with text reading "Bercut-Richards Packing Company, 424 North 7th Street, Sacramento," and photograph number on the back of the photograph in pencil (2B or softer lead). Digital photographs will be taken as uncompressed .TIF file format. The size of each image will be 1600x1200 pixels at 300 ppi (pixels per inch) or larger, color format, and printed in black and white. The file name for each electronic image shall correspond with the index of photographs and photograph label.</i></p> <p><i>Photograph views for the dataset shall include: a) contextual views; b) views of each side of each building and interior views, where possible; c) oblique views of buildings; and d) detail views of character-defining features, including features on the interiors of some buildings. The size of this property would require up to five contextual views, 20 exterior and interior building views, 10 oblique views, and 15 detail views. All views shall be referenced on a photographic key. This photograph key shall be on a map of the property and shall show the photograph number with an arrow indicate the direction of the view. Historic photographs shall also be collected, reproduced, and included in the dataset.</i></p> <p><i>All written and photograph documentation of the Bercut-Richards cannery complex shall be approved by the City Preservation Director prior to any demolition and removal activities.</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p>b) <u>Oral History Project</u> Prior to any structural demolition and removal activities, the project applicant shall retain a professional who meets the Secretary of the Interior's Standards for History to determine if an appropriate number of individuals who worked at the Bercut-Richards Packing Company during the period of significance (1928 to 1953) are available and willing to participate in an oral history project. Written findings of the search for individuals shall be submitted to the City Preservation Director, who shall determine if an oral history project is feasible and would be required by the City to further reduce the impact of the proposed project on historical resources. Five individuals is a recommended minimum, but the City may determine that fewer individuals would be adequate.</p> <p>If an oral history project is conducted, a Draft Research Design for the project shall be submitted to the City Preservation Director for review and approval of the Final Research Design. The Research Design shall identify anticipated informants, research goals, and protocols. The oral history research shall be conducted in conformance with the Principles and Standards of the Oral History Association revised September 2000. The oral history project could be conducted by a historical consultant or be offered as a project to students at the graduate Capitol Campus Public History program at California State University, Sacramento. If the project is given to public history students, it shall be supervised by a faculty member with experience conducting oral history projects.</p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>The oral history project shall consist of interviews conducted in the Sacramento region with persons knowledgeable about the Bercut-Richards Packing Company and its operations in the buildings on this site during the property's period of significance (1928 to 1953). The aim of these interviews shall be to record information about company operations as they were carried out in these buildings. In general, the goal will be to synthesize information gathered from individuals who worked at the cannery, including personal insights and recollections of the company, its management, innovations, and the day-to-day operation of the plant. The preparer of the oral history project shall conduct the following tasks.</i></p> <p><i>Planning / Preparation for Interviews</i></p> <ul style="list-style-type: none"> <i>Review the available historical research and reports, including the reports titled Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814, prepared by JRP Historical Consulting LLC in 2006 and Historical Research Study of the Historic Bercut-Richards Packing Company Site and Surrounding Sacramento Area, prepared by Lisa C. Prince in 2006.</i> <i>Prepare a list of questions prior to the interviews.</i> <i>Conduct a tour of the former cannery with the interviewees prior to demolition of buildings, if possible.</i> 		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<ul style="list-style-type: none"> Prepare and have signed release forms for each interviewee, giving permission for any tapes or photographs made during the project to be used for by researchers and the public for educational purposes. <p><i>Interviews</i></p> <ul style="list-style-type: none"> The oral interviews shall be no longer than 1-2 hours in length and could be conducted in a group setting, if feasible or practical. Each interview (with permission of the interviewee) shall be recorded with a digital voice recorder and use Digital Speech Standard (DSS) Player Software to create a topic index for the interviews linked to a time counter so that the topic index would be searchable on the CD ROM (or DVD) containing the recording of the interview. Use of this software would eliminate the need for full written transcript of the interviews. <p><i>Post-Interviews</i></p> <ul style="list-style-type: none"> Archive quality CDs shall be prepared containing a recording of the interview, topic index, biographical data sheet, and a read.me file explaining the contents of the CD and how to use the DSS Player Software. Short biographical data sheets with a photograph of each interviewee shall be prepared for each interviewee and put in a file on the CD. Interviewers shall synthesize relevant information from the oral histories into a thematic narrative presenting understandings and insights. This narrative shall be included on the CDs. 		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<ul style="list-style-type: none"> • <i>Typed transcripts of interviews would not be required.</i> • <i>CDs shall be disseminated to appropriate repositories identified in the Documentation Dissemination portion of this Mitigation Measure.</i> <p><i>If required, the oral history project shall be monitored and enforced by the City Preservation Director to the extent determined by the City Preservation Director. All costs associated with the oral history project shall be borne by the project applicant.</i></p> <p>c) <u>Documentation Dissemination</u> <i>The HABS/HAER-like documentation of the Bercut-Richards cannery complex shall be disseminated on archival quality paper to appropriate repositories and interested parties. The distribution of the documentation shall include the California Historical Resources Information System Northeast Information Center at California State University Sacramento; the California State Library in Sacramento; the Sacramento Archives and Museum Collection Center (SAMCC); the Sacramento County Historical Society; the Sacramento Public Library's Sacramento Room; the Sacramento Discovery Museum; and other local repositories determined by the City Preservation Director.</i></p> <p><i>If the oral history project is conducted, CDs prepared during the oral history project shall be on archive-quality discs, such as archival gold CD-Rs, and disseminated to the same repositories as the HABS/HAER-like documentation.</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p>d) <u>Interpretation of the Property</u> Under the direction and enforcement of the City Preservation Director, measures shall be implemented to interpret the property's historic significance for the public and for residents that will inhabit the property. All costs associated with interpretation of the property shall be borne by the project applicant. Interpretive and/or educational exhibits shall include but are not necessarily limited to the following items:</p> <p><u>Permanent Interpretive Displays/Signage/Plaques</u> The applicant shall install a minimum of three interpretive displays on the project that will provide information to visitors and residents regarding the history of the Bercut-Richards Packing Company, the Sacramento canning industry, and the former Bercut-Richards cannery. These displays shall be integrated into the design of the public areas of the new housing and retail and shall be installed in highly visible public areas such as the property's parks, the North 7th Street portion of the project, or in public areas on the interiors of buildings. The displays shall include historical data taken from the HABS/HAER-like documentation or other cited archival source and shall also include photographs. Displayed photographs shall include information about the subject, the date of the photograph, and photo credit / photo collection credit. At least one display shall include physical remnants of architectural elements that will be salvaged from the Bercut-Richards Packing Company buildings (see De-Construction, Salvage, and Reuse below) One of the displays shall be the traveling exhibit</p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>(described below) which shall be permanently installed in a highly visible location in a publicly accessible lobby following completion of its tour.</i></p> <p><i>The applicant shall install at least one sign or plaque near the corner of Richards Boulevard and North 7th Street to indicate that the Bercut-Richards Packing Company plant once stood on the property. Additional signage / plaques may be installed to provide interpretive information about any historical photographs or architectural salvage used or installed on the property.</i></p> <p><i>Interpretive displays and the signage/plaques installed on the property shall follow the Township 9 Design Guidelines and be sufficiently durable to withstand typical Sacramento weather conditions for at least five years. Displays and signage/plaques shall be lighted, installed at pedestrian-friendly locations, and be of adequate size to attract the interested pedestrian. Maintenance of displays and signage/plaques shall be included in the management of the common area maintenance program on the property.</i></p> <p><u><i>Exhibits And Written Documentation for Publication on a Web Site</i></u></p> <p><i>The applicant shall publish exhibits and written documentation on a Web site regarding the history of the Sacramento canning industry and the Bercut-Richards Cannery complex. This information shall be derived from the HABS/HAER-like documentation, and the reports titled Historical Resource Inventory and Evaluation Report, Bercut-</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814, prepared by JRP Historical Consulting LLC in 2006 and Historical Research Study of the Historic Bercut-Richards Packing Company Site and Surrounding Sacramento Area, prepared by Lisa C. Prince in 2006. The publication shall include text and photographs. The text shall be written for popular consumption, but also be properly cited following historical documentation standards.</i></p> <p><i>Publication of these materials shall be either on an independent Web site maintained by the project applicant (or its successor property management company) or be donated for posting on a local history website, such as www.sacramentohistory.org (owned by SAMCC). The materials shall be available on the Web site for at least two years following demolition of the former Bercut-Richards cannery complex.</i></p> <p><u><i>Traveling Exhibit</i></u> <i>The applicant shall have a traveling exhibit prepared that will be loaned to local museums (such as the Sacramento Discovery Museum) and, if possible, at public libraries and/or public buildings in the Sacramento region. The small exhibit shall include panels or boards that provide information and photographs regarding Sacramento's canning industry history, the Bercut-Richards Packing Company, and the Bercut-Richards cannery complex. The exhibit shall include three or more 2x2 foot boards that can be either wall mounted or displayed on easels. The exhibit shall be supplemented in museum settings with small</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>artifacts or architectural features salvaged from the former cannery site. Following installation of the exhibit in local museums and other locations, the exhibit shall be permanently displayed in a highly visible location in a publicly accessible lobby on the property and will fulfill a portion of the on-site interpretation mitigations discussed above.</i></p> <p>e) <u><i>De-Construction, Salvage, and Reuse</i></u> <i>The project applicant shall preserve the scale house (Building 11) and relocate the preserved building to one of the project park settings. The applicant shall consult with the City of Sacramento regarding the potential de-construction, salvage, and/or reuse of other architectural features from the existing Bercut-Richards Packing cannery complex that would serve as important artifacts and physical reminders of the cannery's material existence and importance. Examples of the property's character-defining features that could be potentially salvaged are illustrated in Appendix B of the report titled Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814, prepared by JRP Historical Consulting LLC. To the extent that is reasonable and feasible as determined by the City, the project applicant shall use some architectural features in the property's new design. Such features shall be displayed in highly visible public areas of the development, such as in building lobbies or on the exterior of buildings in the parks or along the proposed North 7th Street portion of the project. Salvaged and reused features shall be</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>accompanied by interpretive information on signage/plaques to indicate their origins as part of the Bercut Richards cannery complex. Potentially salvageable features are identified in Section 6.3., Impacts Analysis and Suggested Mitigation of the report titled Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814, prepared by JRP Historical Consulting LLC and on file with the City of Sacramento Development Services.</i></p> <p><i>The applicant shall also offer architectural features and materials to museums and other local repositories for curation and display. SAMCC and the Sacramento Discovery Museum, for example, would be repositories that may be interested in the salvaged materials, as they have archival storage facilities for artifacts and some ability to display them. Other interested parties may be those interested in the history of industrial buildings or materials such as masonry and bricks (such as Dan Mosier, who maintains a collection of historic bricks and provides the public information about the companies that manufactured them on his website, http://calbricks.netfirms.com/).</i></p> <p>f) <u>Design Guidelines</u> <i>The final Design Guidelines for the proposed project shall take into account that the project is removing a historically significant cannery and industrial site. The final Design Guidelines shall encourage the use of design features of the historic buildings of the cannery in the new buildings to be constructed on the property. The City Preservation Director shall be</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>given the opportunity to help review and refine the Design Guidelines to ensure that the architecture of the new buildings help convey the history and significance of the property. Character-defining features that could be included in the Design Guidelines are identified the report titled Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814, prepared by JRP Historical Consulting LLC and on file with the City of Sacramento Development Services.</i></p>		
<p>6.4-2 The proposed project could cause a substantial change in the significance of an as yet undiscovered archaeological resource as defined in CEQA Guidelines Section 15064.5.</p>	PS	PS	<p>6.4-2 (A & B) a) <i>In the event that any prehistoric or historic-period subsurface archaeological features or deposits, including locally darkened soil ("midden"), that could conceal cultural deposits, animal bone, obsidian, and/or mortar are discovered during demolition/construction-related earth-moving activities, all ground-disturbing activity within 100 feet of the resources shall be halted immediately, and the City of Sacramento Development Services Department and the City Preservation Director shall be notified within 24 hours. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's professional qualifications for Archaeology. The City Preservation Director shall consult with the archeologist to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the City Preservation Director and that are consistent with the Secretary of the Interior's Standards for Archaeological Documentation.</i></p>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>If a Native American archaeological, ethnographic, or spiritual resources are discovered, all identification and treatment of the resources shall be conducted by a qualified archaeologist and Native American representatives who are approved by the local Native American community as scholars of the cultural traditions. In the event that no such Native American is available, persons who represent tribal governments and/or organizations in the locale in which resources could be affected shall be consulted. When historic archaeological sites or historic architectural features are involved, all identification and treatment is to be carried out by historical archaeologists or architectural historians who meet the Secretary of the Interior's professional qualifications for Archaeology and/or Architectural History.</i></p> <p>b) <i>If human remains are discovered during any demolition/construction activities, all ground-disturbing activity within 50 feet of the remains shall be halted immediately, and the Sacramento County coroner shall be notified immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California's Health and Safety Code. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project applicant shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<i>Most Likely Descendant, if any, identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the Most Likely Descendant, including the excavation and removal of the human remains. The City of Sacramento Development Services Department shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of state law, as set forth in CEQA Guidelines section 15064.5(e) and Public Resources Code section 5097.98. The project applicant shall implement approved mitigation, to be verified by the City of Sacramento Development Services Department, before the resumption of ground-disturbing activities within 50 feet of where the remains were discovered.</i>		
6.4-3 The proposed project, in combination with other development in the City of Sacramento, could cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5.	S	S	6.4-3 (A & B) <i>Implement Mitigation Measure 6.4-1.</i>	SU	SU
6.4-4 The proposed project, in combination with other development in the City of Sacramento, could cause a substantial change in the significance of a change in the significance of an as yet undiscovered archaeological resource as defined in CEQA Guidelines Section 15064.5.	PS	PS	6.4-4 (A & B) <i>Implement Mitigation Measure 6.4-2.</i>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
6.5 Geology and Soils					
6.5-1 Construction of the proposed project would include earth disturbing activities that could increase the rate or amount of soil erosion.	PS	PS	6.5-1 (A & B) <i>Prior to the commencement of any grading activities, the applicant shall retain an erosion control professional, landscape architect, or civil engineer specializing in sediment control to prepare an Erosion and Sediment Transport Control Plan consistent with Chapter 15.88.250 of the City of Sacramento Municipal Code. The Erosion and Sediment Control Plan shall include a statement of purpose, proposed best management practices, and the required information from the Manual of Standards, Chapter 2, Section 3. The Plan shall be submitted with the final grading plan. The Erosion and Sediment Transport Control Plan shall be implemented by the applicant, and enforced by the City of Sacramento Department of Public Works, prior to pre-construction activities and shall continue through the completion of all final improvements and permanent structures.</i>	LS	LS
6.5-2 The proposed project would introduce a change in topography through the use of fill material which could expose proposed project uses to geologic hazards associated with unstable soil conditions.	LS	LS	6.5-2 (A & B) <i>None required.</i>	NA	NA
6.5-3 The proposed project is located on a site containing unstable soil which if developed could expose structures to geologic hazards associated with settlement.	PS	PS	6.5-3 (A & B) a) <i>Prior to issuance of the building permit, the project applicant shall ensure that all designs for mid- and high-rise structures within the proposed project minimize differential settlement impacts enabling the soils underlying the project site to support such structures. The most appropriate methods to mitigate the effects of differential settlement within the proposed project shall be determined by the project applicant in consultation with a qualified</i>	LS	LS

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>geotechnical engineer based on recommendations set forth in the Preliminary Geotechnical Engineering Report, Capitol Station 65 (July 13, 2006) prepared by Wallace-Kuhl & Associates, Inc.</i></p> <p><i>Recommendations identified in the Preliminary Geotechnical Engineering Report to mitigate the effects of differential settlement on high-rise structures (six stories or higher) include the use of a deep foundation system, such as driven piles or auger-cast piles, that extends into dense sands and gravels underlying the project site, and overexcavation and recompaction of the upper three to five feet of soil within the building footprints to support interior floor slabs and in areas of pavement and flatwork.</i></p> <p>b) <i>During excavation activities, the project contractor shall comply with the recommendations set forth in the Preliminary Geotechnical Engineering Report, Capitol Station 65 (July 13, 2006) prepared by Wallace-Kuhl & Associates, Inc. regarding trenching activities. Implementation of the recommendations shall be monitored by the City of Sacramento.</i></p> <p>c) <i>Although the presence of high concentrations of organic refuse has not been confirmed throughout the site, any such material, such as the peach pit refuse discovered in the western portion of the project site, shall be removed prior to the commencement of site preparation activities. The project applicant shall retain a geotechnical engineer to ensure that the proper removal of organic refuse be completed to ensure structural safety.</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
6.5-4 The proposed project could result in geologic hazards associated with subsidence or settlement of land attributed to dewatering activities.	PS	PS	6.5-4 (A & B) a) <i>Prior to approval of the final grading plan, the project applicant shall retain a qualified dewatering contractor to design, install, and operate a project-specific construction dewatering system. Excavation work shall be scheduled during the dry season (summer to early winter) when river levels are low and excavation is less likely to encounter groundwater, making dewatering activities as minimal as possible. A groundwater depth of at least three feet below the lowest anticipated excavation depth shall be maintained to provide a stable surface for construction equipment. When necessary, alternative methods such as sheet piles or soil cement columns may be used to allow localized dewatering and help prevent dewatering effects on adjacent sites. Implementation of the plan during dewatering activities shall be monitored by the City of Sacramento Department of Engineering and/or Department of Public Works, as appropriate.</i> b) <i>Prior to approval of the final grading plan, the City shall ensure that all walls, foundations, and floor slabs constructed below an assumed groundwater level of +15 feet msl are sealed, waterproofed, and designed to withstand hydrostatic uplift and lateral stresses exerted by groundwater. This measure shall be implemented to the satisfaction of the Department of Engineering and/or Department of Public Works as appropriate.</i>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
6.5-5 Earth disturbing activities associated with the construction of the proposed project, in combination with other construction projects in the City of Sacramento, could increase the rate or amount of soil erosion.	LS	LS	6.5-5 (A & B) <i>None required.</i>	NA	NA
6.5-6 The proposed project, in combination with other development in the City of Sacramento, could expose an increased number of people and structures to geologic hazards resulting from changes in topography, and settlement and subsidence due to unstable soil conditions or dewatering activities.	LS	LS	6.5-6 (A & B) <i>None required.</i>	NA	NA
6.6 Hazardous Materials and Public Safety					
6.6-1 Construction and/or occupancy of the proposed project would involve the routine use of hazardous materials, which could create a health hazard or potential health hazard.	LS	LS	6.6-1 (A & B) <i>None required.</i>	NA	NA
6.6-2 The proposed project could interfere with an emergency evacuation plan as a result of temporary lane closures, roadway narrowing, or detours during construction.	PS	PS	6.6-2 (A & B) <i>Prior to the commencement of demolition/construction, the project applicant shall retain a transportation planner to prepare a Traffic Management Plan (TMP) for construction activities, in accordance with Sections 12.20.020 and 12.20.030 of the Sacramento Municipal Code. Elements of the TMP shall include:</i> <ul style="list-style-type: none"> • <i>The name and business address of the applicant;</i> • <i>A diagram showing the location of the proposed work area;</i> • <i>A diagram showing the locations of areas where public right-of-way may be closed or obstructed;</i> 	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
			<ul style="list-style-type: none"> • A diagram showing the placement of traffic control devices; • The proposed phasing of traffic control; • Times when traffic control would be in effect; • Times when demolition/construction activities would prohibit access to private property from a public right-of-way; • A statement that the applicant shall comply with the City's noise ordinance during the performance of all work; and • A statement that the applicant understands that the plan may be modified by the director at any time in order to eliminate or avoid traffic conditions that are hazardous to the safety of the public. <p>The project applicant shall submit the TMP to the City for review and approval. The City shall approve, approve with modifications to the plan, or disapprove the plan. In the event that the demolition/construction work to be performed under the TMP is not performed and completed within the times specified within the application for the proposed plan, the plan shall be considered expired and void. A new plan shall be required prior to the commencement or continuation of work.</p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
<p>6.6-3 Construction and/or occupancy of the proposed project could expose people to previously unidentified sources of potential health hazards, such as soil or groundwater contamination, from past uses on- or off-site.</p>	PS	PS	<p>6.6-3 (A & B) a) <i>In the event that previously unidentified soil or groundwater contamination, USTs, or other features or materials that could present a threat to human health or the environment are discovered during excavation and grading or construction activities, all construction within the project site shall cease immediately, and the applicant shall retain a qualified professional to evaluate the type and extent of the hazardous materials contamination and make appropriate recommendations, including, if necessary, the preparation of a site remediation plan. Pursuant to Section 25401.05 (a)(1) of the California Health and Safety Code, the plan shall include: a proposal in compliance with application law, regulations, and standards for conducting a site investigation and remedial action, a schedule for the completion of the site investigation and remedial action, and a proposal for any other remedial actions proposed to respond to the release or threatened release of hazardous materials at the property. Work within the project site shall not proceed until all identified hazards are managed to the satisfaction of the City and the SCEMD.</i></p>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p>b) <i>In the event site investigation and/or remediation is required, the applicant shall ensure preparation of a site-specific health and safety plan that meets the intent of OSHA hazardous materials worker requirements (CCR Title 8). The plan shall be prepared by a qualified professional prior to the commencement of site-disturbing activities associated with the investigation and/or remediation. The plan shall provide for the identification, evaluation, control of safety and health hazards, and emergency response to hazardous waste operations. Pursuant to the requirements of state and federal law, the site-specific health and safety plan may require, but would not be limited to: the use of personal protective equipment, onsite controls (e.g., continuous air quality monitoring) during construction, and other precautions as determined to be necessary by the plan preparer.</i></p> <p>c) <i>In the event contaminated groundwater is identified, any discharges to the sewer, if determined to the appropriate method of disposal, shall be in accordance with the City Department of Utilities Engineering Services Policy No. 0001, adopted as Resolution No. 92-439 by the Sacramento City Council.</i></p>		
6.6-4 The proposed project could expose people to potential health hazards by demolishing buildings on the project site that could contain lead-based paint.	PS	PS	<p>6.6-4 (A & B) <i>Prior to demolition of any structures located on the project site, the project applicant shall retain a state-certified risk assessor to conduct a risk assessment or paint inspection of all structures on-site constructed prior to 1978 for the presence of lead-based paint. If lead-based paint is determined to exist on site, the risk</i></p>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p>assessor shall prepare a site-specific lead hazard control plan. Paint removal methods may include, but are not limited to: use of a heat gun, tools equipped with HEPA exhaust capability, wet scraping, and chemical removers. The plan shall also provide specific instructions for providing protective clothing and gear for abatement personnel.</p> <p>The project applicant shall then retain a state-certified lead-based paint removal contractor independent of the risk assessor to conduct the appropriate abatement measures as required by the plan. Wastes from abatement and demolition activities shall be managed and disposed of at a landfill(s) licensed to accept lead-based waste. Once all abatement measures have been implemented, a state-certified risk assessor shall conduct a clearance examination and provide written documentation to the City that lead-based paint testing and abatement, if necessary, has been completed in accordance with all federal, state, and local laws and regulations, including: lead-based paint exposure guidelines provided in "Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing" by the U.S. Department of Housing and Urban Development (HUD), Construction Safety Order 1532.1 from Title 8 of the California Code of Regulations (CCR), and the California Department of Health Services.</p>		
<p>6.6-5 The proposed project, in combination with other development in the City, could expose people to existing contaminated soil, groundwater and/or hazardous building materials during demolition and site preparation activities.</p>	S	S	<p>6.6-5 (A & B) Implement Mitigation Measures 6.6-3 and 6.6-4.</p>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
6.6-6 The proposed project, in combination with other development within the City, could interfere with an emergency evacuation plan as a result of temporary lane closures, roadway narrowing, or detours during demolition and construction activities.	S	S	6.6-6 (A & B) <i>Implement Mitigation Measure 6.6-2.</i>	NA	NA
6.7 Hydrology and Water Quality					
6.7-1 Implementation of the proposed project would result in an increase in the rate and amount of stormwater runoff, which could exceed the capacity of the stormwater collection infrastructure and result in an increase in on- or off-site flooding.	LS	LS	6.7-1 (A & B) <i>None required.</i>	NA	NA
6.7-2 Site runoff containing urban pollutants and sediment caused by dewatering activities and erosion within the project site could be discharged to the Sacramento River, which could affect surface water quality.	PS	PS	6.7-2 (A & B) <i>Prior to the issuance of a grading permit, the project applicant shall:</i> a) <i>Provide proof that a NOI for coverage under the State NPDES General Permit for Discharges of Storm Water Runoff associated with Construction Activity has been submitted to the State Water Resources Control Board.</i> b) <i>Prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the State Water Resources Control Board that includes the following items:</i> <ul style="list-style-type: none"> • <i>A vicinity map showing the construction site, nearby roadways, topography, and geographic features surrounding the site;</i> 	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
			<ul style="list-style-type: none"> • A site map showing the proposed project in detail, including the existing and planned paved areas, buildings, topography, drainage patterns across the project site, and the proposed stormwater discharge locations; • A detailed, site-specific listing of the potential sources of stormwater pollution; • A description of the type and location of erosion and sediment control BMPs to be implemented at the project site; • The name and phone number of the person responsible for implementing the SWPPP; and • Certification by the landowner or an authorized representative of the landowner. <p>c) Obtain, if necessary, a dewatering permit or MOU from the City.</p> <p>d) Prepare an Erosion and Sediment Control Plan (ESC plan) in compliance with the Section 15.88.250 of the City's Municipal Code, Grading Ordinance, and Stormwater Management and Discharge Ordinance, with guidance from the Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control. The ESC plan shall include erosion control BMPs, sediment control BMPs, and good housekeeping practices to be implemented during construction.</p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p>e) Prepare a post construction erosion and sediment control plan (PC) plan to control surface runoff and erosion after construction of the proposed project has been completed. The plan shall contain a statement of the purposed of the proposed BMPs and all the information required and contained in the Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control.</p> <p>f) Incorporate specific source control measures for: 1) commercial/industrial material storage, 2) commercial/industrial outdoor materials handling, 3) commercial/industrial vehicle and equipment fueling, 4) commercial/industrial vehicle and equipment maintenance, repair, and washing, 5) commercial/ industrial/multi-family residential waste handling, 6) multi-family residential vehicle wash areas, and 7) permanent "no dumping-drains to river" storm drain markings. Since this project is not served by a regional water quality control facility and is greater than one acre, the project shall be required to incorporate regional and/or on-site stormwater quality control measures such as water quality basins, vegetated swales, stormwater planters, and/or sand filters. The project applicant shall be required to provide a mechanism to fund the maintenance of the treatment control measures including entering into a maintenance agreement.</p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
6.7-3 Implementation of the proposed project could adversely affect groundwater quality, the rate and direction of groundwater flow, or interfere with groundwater recharge.	PS	PS	6.7-3 (A & B) <i>Prior to the issuance of grading permits, the project applicant shall implement the Waste Discharge Requirements General Order for Dewatering and Other Low Threat Discharges to Surface Waters, as established by the CVRWQCB, which shall be enforced by the City. The permit states that construction dewatering activities may occur provided that discharges do not contain significant quantities of pollutants and are either four months or less in duration or the average dry weather discharge does not exceed 0.25 mgd.</i>	LS	LS
6.7-4 Implementation of the proposed project, in combination with other development within the City, could result in an increase in the rate and amount of surface and/or stormwater runoff discharged to the City's drainage system, and ultimately, the Sacramento River, which could result in localized flooding.	LS	LS	6.7-4 (A & B) <i>None required.</i>	NA	NA
6.7-5 The proposed project, in combination with other development within the region, would result in the discharge of stormwater runoff containing urban pollutants and sediment to local waterways, which could affect surface water quality in the lower Sacramento River watershed.	PS	PS	6.7-5 (A & B) <i>Implement Mitigation Measures 6.7-2 (a) through (f) and 6.7-3.</i>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
6.7-6 Dewatering activities and construction of the proposed project, in combination with other development within the Sacramento River watershed, could affect groundwater by depleting supplies, changing rate and/or direction of flow, and facilitate contaminants entering groundwater, affecting groundwater quality.	PS	PS	6.7-6 (A & B) <i>Implement Mitigation Measure 6.7-3.</i>	LS	LS
6.8 Noise and Vibration					
6.8-1 Construction of the proposed project would temporarily expose existing sensitive receptors to increased noise levels.	S	S	6.8-1 (A & B) <i>The contractor shall ensure that the following measures are implemented during all phases of project construction:</i> a) <i>Whenever construction during later project stages occurs near residential and other noise-sensitive uses built on site during earlier project stages, temporary barriers shall be constructed around the construction sites to shield the ground floor and lower stories of the noise-sensitive uses. These barriers shall be of ¾-inch Medium Density Overlay (MDO) plywood sheeting, or other material of equivalent utility and appearance, and shall achieve a Sound Transmission Class of STC-30, or greater, based on certified sound transmission loss data taken according to ASTM Test Method E90. The barrier shall not contain any gaps at its base or face, except for site access and surveying openings. The barrier height shall be designed to break the line-of-sight and provide at least a 5 dBA insertion loss between the noise producing equipment and the upper-most story of the adjacent noise-sensitive uses. If for practical reasons, which are subject to the review and approval of the City, a barrier can not</i>	SU	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>be built to provide noise relief to the upper stories of nearby noise-sensitive uses, then it must be built to the tallest feasible height.</i></p> <p>b) <i>Construction activities shall comply with the City of Sacramento Noise Ordinance, which limits such activity to the hours of 7 a.m. to 6 p.m. Monday through Saturday, the hours of 9 a.m. to 6 p.m. on Sunday, prohibits nighttime construction, and requires the use of exhaust and intake silencers for construction equipment engines.</i></p> <p>c) <i>Construction equipment staging areas shall be located away from residential uses; pre-drill pile holes and use quieter "sonic" pile-drivers, where feasible; and restrict high noise activities, such as pile driving, the use of jackhammers, drills, and other generators of sporadic high noise peaks, to the hours of 7 a.m. to 6 p.m. Monday through Friday, or other such hours satisfactory to the City.</i></p>		
6.8-2 Ground-borne vibration from construction activity could cause structural damage to nearby buildings.	S	S	<p>6.8-2 (A & B) <i>For pile driving within 100 feet of an existing building, the project applicant shall drill pilot holes for piles, to the extent feasible, prior to commencement of impact pile driving. Prior to issuance of a building permit, the project applicant shall submit to the City for approval the anticipated depth to which piles will be drilled and the estimated start date and end date of impact pile driving.</i></p>	SU	SU
6.8-3 Operation of the proposed project would permanently expose sensitive receptors to increased traffic future light rail noise levels.	S	S	<p>6.8-3 (A & B) a) <i>Prior to the issuance of building permits, the applicant shall have a certified acoustical professional prepare a site-specific acoustical analysis for residential uses that details how the outdoor common areas would achieve an exterior</i></p>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>noise level of less than 60 dB L_{dn} and an interior noise level of less than 45 dB L_{dn} consistent with City of Sacramento General Plan noise standards. Noise reduction measures to ensure acceptable interior noise levels could include, but might not be limited to: use of dual-pane, sound-rated windows; mechanical air systems; and exterior wall insulation. Noise reduction design features to ensure acceptable exterior noise levels could include, but might not be limited to: orienting buildings between Richards Boulevard and exterior common areas. The results of the analysis shall be submitted to the City for review and approval and appropriate recommended noise reduction measures/design features shall be incorporated into project design, as feasible.</i></p> <p>b) <i>Prior to issuance of occupancy permits, at least one 24 hour noise measurement per residential unit fronting Richards Boulevard shall be completed to ensure that interior noise levels attain legal requirements. The results of each measurement shall be reported to both the applicant and the City.</i></p>		
6.8-4 Operation of the proposed project would permanently expose sensitive receptors on the project site to increased noise produced by on-site stationary sources.	S	S	<p>6.8-4 (A & B)</p> <p>a) <i>Prior to the issuance of building permits, the applicant shall submit engineering and acoustical specification for project mechanical HVAC equipment to the Planning Director demonstrating that the equipment design (types, location, enclosure, specifications) will control noise from the equipment to at least 10 dBA below existing ambient at nearby residential and other noise-sensitive land uses.</i></p>	LS	LS

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			b) <i>Garbage storage containers and building loading docks shall be placed to allow adequate separation to shield adjacent residential or other noise-sensitive uses.</i> c) <i>Noise generating stationary equipment associated with proposed commercial and/or office uses, including portable generators, compressors, and compactors shall be enclosed or acoustically shielded to reduce noise-related impacts to noise-sensitive residential uses.</i> d) <i>Events at the waterfront pavilion shall be conducted pursuant to discretionary licenses or permits as required by the city.</i>		
6.8-5 Traffic generated by the proposed project, in conjunction with traffic from planned future development in the surrounding parts of Sacramento and future light rail activity, would permanently expose sensitive receptors to increased noise levels.	S	S	6.8-5 (A & B) <i>Implement Mitigation Measure 6.8-3.</i>	LS	LS
6.9 Public Services					
6.9-1 The proposed project would result in an increase demand for law enforcement services, including the possible construction of new police facilities which could cause significant environmental effects.	LS	LS	6.9-1 (A & B) <i>None required.</i>	NA	NA

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6.9-2 The proposed project, in combination with future development in the Central City, would result in an increase demand for law enforcement services, including the construction of new police facilities which could cause significant environmental effects.	LS	LS	6.9-2 (A & B) <i>None required.</i>	NA	NA
6.9-3 Implementation of the proposed project would increase the demand for fire and emergency protection services that could result in the need to construct new or expand existing facilities to ensure adequate fire protection services are provided.	LS	LS	6.9-3 (A & B) <i>None required.</i>	NA	NA
6.9-4 Development of the proposed project, in combination with future development in the Central City, would result in increased demand for fire protection services and the construction of new or expansion of existing facilities in the SFD service area.	LS	LS	6.9-4 (A & B) <i>None required.</i>	NA	NA
6.9-5 The proposed project would generate additional elementary school students in the North Sacramento School District.	LS	LS	6.9-5 (A & B) <i>None required.</i>	NA	NA
6.9-6 The proposed project would generate additional middle school students in the GJUHSD.	LS	LS	6.9-6 (A & B) <i>None required.</i>	NA	NA
6.9-7 The proposed project would generate additional high school students in the GJUHSD.	LS	LS	6.9-7 (A & B) <i>None required.</i>	NA	NA

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6.9-8 The proposed project, in combination with other projects in the NSSD, would generate additional elementary school students and could result in the construction of new or expanded facilities.	LS	LS	6.9-8 (A & B) <i>None required.</i>	NA	NA
6.9-9 The proposed project, in combination with other projects in the GJUHSD, could generate additional middle school students and could result in the construction of new or expanded facilities.	LS	LS	6.9-9 (A & B) <i>None required.</i>	NA	NA
6.9-10 The proposed project, in combination with other projects in the GJUHSD, could generate additional high school students and could result in the construction of new or expanded facilities.	LS	LS	6.9-10 (A & B) <i>None required.</i>	NA	NA
6.9-11 The proposed project would result in an increased demand for library services, including the construction of new library facilities which could cause significant environmental effects.	LS	LS	6.9-11 (A & B) <i>None required.</i>	NA	NA
6.9-12 The proposed project, in combination with cumulative development in the City of Sacramento, would result in an increased demand for library services, including the construction of new library facilities which could cause significant environmental effects.	LS	LS	6.9-12 (A & B) <i>None required.</i>	NA	NA
6.9-13 The proposed project could result in the need to construct new, or expanded existing neighborhood serving parks.	S	S	6.9-13 (A & B) <i>The project applicant or developer shall comply with the City's Park Development Impact Fund and pay required fees to ensure adequate neighborhood park facilities are provided in the City.</i>	LS	LS

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
6.9-14 The proposed project could result in the need to construct new, or expanded existing community serving parks.	S	S	6.9-14 (A & B) <i>The project applicant or developer shall comply with the City's Park Development Impact Fund and pay required fees to ensure adequate community park facilities are provided in the City.</i>	LS	LS
6.9-15 The proposed project could result in the need to construct new, or expanded existing Citywide/regionally serving parks.	S	S	6.9-15 (A & B) <i>The project applicant or developer shall comply with the City's Park Development Impact Fund and pay required fees to ensure adequate citywide or regional park facilities are provided in the City.</i>	LS	LS
6.9-16 The proposed project, in combination with other future development in the Central City, could result in the need to construct new, or expanded existing neighborhood serving parks.	S	S	6.9-16 (A & B) <i>Implement Mitigation Measure 6.9-13.</i>	LS	LS
6.9-17 The proposed project, in combination with other future development in the Central City, could result in the need to construct new, or expanded existing community serving parks.	S	S	6.9-17 (A & B) <i>Implement Mitigation Measure 6.9-14.</i>	LS	LS
6.9-18 The proposed project, in combination with other future development in the Central City, could result in the need to construct new, or expanded existing Citywide/regionally serving parks.	S	S	6.9-18 (A & B) <i>Implement Mitigation Measure 6.9-15.</i>	LS	LS
6.10 Public Utilities					
6.10-1 Solid waste generated by the proposed project could exceed landfill capacity.	LS	LS	6.10-1 (A & B) <i>None required.</i>	NA	NA
6.10-2 Solid waste generated by the proposed project, in combination with other development in the City, could exceed landfill capacity.	LS	LS	6.10-2 (A & B) <i>None required.</i>	NA	NA

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SUMMARY OF IMPACTS AND MITIGATION MEASURES

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	Scenario A	Scenario B		Scenario A	Scenario B
6.10-3 The proposed project would increase wastewater flows that could exceed treatment capacity at the SRWTP and/or wastewater collection infrastructure.	LS	LS	6.10-3 (A & B) <i>None required.</i>	NA	NA
6.10-4 The proposed project, in combination with other development within the SRWTP service area, would increase wastewater flows that could exceed treatment capacity at the SRWTP and/or wastewater collection infrastructure.	LS	LS	6.10-4 (A & B) <i>None required.</i>	NA	NA
6.10-5 The proposed project's demand for water could exceed available sources of water supply sources.	LS	LS	6.10-5 (A & B) <i>None required.</i>	NA	NA
6.10-6 The proposed project could increase water demand in excess of 10 mgd.	LS	LS	6.10-6 (A & B) <i>None required.</i>	NA	NA
6.10-7 The proposed project could require the construction of new water supply treatment and/or distribution utilities or the expansion of existing utilities, the construction of which could cause significant environmental effects.	LS	LS	6.10-7 (A & B) <i>None required.</i>	NA	NA
6.10-8 The proposed project, in combination with buildout of the City of Sacramento General Plan, could increase water demand throughout the City but would not exceed available water supplies.	LS	LS	6.10-8 (A & B) <i>None required.</i>	NA	NA
6.10-9 The proposed project, in combination with buildout of the City of Sacramento General Plan, could require the construction of new water supply treatment and/or distribution utilities or the expansion of existing utilities, the construction of which could cause significant environmental effects.	LS	LS	6.10-9 (A & B) <i>None required.</i>	NA	NA

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	Scenario A	Scenario B		Scenario A	Scenario B
6.10-10 The proposed project would increase the demand for electricity that could require the construction of new electrical production or transmission facilities.	LS	LS	6.10-10 (A & B) <i>None required.</i>	NA	NA
6.10-11 The proposed project would increase the demand for natural gas that could require the construction of new gas production or transmission facilities.	LS	LS	6.10-11 (A & B) <i>None required.</i>	NA	NA
6.10-12 The proposed project, in combination with other development in the City of Sacramento, could exceed the electrical or natural gas supply and transmission capabilities.	LS	LS	6.10-12 (A & B) <i>None required.</i>	NA	NA
6.11 Transportation and Circulation					
6.11-1 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.	S	S	6.11-1 (A & B) a) <i>At the I-5 southbound ramps / Richards Boulevard intersection, under both Scenario A and Scenario B, the City shall install, or cause to be installed, one southbound left-turn lane to provide two left-turn lanes and one combination through-right lane; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.</i>	LS	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.</i></p> <p><i>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS E (56.4 seconds delay) in the a.m. peak hour and LOS D (37.8 seconds delay) in the p.m. peak hour; thus reducing the impact to a less-than-significant level; the level of service under Scenario B would be reduced to LOS E (77.9 seconds delay) in the a.m. peak hour and LOS D (49.5 seconds delay) in the p.m. peak hour; thus reducing the impact to a less-than-significant level in the a.m. peak hour but the impact in the p.m. peak hour would remain significant and unavoidable. To fully mitigate the impact would require widening of the freeway ramp to provide an additional lane to the west. However, the freeway ramp is not under the jurisdiction of the City but is subject to Caltrans' jurisdiction. In addition, to implement this mitigation measure would require acquisition of additional right of way for a new lane to the west. Finally, this improvement is not included in any of Caltrans' funding mechanisms. Because this mitigation is beyond the control of the</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p><i>project applicant, outside the jurisdiction of the City, and there is not an established funding mechanism available for contribution, this mitigation measure is considered infeasible and the impact is considered significant and unavoidable. These results are shown in Table 6.11-13.</i></p> <p>b) <i>At the I-5 northbound ramps / Richards Boulevard intersection, under both Scenario A and Scenario B, the City shall install, or cause to be installed, one westbound right-turn lane to provide two right-turn lanes and two through lanes; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.</i></p> <p><i>The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.</i></p>	LS	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS E (57.4 seconds delay) in the a.m. peak hour and LOS D (40.4 seconds delay) in the p.m. peak hour, thus reducing the impact to a less-than-significant level; the level of service under Scenario B would be reduced to LOS F (104.1 seconds delay) in the a.m. peak hour and LOS D (43.2 seconds delay) in the p.m. peak hour, thus the impact is less than significant in the p.m. peak hour but remains significant and unavoidable in the a.m. peak hour. To fully mitigate the impact would require widening of the freeway ramp to provide an additional lane to the east. The freeway ramp is not under the jurisdiction of the City but is subject to Caltrans jurisdiction. To implement this mitigation measure, acquisition of an additional lane of right of way would be required and is not currently available. Because this mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is no established funding mechanism available for contribution, this mitigation measure is considered infeasible and the impact is considered, significant and unavoidable. These results are shown in Table 6.11-13.</i></p>		
	S	S	<p>c) <i>At the Bercut Drive / Richards Boulevard intersection, under Scenario A, the City shall increase the cycle length to 120 seconds and modify signal phasing. The applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard. Under Scenario B, the City shall install,</i></p>	LS	LS

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p>or cause to be installed, one eastbound through lane to provide one left-turn lane, two through lanes and one combination through-right lane; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees.</p> <p>The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.</p> <p>The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.</p> <p>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS C (24.1 seconds delay) in the a.m. peak hour and LOS B (18.2 seconds delay) in the p.m. peak hour, thus reducing the impact to a less-than-significant level; the level of service under Scenario B would be reduced to LOS A (8.1</p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p>seconds delay) in the a.m. peak hour and LOS C (20.4 seconds delay) in the p.m. peak hour, thus reducing the impact to a less-than-significant level. These results are shown in Table 6.11-13.</p>	LS	SU
	S	S	<p>d) At the N. 5th Street / Richards Boulevard intersection, under both Scenario A and Scenario B, the applicant shall dedicate right-of-way and construct an eastbound left-turn lane to provide two left-turn lanes, one through lane and one combination through-right lane; and optimize signal timing. The applicant shall also dedicate sufficient right-of-way and construct an expanded intersection at this location to the City of Sacramento Street Standards.</p> <p>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (13.2 seconds delay) in the a.m. peak hour and LOS C (24.9 seconds delay) in the p.m. peak hour, thus reducing the impact to a less-than-significant level; the level of service under Scenario B would be reduced to LOS C (21 seconds delay) in the a.m. peak hour and LOS F (84.9 seconds delay) in the p.m. peak hour; thus the impact would remain significant and unavoidable. To fully mitigate the impact under Scenario B would require further widening of Richards Boulevard, which would create secondary impacts to adjacent properties through the acquisition of additional right of way for a new vehicle travel lane (typically 12 feet); this right of way is currently unavailable. These results are shown in Table 6.11-13.</p>	LS	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p>e) <i>At the N. 7th Street / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would require the applicant to install one southbound through lane to provide one left-turn lane, two through lanes, and one right-turn lane and install one northbound left-turn lane and one through lane to provide two left-turn lanes, two through lanes and one right-turn lane. With these improvements, the intersection would operate at LOS D (36 seconds delay) in the a.m. peak hour and LOS E (59.9 seconds delay) in the p.m. peak hour under Scenario A; Scenario B would produce LOS D (43 seconds delay) in the a.m. peak hour and LOS E (76.4 seconds delay) in the p.m. peak hour.</i></p> <p><i>However, a review of the intersection reveals that there is insufficient right-of-way for the northbound improvements. Implementation of these northbound lanes would require the acquisition of right of way from the adjacent properties which are not controlled by the applicant.</i></p> <p><i>Therefore, the applicant shall dedicate sufficient right-of-way for a future expanded intersection to the City of Sacramento Street Standards and shall construct modifications to 7th Street for the southbound approach at Richards Boulevard as required to accommodate the mitigation described above. These modifications to the southbound approach would include providing two additional southbound lanes to provide one left-turn lane one through lane and two right-turn lanes. With these improvements, the intersection would operate at</i></p>	SU	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p>LOS F (131 seconds delay) in the a.m. peak hour and LOS F (142 seconds delay) in the p.m. peak hour under Scenario A; Scenario B would produce LOS F (167 seconds delay) in the a.m. peak hour and LOS F (186 seconds delay) in the p.m. peak hour. These results are shown in Table 6.11-13. The project impact would remain significant and unavoidable.</p> <p>f) At the Dos Rios Street / Richards Boulevard intersection, under both Scenario A and Scenario B, the City shall increase the cycle length to 75 seconds and optimize the signal timing in the p.m. peak hour. The applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard.</p> <p>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (15.2 seconds delay) and the level of service under Scenario B would be reduced LOS C (20.4 seconds delay) in the p.m. peak hour, thus reducing the impact to a less-than-significant level during both a.m. and p.m. peak hours. These results are shown in Table 6.11-13.</p>	LS	LS
	S	S	<p>g) At the 12th /16th Streets / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening of the roadways which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart</p>	SU	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p><i>Growth polices. Additionally, it requires the acquisition of right-of-way from adjacent properties to provide additional vehicle travel lanes (typically 12 feet per lane) for increase vehicle capacity as well as the possible relocation of light rail along N. 12th Street. These improvements would create secondary impacts to adjacent properties and are beyond the capability of the project. Hence, the impact would remain significant and unavoidable.</i></p> <p>h) <i>At the 7th Street / North B Street intersection, under both Scenario A and Scenario B, the City shall install, or cause to be installed, a traffic signal, add a northbound left-turn lane to provide one left-turn lane and one combination through-right lane; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.</i></p> <p><i>The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be</i></p>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p><i>determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.</i></p> <p><i>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (16 seconds delay) in the a.m. peak hour and LOS C (26.2 seconds delay) in the p.m. peak hour; thus reducing the impact to a less-than-significant level; the level of service under Scenario B would be reduced to LOS B (19.1 seconds delay) in the a.m. peak hour and LOS C (31.2 seconds delay) in the p.m. peak hour, thus reducing the impact to a less-than-significant level. These results are shown in Table 6.11-13.</i></p> <p>i) <i>At the 12th Street / North B Street intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening of the roadways to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, the right of way is unavailable and would require acquisition from adjacent properties as well as possible relocation of light rail along N. 12th Street. These improvements would create secondary impacts to adjacent properties and are beyond the capability of the project. Hence, the impact would remain significant and unavoidable.</i></p>	SU	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	j) <i>At the 7th Street / F Street intersection, under both Scenario A and Scenario B, the City install or cause to install a traffic signal, add a southbound left-turn lane to provide one left-turn lane and one combination through-right lane; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.</i> <i>The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.</i>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p><i>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (10.7 seconds delay) in the a.m. peak hour and LOS B (13.1 seconds delay) in the p.m. peak hour, thus reducing the impact to a less-than-significant level; the level of service under Scenario B would be reduced to LOS A (6 seconds delay) in the a.m. peak hour and LOS B (15.1 seconds delay) in the p.m. peak hour, thus reducing the impact to a less-than-significant level. These results are shown in Table 6.11-13.</i></p> <p>k) <i>At the 7th Street / G Street intersection, under both Scenario A and Scenario B, the City shall install, or cause to be installed, a southbound through lane to provide two through lanes; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.</i></p>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.</i></p> <p><i>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (19.5 seconds delay) in the a.m. peak hour and LOS A (8.5 seconds delay) in the p.m. peak hour, thus reducing the impact to a less-than-significant level; the level of service under Scenario B would be reduced to LOS A (9.7 seconds delay) in the a.m. peak hour and LOS B (12.8 seconds delay) in the p.m. peak hour, thus reducing the impact to a less-than-significant level. These results are shown in Table 6.11-13.</i></p>		
	S	S	<p>l) <i>At the 7th / Signature Street intersection, prior to occupancy of Lots 1, 3, 4, 8, 9, and 11, the applicant shall install a traffic signal under Scenario A and Scenario B and shall add one lane each from the north, east and west approaches to provide one northbound left-turn lane, one through lane and one right-turn lane; one southbound combination left-through-right lane; one eastbound right-turn lane and one combination left-through-right lane; and one westbound left-turn lane and one combination left-through-right lane. The applicant shall be required to dedicate right-of-way and construct the traffic</i></p>	SU	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p>signal at this intersection subject to future reimbursement if found appropriate in the updated finance plan.</p> <p>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (15.6 seconds delay) in the a.m. peak hour and LOS D (40.1 seconds delay) in the p.m. peak hour, thus the impact would remain significant and unavoidable; the level of service under Scenario B would be reduced to LOS C (20.4 seconds delay) in the a.m. peak hour and LOS D (46.7 seconds delay) in the p.m. peak hour, thus the impact would remain significant and unavoidable. These results are shown in Table 6.11-13. To fully mitigate the project impact would require further widening of 7th Street north of Signature Street, which would be inconsistent with the goals and objectives of the project to create a pedestrian-friendly street that features a linear park and interpretive walkway down the median of 7th Street, with landscaping and amenities to encourage street life.</p>		
6.11-2 The proposed project would add traffic to the study roadway segments that result in substandard levels of service.	S	S	<p>6.11-2 (A & B)</p> <p>a) Widening of 7th Street to provide two travel lanes per direction between Richards Boulevard and Signature Street would reduce the project impact of Scenario A to less than significant; while the project impact of Scenario B would be lessened but remain significant and unavoidable.</p>	LS	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>After implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS C (v/c of 0.74) and the level of service under Scenario B would be reduced to LOS D (v/c of 0.88). These results are shown in Appendix N. To fully mitigate the project impact under Scenario B, it would required to further widening of 7th Street for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane), which would be inconsistent with the goals and objectives of the project to create a pedestrian-friendly street that features a linear park and interpretive walkway down the median of 7th Street, with landscaping and amenities to encourage street life.</i></p> <p>b, c) <i>No feasible mitigation measures were identified that would reduce the impact of the proposed project on the Richards Boulevard roadway segments. Mitigation would require increasing the number of travel lanes for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane), which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it would require the acquisition of right-of-way for the additional lanes from properties not owned by the project.</i></p>	SU	SU

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
<p>6.11-3 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E.</p>	S	S	<p>6.11-3 (A & B)</p> <p><i>The Traffic Study found that the impacted freeway mainline segments currently operate at LOS "F" in the Baseline Condition during the PM Peak Hour without the Project, and would continue to operate at LOS "F" in both the "Near Term Cumulative Condition (2013)" and "Long Term Cumulative Condition (2030)" both without and with the Project. Freeway mainline improvements are within the exclusive jurisdiction of Caltrans which can and should propose and adopt appropriate improvement plans that would reduce freeway mainline impacts pursuant to Public Resources Code Section 21081 and CEQA Guideline Section 15091.</i></p> <p><i>The City consulted with Caltrans prior to the preparation of this Draft EIR concerning possible mitigation measures to address impacts to the identified freeway mainline segments. The discussion focused on (1) identifying any Caltrans approved or adopted capital improvement projects that would improve access to and from Sacramento's downtown and improve the existing LOS F on the freeway mainline segments to LOS "E" or better in the Near Term (2013) and Long Term (2030), and (2) proportional share mitigation impact funding contributions to those projects as a means of addressing impacts to the highways from the Project and various other pending developments in the area.</i></p> <p><i>Caltrans indicated that they have developed general cost estimates for the following projects. Though these projects are designed to address regional transportation needs that extend far beyond the downtown area, Caltrans believes they would serve to mitigate impacts from pending downtown developments and are viable:</i></p>	SU	SU

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<ul style="list-style-type: none"> • I-5 American River Bridge widening - two structures. Add one standard lane and re-establish standard shoulders to each structure: \$134 million. • I-5 HOV lanes - Garden Highway to I-80 HOV lanes with direct connectors: \$300 million. • I-5 HOV lanes - U.S. 50 Interchange to Elk Grove Blvd: \$200 million. <p>No preliminary improvement plans have been prepared for these proposed freeway improvements, and it is unclear what the cost estimates are based on or include.</p> <p>These proposed freeway improvement projects are included in Sacramento Area Council of Governments (SACOG) existing Metropolitan Transportation Plan (MTP) for preliminary engineering and environmental only. The MTP is a long-range plan which is based on growth and travel demand projections coupled with financial projections. The MTP lists hundreds of locally and regionally important projects. It is updated every three years, at which time projects can be added or deleted. SACOG uses the plan to help prioritize projects and guide regional transportation project funding decisions. The projects included in the MTP have not gone through the environmental review process and are not guaranteed for funding or construction.</p>		

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>Given the status of the improvement projects identified by Caltrans and the information available at this time, the City has concluded that there is currently insufficient information and certainty on which to base a feasible and viable mitigation measure to address the Project's impacts on the identified freeway mainline segments. The proposed freeway improvement projects are not currently approved and funded. There is no fee or other funding mechanism currently in place for future funding. Furthermore, the City cannot determine either the cost of the proposed freeway improvement projects or the Project's fair share proportional contribution to the improvement projects with sufficient certainty to enable the City to develop a fee-based mitigation measure that would satisfy the legal requirements for fee-based mitigation under both CEQA (see CEQA Guidelines 15126.4) and constitutional principles that call for a nexus and rough proportionality between a project's impacts and the fee-based mitigation measure. Finally, the prospects of the proposed freeway improvements ever being constructed remains uncertain due to funding priorities and on-going policy developments that may favor other approaches to addressing freeway congestion.</i></p> <p><i>Widening the freeway mainline right of way would create adverse impacts by requiring the removal of historic buildings in the Old Sacramento District, and potentially the Crocker Art Museum, which are already situated adjacent to the existing freeway right of way; would potentially require modifications to the flood wall/levee that protects Downtown Sacramento; and would create further physical barriers between people living and working in Downtown Sacramento and the Sacramento</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>River and the Old Sacramento District. Such new impacts from widening the freeway would not be capable of mitigation to a less than significant level and would violate City policies concerning: the preservation of the Old Sacramento District; promoting ease of pedestrian access between Downtown Sacramento and the Sacramento River; promoting ease of pedestrian access between Downtown Sacramento and the Old Sacramento District; and protecting the integrity of Sacramento's flood control system.</i></p> <p><i>Consequently, the City has been unable to identify any feasible mitigation measures that could reduce or avoid the impact of the Project on the freeway mainline segments to a less than significant level. The California Environmental Quality Act (Pub. Resources Code, §21000 et seq.) defines "feasible" for these purposes as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors (Pub. Resources Code, §21061.1). Therefore, the impacts of the proposed project on the three I-5 freeway segments would remain significant and unavoidable.</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
6.11-4 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline.	S	S	6.11-4 (A & B) <i>No feasible mitigation measures were identified that would reduce the impact of the project on I-5 freeway ramps. Widening the freeway may reduce the impact but would require acquisition of right-of-way which is not under the control of the applicant. The freeway interchanges are not under the jurisdiction of the City but are subject to Caltrans' jurisdiction. Finally, no improvement is included in any of Caltrans' funding mechanisms. Because mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is not an established funding mechanism available for contribution, this mitigation measure is considered infeasible and the impact is considered significant and unavoidable.</i>	SU	SU
6.11-5 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.	S	S	6.11-5 (A & B) <i>No feasible mitigation measures were identified that would reduce the impact of the freeway ramp queues. The freeway ramp is not under the jurisdiction of the City but is subject to Caltrans' jurisdiction. In addition, to implement this mitigation measure would require acquisition of additional right of way for a new lane (typically 12 feet per lane). Finally, this improvement is not included in any of Caltrans' funding mechanisms. Because mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is not an established funding mechanism available for contribution, mitigation is considered infeasible and the impact is considered significant and unavoidable.</i>	SU	SU

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
6.11-6 The proposed project would increase demand on the public transit system.	PS	PS	6.11-6 (A & B) <i>The City shall coordinate with RT to modify its bus routes and/or frequencies to better serve the needs of the proposed project. In particular, RT may increase the frequency of Route 33, which is a neighborhood shuttle service that operates between the Richards Boulevard district and the downtown area.</i>	LS	LS
6.11-7 The proposed project may interfere with the implementation of proposed bikeways.	PS	PS	6.11-7 (A & B) <i>The project applicant shall include on-site bikeway facilities to achieve the intent of the Bikeway Master Plan subject to review and approval of Development Service, Development Engineering Division. All bikeways shall meet the City's design standards and ensure that all roadway designs would not result in unsafe conditions for bicyclists.</i>	LS	LS
6.11-8 The proposed project would increase the number of pedestrians on the roadway system and some proposed project design elements could result in unsafe conditions for pedestrians.	PS	PS	6.11-8 (A & B) <i>Pedestrian walkways shall be designed in compliance with the City's design standards and shall comply with the guidelines contained in <u>Roundabouts: An Informational Guide</u> (FHWA 2000) and/or be designed to the satisfaction of the city traffic engineer. Walkways shall be designed around the outside of the roundabouts rather than through the center unless otherwise accepted by the city traffic engineer after the applicant has technically demonstrated the safety and ADA accessibility of the 'traffic plaza'. Additionally, by installing a traffic signal at 7th Street and Signature Street to replace the proposed roundabout at this intersection, all new pedestrian cross walks will be designed to City of Sacramento Street Standards.</i>	LS	LS

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
6.11-9 The proposed project does not comply with City design guidelines or normal traffic engineering practices with regard to the design of the secondary roundabouts.	PS	PS	6.11-9 (A & B) a) <i>The gateway roundabout on 7th Street at New Street "A" shall be designed in compliance with the guidelines contained in <u>Roundabouts: An Informational Guide</u> (FHWA 2000) or the applicant shall provide sufficient technical data to the city traffic engineer in order to demonstrate the safety and ADA accessibility of the proposed 'traffic plaza'. This intersection will carry a significant volume of automobile traffic (from an estimated low of 995 vehicles during the a.m. peak hour under Baseline with Scenario A conditions to an estimated high of 1450 vehicles during the p.m. peak hour under Long Term Year 2030 with Scenario B conditions) and shall be designed according to standard design practice for high-volume roadways and/or to the satisfaction of the City Traffic Engineer.</i> b) <i>The intersections on New Street "C" where roundabouts are identified in the Township 9 Design Guidelines shall be designed in compliance with City's requirements for traffic circles or to the satisfaction of the city traffic engineer. The automobile traffic volumes at these intersections are expected to be low and should be well-served by traffic circles.</i>	LS	LS
6.11-10 The proposed project is required to provided sufficient vehicle and bicycle parking to comply with the City's zoning code requirements.	PS	PS	6.11-10 (A & B) <i>The project applicant shall provide sufficient on-site bicycle parking spaces to comply with the City's Zoning Code requirement.</i>	LS	LS

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	Scenario A	Scenario B		Scenario A	Scenario B
6.11-11 The proposed project would increase parking demand during special events at the riverfront pavilion.	PS	PS	6.11-11 (A & B) <i>The project applicant shall develop a traffic management program for special events, which is to be approved by City Traffic Engineer. The program shall include ways to mitigate the adverse impacts of special event traffic on parking in the project vicinity. The traffic management plan shall identify the amount of vehicle parking necessary for the event, where parking can be temporarily located for the event, and how event traffic will circulate to enter and exit the site. The traffic management plan shall provide all mitigation measures necessary for the event.</i>	LS	LS
6.11-12 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.	S	S	6.11-12 (A & B) a) <i>At the I-5 southbound ramps / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening of the freeway ramp to add an additional lane (typically 12 feet) to the west and acquisition of right-of-way, which is beyond the capability of the project. However, the applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard.</i>	SU	SU

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p>b) At the I-5 northbound ramps / Richards Boulevard intersection, optimizing signal timing would lessen the project impact; however, to fully mitigate the project impact would require widening of the freeway on-ramp and acquisition of right-of-way, which is beyond the capability of the project. Therefore, the project impact would remain significant and unavoidable under Scenario B. The applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard.</p> <p>c) At the Bercut Drive / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would require further widening of Richards Boulevard which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additional lanes (typically 12 feet per lane) would increase the capacity of the intersection but would require the acquisition of right-of-way from adjacent properties. This is beyond the capability of the project because the property is not controlled by the applicant and the right of way is not available; hence the impact would remain significant and unavoidable.</p>	SU	SU
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	Scenario A	Scenario B		Scenario A	Scenario B
			<p>d) <i>At the N. 5th Street / Richards Boulevard intersection, under both Scenario A and Scenario B, optimize signal timing would lessen the project impact to less-than-significant level under Scenario A, but the impact under Scenario B would remain significant and unavoidable. To fully mitigate the impact would require widening of Richards Boulevard which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth policies. The applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard and dedicate sufficient right-of-way for a future expanded intersection to City of Sacramento Standards.</i></p>	LS	SU
			<p>e) <i>At the N. 7th Street / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigation of the impact would require adding one northbound left-turn and one through lanes to provide two left-turn lanes, two through lanes and one right-turn lane; add one southbound through lane to provide one left-turn lane, two through lane and one right-turn lane; add one eastbound left-turn and one through lanes to provide two left-turn lanes, two through lanes and one right-turn lane; add one westbound left-turn lane to provide two left-turn lanes, one through lane, and one combination through-right lane; and optimize signal timing. The applicant shall dedicate right-of-way along his property for the intersection modifications described above and dedicate sufficient right-of-way for an</i></p>	LS	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p>expanded intersection to the City of Sacramento Standards. The applicant shall pay a fair share contribution to fund acquisition of right-of-way by the City from other properties as required for the construction of the improvements described above, and in the event right-of-way is not made available, provide funding for future modifications to the intersection.</p> <p>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS E (57.3 seconds delay) in the a.m. peak hour and LOS E (63.8 seconds delay) in the p.m. peak hour, thus reducing the impact to less than significant during both a.m. and p.m. peak hours; and the level of service under Scenario B would be reduced to LOS F (106.9 seconds delay) in the a.m. peak hour and LOS F (87.4 seconds delay) in the p.m. peak hour, thus the impact would be less than significant during the p.m. peak hour but would remain significant and unavoidable during the a.m. peak hour. These results are shown in Table 6.11-20. To fully mitigate the impact would require widening of Richards Boulevard and 7th Street which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity, which is not controlled by the applicant of this project.</p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			f) <i>At the 12th / 16th Streets / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would entail widening of 12th Street, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity and/or relocation of light rail. These improvements are beyond the control of the project applicant.</i>	SU	SU
			g) <i>At the 7th Street / North B Street intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening of the roadways, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant.</i>	SU	SU
			h) <i>At the 12th Street / North B Street intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening of 12th Street which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity and/or</i>	SU	SU

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>relocation of light rail. These improvements are beyond the capability of the project and beyond the control of the project applicant.</i></p> <p>i) <i>At the 7th Street / Big Four Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would entail widening of 7th Street, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant.</i></p> <p>j) <i>At the 7th Street / F Street intersection, under both Scenario A and Scenario B, mitigating project impact would entail widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community.</i></p> <p>k) <i>At the 6th Street / G Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity. Further, a wide roadway is in</i></p>	SU	SU
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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>opposition of the City's goal of providing a pedestrian-friendly and walkable community.</i></p> <p>l) <i>At the 7th Street / G Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way (typically 12 feet per lane). Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community.</i></p> <p>m) <i>At the 6th Street / H Street intersection, under both Scenario A and Scenario B, mitigating project impact would entail widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community.</i></p> <p>n) <i>At the 7th Street / H Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community.</i></p>	SU	SU
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	Scenario A	Scenario B		Scenario A	Scenario B
			o) <i>At the 6th Street / I Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way (typically 12 feet per lane) to allow more vehicle capacity. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community.</i>	SU	SU
			p) <i>At the 6th Street / J Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadway beyond the road width found in downtown and necessitate acquisition of right-of-way (typically 12 feet per lane) to allow more vehicle capacity. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community.</i>	SU	SU
			q) <i>At the 7th / Signature Street intersection, under both Scenario A and Scenario B, with implementation of Mitigation Measure 6.11-1(l), the level of service under Scenario A would be reduced to LOS B (13.5 seconds delay) in the a.m. peak hour and LOS C (31.2 seconds delay) in the p.m. peak hour thus reducing the impact to less-than-significant; and the level of service under Scenario B would be reduced to LOS B (16.6 seconds delay) in the a.m. peak hour and LOS D (39.3 seconds delay) in the p.m. peak hour thus remaining significant and unavoidable.</i>	LS	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
6.11-13 The proposed project would add traffic to the study roadway segments.	S	S	6.11-13 (A & B) a) <i>Implementation of Mitigation Measure 6.11-2(a) would reduce the project impact of Scenario A to less-than-significant; while the project impact of Scenario B would be lessened but remain significant and unavoidable. Further widening 7th Street in order to fully mitigate the impact of Scenario B is infeasible because it would create an unfriendly pedestrian environment which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. After implementation of this mitigation measure, Scenario A would produce LOS C (v/c of 0.75) and Scenario B would produce LOS D (v/c of 0.88). These results are shown in Appendix N.</i>	LS	SU
			b, c) <i>No feasible mitigation measures were identified that would reduce the impact of the proposed project on the Richards Boulevard roadway segments. Mitigation would require increasing the number of travel lanes, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it would require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity from properties not owned by the applicant. Therefore, the impacts of proposed project on roadway segments would remain significant and unavoidable.</i>	SU	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
<p>6.11-14 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E under near term conditions.</p>	S	S	<p>6.11-14 (A & B)</p> <p><i>The Traffic Study found that the impacted freeway mainline segments currently operate at LOS "F" in the Baseline Condition during the PM Peak Hour without the Project, and would continue to operate at LOS "F" in both the "Near Term Cumulative Condition (2013)" and "Long Term Cumulative Condition (2030)" both without and with the Project. Freeway mainline improvements are within the exclusive jurisdiction of Caltrans which can and should propose and adopt appropriate improvement plans that would reduce freeway mainline impacts pursuant to Public Resources Code Section 21081 and CEQA Guideline Section 15091.</i></p> <p><i>The City consulted with Caltrans prior to the preparation of this Draft EIR concerning possible mitigation measures to address impacts to the identified freeway mainline segments. The discussion focused on (1) identifying any Caltrans approved or adopted capital improvement projects that would improve access to and from Sacramento's downtown and improve the existing LOS F on the freeway mainline segments to LOS "E" or better in the Near Term (2013) and Long Term (2030), and (2) proportional share mitigation impact funding contributions to those projects as a means of addressing impacts to the highways from the Project and various other pending developments in the area.</i></p> <p><i>Caltrans indicated that they have developed general cost estimates for the following projects. Though these projects are designed to address regional transportation needs that extend far beyond the downtown area, Caltrans believes they would serve to mitigate impacts from pending downtown developments and are viable:</i></p>	SU	SU

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			<ul style="list-style-type: none"> <i>I-5 American River Bridge widening - two structures. Add one standard lane and re-establish standard shoulders to each structure: \$134 million.</i> <i>I-5 HOV lanes - Garden Highway to I-80 HOV lanes with direct connectors: \$300 million.</i> <i>I-5 HOV lanes - U.S. 50 Interchange to Elk Grove Blvd: \$200 million.</i> <p><i>No preliminary improvement plans have been prepared for these proposed freeway improvements, and it is unclear what the cost estimates are based on or include.</i></p> <p><i>These proposed freeway improvement projects are included in Sacramento Area Council of Governments (SACOG) existing Metropolitan Transportation Plan (MTP) for preliminary engineering and environmental only. The MTP is a long-range plan which is based on growth and travel demand projections coupled with financial projections. The MTP lists hundreds of locally and regionally important projects. It is updated every three years, at which time projects can be added or deleted. SACOG uses the plan to help prioritize projects and guide regional transportation project funding decisions. The projects included in the MTP have not gone through the environmental review process and are not guaranteed for funding or construction.</i></p> <p><i>Given the status of the improvement projects identified by Caltrans and the information available at this time, the City has concluded that there is currently insufficient information and certainty on which to base a feasible and viable mitigation measure to address the Project's impacts on the identified freeway mainline segments. The proposed freeway improvement projects are not</i></p>		

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>currently approved and funded. There is no fee or other funding mechanism currently in place for future funding. Furthermore, the City cannot determine either the cost of the proposed freeway improvement projects or the Project's fair share proportional contribution to the improvement projects with sufficient certainty to enable the City to develop a fee-based mitigation measure that would satisfy the legal requirements for fee-based mitigation under both CEQA (see CEQA Guidelines 15126.4) and constitutional principles that call for a nexus and rough proportionality between a project's impacts and the fee-based mitigation measure. Finally, the prospects of the proposed freeway improvements ever being constructed remains uncertain due to funding priorities and on-going policy developments that may favor other approaches to addressing freeway congestion.</i></p> <p><i>Widening the freeway mainline right of way would create adverse impacts by requiring the removal of historic buildings in the Old Sacramento District, and potentially the Crocker Art Museum, which are already situated adjacent to the existing freeway right of way; would potentially require modifications to the flood wall/levee that protects Downtown Sacramento; and would create further physical barriers between people living and working in Downtown Sacramento and the Sacramento River and the Old Sacramento District. Such new impacts from widening the freeway would not be capable of mitigation to a less than significant level and would violate City policies concerning: the preservation of the Old Sacramento District; promoting ease of pedestrian access between Downtown Sacramento and the Sacramento River; promoting ease of pedestrian access</i></p>		

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TABLE 3-1

SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>between Downtown Sacramento and the Old Sacramento District; and protecting the integrity of Sacramento's flood control system.</i></p> <p><i>Consequently, the City has been unable to identify any feasible mitigation measures that could reduce or avoid the impact of the Project on the freeway mainline segments to a less than significant level. The California Environmental Quality Act (Pub. Resources Code, §21000 et seq.) defines "feasible" for these purposes as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors (Pub. Resources Code, §21061.1).</i></p>		
<p>6.11-15 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline under both Scenario A and Scenario B.</p>	S	S	<p>6.11-15 (A & B)</p> <p><i>No feasible mitigation measures were identified that would reduce the impact of the project on I-5 freeway ramps. The freeway ramp is not under the jurisdiction of the City but is subject to Caltrans' jurisdiction. Finally, improvements to this interchange are not included in any of Caltrans' funding mechanisms. Because mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is no established funding mechanism available for contribution, mitigation is considered infeasible.</i></p>	SU	SU

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
6.11-16 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.	S	S	6.11-16 (A & B) <i>No feasible mitigation measures were identified that would reduce the impact of the freeway ramp queues. The freeway off-ramps are not under the jurisdiction of the City but are subject to Caltrans' jurisdiction. Finally, ramp improvements are not included in any of Caltrans' funding mechanisms. Because freeway mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is no established funding mechanism available for contribution, mitigation is considered infeasible.</i>	SU	SU
6.11-17 The proposed project would increase demand on the public transit system.	PS	PS	6.11-17 (A & B) <i>The City shall coordinate with RT to modify its bus routes and/or frequencies to better serve the needs of the proposed project and to help fund any necessary improvements. In particular, RT may increase the frequency of Route 33, which is a neighborhood shuttle service that operates between the Richards Boulevard district and the downtown area.</i>	LS	LS
6.11-18 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.	S	S	6.11-18 (A & B) a) <i>At the I-5 northbound ramps / Richards Boulevard intersection, optimizing signal timing would lessen the project impact; therefore the applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard. To fully mitigate the project impact would require widening of the freeway on-ramp and acquisition of right-of-way, which is under Caltrans jurisdiction and beyond the capability of the project.</i>	SU	SU

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p>b) <i>At the Bercut Drive / Richards Boulevard intersection, under both Scenario A and Scenario B, the City shall install, or cause to be installed, one westbound through lane to provide one left-turn lane, four through lanes and one combination through-right lane; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.</i></p> <p><i>The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.</i></p>	LS	LS

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SUMMARY OF IMPACTS AND MITIGATION MEASURES

Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p><i>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (12.7 seconds delay) in the a.m. peak hour and LOS C (21.1 seconds delay) in the p.m. peak hour, thus reducing the impact to less than significant; and the level of service under Scenario B would be reduced to LOS B (12.5 seconds delay) in the a.m. peak hour and LOS C (24.8 seconds delay) in the p.m. peak hour thus reducing impact to less than significant. These results are shown in Table 6.11-24.</i></p> <p>c) <i>At the N. 5th Street / Richards Boulevard intersection, under Scenario B, the applicant shall dedicate right-of-way and construct an additional one westbound through lane to provide one left-turn lane, four through lanes and one combination through-right lane; and optimize signal timing. The applicant shall also dedicate sufficient right-of-way and construct an expanded intersection to the City of Sacramento Standards.</i></p> <p><i>With implementation of this mitigation measure, the level of service under Scenario B would be reduced to LOS C (24.1seconds delay) in the a.m. peak hour and LOS C (21.3 seconds delay) in the p.m. peak hour thus reducing impact to less than significant. These results are shown in Table 6.11-26.</i></p> <p><i>However, the implementation of Mitigation Measure 6.11-18 d) at 7th Street/Richards Boulevard would create a downstream secondary impact at the N. 5th Street/ Richards Boulevard intersection during the p.m. peak hour under Scenario A, where the level of service would degrade to LOS E. The secondary</i></p>	LS	LS

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p><i>impact may be mitigated by implementing Mitigation Measure 6.11-18c and modifying the signal phasing splits during the p.m. peak hour, which would reduce the secondary impact to a less-than-significant level. With implementation of this measure, the level of service under Scenario A would be reduced to LOS C (24.7 seconds delay) in the a.m. peak hour and LOS D (33.5 seconds delay) in the p.m. peak hour. These results are shown in Table 6.11-26. These mitigation measures shall be implemented by the applicant.</i></p> <p>d) <i>At the N. 7th Street / Richards Boulevard intersection, under both Scenario A and Scenario B, the applicant shall dedicate right-of-way for and construct one westbound through lane to provide one left-turn lane, four through lanes and one right-turn lane; and optimize signal timing.</i></p> <p><i>With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS D (36.3 seconds delay) in the a.m. peak hour and LOS C (26.3 seconds delay) in the p.m. peak hour, thus reducing the impact to less than significant during the p.m. peak hour while the impact during the a.m. peak hour remains significant and unavoidable; and the level of service under Scenario B would be reduced to LOS D (48.5 seconds delay) in the a.m. peak hour and LOS D (45.4 seconds delay) in the p.m. peak hour thus the impact remains significant and unavoidable during both peak hours. These results are shown in Table 6.11-26.</i></p>	SU	SU

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p>e) At the N. 5th Street / Bannon Street intersection, under Scenario B during the p.m. peak hour, the City shall optimize signal timing in order to improve vehicle progression. Implementation of this measure would mitigate the project impact to a less-than-significant level. The applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard.</p>	LS	LS
			<p>f) At the 7th Street / North B Street intersection, under both Scenario A and Scenario B, mitigating the project impact would entail widening of the roadways, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way (typically 12 feet per lane) and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant.</p>	SU	SU
			<p>g) At the 6th Street / Big Four Boulevard intersection, mitigating the project impact would entail widening the roadways, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane). These improvements are beyond the capability of the project and not controlled by the project applicant.</p>		

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			h) <i>At the 7th Street / Big Four Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening 7th Street which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant.</i>	SU	SU
			i) <i>At the 7th Street / F Street intersection, under both Scenario A and Scenario B, mitigating project impact would entail widening the roadways beyond the road width found in downtown which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets, walkable communities and the Smart Growth polices. Additionally, it will require acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane). These improvements are beyond the capability of the project and not controlled by the project applicant.</i>	SU	SU
			j) <i>At the 6th Street / G Street intersection, under both Scenario A and Scenario B, mitigating project impact would entail widening the roadways beyond the road width found in downtown and necessitate acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) which is</i>	SU	SU

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p>beyond the capability of the project and not controlled by the project applicant. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community.</p> <p>k) At the 7th Street / G Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the road width found in downtown and necessitate acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) which is not controlled by the project applicant. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community.</p> <p>l) At the 6th Street / H Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the road width found in downtown and necessitate acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) which is beyond the control of the project applicant. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community.</p>	SU	SU
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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p>m) <i>At the 6th Street / I Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the road width found in downtown and necessitate acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane). Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community.</i></p>	SU	SU
			<p>n) <i>At the 6th Street / J Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the road width found in downtown and necessitate acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) which is beyond the control of the project applicant. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community.</i></p>	SU	SU
			<p>o) <i>At the Richards Boulevard / 12th Street intersection, mitigating the project impact would require widening of 12th Street, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant.</i></p>	SU	SU

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<p>p) At the 12th Street / Bannon Street intersection, mitigating the project impact would require widening of 12th and Bannon Streets, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant.</p>	SU	SU
			<p>q) At the 7th / Signature Street intersection, the applicant shall implement Mitigation Measure 6.11-1(l) and add one westbound left-turn lane to provide two left-turn lanes and one through-right lane. With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS C (31.8 seconds delay) in the a.m. peak hour and LOS F (215.9 seconds delay) in the p.m. peak hour, thus the impact would remain significant and unavoidable; and the level of service under Scenario B would be reduced to LOS C (33.9 seconds delay) in the a.m. peak hour and LOS F (177.7 seconds delay) in the p.m. peak hour, thus the impact would be reduced to less than significant during the a.m. peak hour but the impact during the p.m. peak hour would remain significant and unavoidable. These results are shown in Table 6.11-26. To fully mitigate the project impact would require further widening of 7th Street north of Signature Street for additional vehicle travel lanes to increase the capacity of the</p>	SU	SU

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Impact	Level of Significance Prior to Mitigation		Mitigation Measure(s)	Level of Significance After Mitigation	
	Scenario A	Scenario B		Scenario A	Scenario B
			<i>intersection (typically 12 feet per lane), which would be inconsistent with the goals and objectives of the project to create a pedestrian-friendly street that features a linear park and interpretive walkway down the median of 7th Street, with landscaping and amenities to encourage street life.</i>		
6.11-19 The proposed project would add traffic to the study roadway segments that results in substandard levels of service.	S	S	6.11-19 (A & B) a) <i>Widening of 5th Street to provide two travel lanes per direction would reduce the project impact of Scenario B to a less-than-significant level.</i>	LS	LS
	S	S	b) <i>Under both Scenario A and Scenario B, widening of 7th Street to provide two travel lanes per direction between Richards Boulevard and Signature Street would improve the roadway operations but the impacts of the 7th Street roadway segment would remain significant and unavoidable. As described in Mitigation Measure 6.11-12(a), further widening of 7th Street would necessitate acquisition of right-of-way and would create an unfriendly pedestrian environment. After implementation of this mitigation measure, Scenario A would produce LOS D (v/c of 0.87) and Scenario B would produce LOS D (v/c of 0.87). These results are shown in the Appendix N.</i>	SU	SU
			c) <i>Under both Scenario A and Scenario B, no feasible mitigation measure was identified that would reduce the impact of the proposed project on the Richards Boulevard roadway segments. Mitigation would require increasing the number of travel lanes to increase the capacity of the intersection (typically 12 feet per lane), which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth</i>	SU	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
	S	S	<p><i>polices. Additionally, it will require acquisition of right-of-way and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant.</i></p> <p>d,e) <i>Under both Scenario A and Scenario B, no feasible mitigation measure was identified that would reduce the impact of the proposed project on the Bannon Street roadway segments. Mitigation would require increasing the number of travel lanes, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way. These improvements are beyond the capability of the project and not controlled by the project applicant.</i></p>	SU	SU
6.11-20 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E under near term conditions.	S	S	<p>6.11-20 (A & B) <i>The Traffic Study found that the impacted freeway mainline segments currently operate at LOS "F" in the Baseline Condition during the PM Peak Hour without the Project, and would continue to operate at LOS "F" in both the "Near Term Cumulative Condition (2013)" and "Long Term Cumulative Condition (2030)" both without and with the Project. Freeway mainline improvements are within the exclusive jurisdiction of Caltrans which can and should propose and adopt appropriate improvement plans that would reduce freeway mainline impacts pursuant to Public Resources Code Section 21081 and CEQA Guideline Section 15091.</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>The City consulted with Caltrans prior to the preparation of this Draft EIR concerning possible mitigation measures to address impacts to the identified freeway mainline segments. The discussion focused on (1) identifying any Caltrans approved or adopted capital improvement projects that would improve access to and from Sacramento's downtown and improve the existing LOS F on the freeway mainline segments to LOS "E" or better in the Near Term (2013) and Long Term (2030), and (2) proportional share mitigation impact funding contributions to those projects as a means of addressing impacts to the highways from the Project and various other pending developments in the area.</i></p> <p><i>Caltrans indicated that they have developed general cost estimates for the following projects. Though these projects are designed to address regional transportation needs that extend far beyond the downtown area, Caltrans believes they would serve to mitigate impacts from pending downtown developments and are viable:</i></p> <ul style="list-style-type: none"> <i>• I-5 American River Bridge widening - two structures. Add one standard lane and re-establish standard shoulders to each structure: \$134 million.</i> <i>• I-5 HOV lanes - Garden Highway to I-80 HOV lanes with direct connectors: \$300 million.</i> <i>• I-5 HOV lanes - U.S. 50 Interchange to Elk Grove Blvd: \$200 million.</i> <p><i>No preliminary improvement plans have been prepared for these proposed freeway improvements, and it is unclear what the cost estimates are based on or include.</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>These proposed freeway improvement projects are included in Sacramento Area Council of Governments (SACOG) existing Metropolitan Transportation Plan (MTP) for preliminary engineering and environmental only. The MTP is a long-range plan which is based on growth and travel demand projections coupled with financial projections. The MTP lists hundreds of locally and regionally important projects. It is updated every three years, at which time projects can be added or deleted. SACOG uses the plan to help prioritize projects and guide regional transportation project funding decisions. The projects included in the MTP have not gone through the environmental review process and are not guaranteed for funding or construction.</i></p> <p><i>Given the status of the improvement projects identified by Caltrans and the information available at this time, the City has concluded that there is currently insufficient information and certainty on which to base a feasible and viable mitigation measure to address the Project's impacts on the identified freeway mainline segments. The proposed freeway improvement projects are not currently approved and funded. There is no fee or other funding mechanism currently in place for future funding. Furthermore, the City cannot determine either the cost of the proposed freeway improvement projects or the Project's fair share proportional contribution to the improvement projects with sufficient certainty to enable the City to develop a fee-based mitigation measure that would satisfy the legal requirements for fee-based mitigation under both CEQA (see CEQA Guidelines 15126.4) and constitutional principles that call for a nexus and rough proportionality between a project's impacts and the fee-based mitigation measure. Finally,</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<p><i>the prospects of the proposed freeway improvements ever being constructed remains uncertain due to funding priorities and on-going policy developments that may favor other approaches to addressing freeway congestion.</i></p> <p><i>Widening the freeway mainline right of way would create adverse impacts by requiring the removal of historic buildings in the Old Sacramento District, and potentially the Crocker Art Museum, which are already situated adjacent to the existing freeway right of way; would potentially require modifications to the flood wall/levee that protects Downtown Sacramento; and would create further physical barriers between people living and working in Downtown Sacramento and the Sacramento River and the Old Sacramento District. Such new impacts from widening the freeway would not be capable of mitigation to a less than significant level and would violate City policies concerning: the preservation of the Old Sacramento District; promoting ease of pedestrian access between Downtown Sacramento and the Sacramento River; promoting ease of pedestrian access between Downtown Sacramento and the Old Sacramento District; and protecting the integrity of Sacramento's flood control system.</i></p> <p><i>Consequently, the City has been unable to identify any feasible mitigation measures that could reduce or avoid the impact of the Project on I-5 freeway or SR 160 mainline segments to a less than significant level. The California Environmental Quality Act (Pub. Resources Code, §21000 et seq.) defines "feasible" for these purposes as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and</i></p>		

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	Scenario A	Scenario B		Scenario A	Scenario B
			<i>technological factors (Pub. Resources Code, §21061.1). Therefore, the impacts of the proposed Project on the three I-5 freeway segments would remain significant and unavoidable.</i>		
6.11-21 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline under both Scenario A and Scenario B.	S	S	6.11-21 (A & B) <i>No feasible mitigation measures were identified that would reduce the impact of the project on I-5 freeway ramp and weaving areas. The freeway is not under the jurisdiction of the City but is subject to Caltrans' jurisdiction. Improvements to this interchange are not included in any of Caltrans' funding mechanisms. Because mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is no established funding mechanism available for contribution, mitigation is considered infeasible.</i>	SU	SU
6.11-22 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.	S	S	6.11-22 (A & B) <i>No feasible mitigation measures were identified that would reduce the impact of the freeway ramp queues. The freeway ramps are not under the jurisdiction of the City but subject to Caltrans' jurisdiction. Improvements to these ramps are not included in any of Caltrans' funding mechanisms. Because mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is no established funding mechanism available for contribution, mitigation is considered infeasible.</i>	SU	SU

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	Scenario A	Scenario B		Scenario A	Scenario B
6.11-23 The proposed project would increase demand on the public transit system.	PS	PS	6.11-23 (A & B) <i>The City shall work with RT to modify its bus routes and/or frequencies to better serve the needs of the proposed project and to help fund any necessary improvements. In particular, RT should increase the frequency of Route 33, which is a neighborhood shuttle service that operates between the Richards Boulevard district and the downtown area.</i>	LS	LS
6.11-24 The project construction would increase traffic volumes in the project area and involve the use of large construction equipment and vehicles that could result in traffic hazards.	PS	PS	6.11-24 (A & B) <i>Prior to the issuance of grading permits for the Town Ship 9 project, the project applicant shall prepare a Construction Management Plan that will address construction traffic and ensure acceptable and safe operating conditions on project area roadways. This Plan shall be reviewed and approved by the City and any other affected agency and will contain the following (at a minimum):</i> <ul style="list-style-type: none"> • <i>Identification of the anticipated mix of construction equipment and vehicles and their proposed staging location.</i> • <i>Number of truck trips and the daily schedule of truck trips entering and leaving the site. Truck trips shall be scheduled outside the AM and PM peak hours of traffic.</i> • <i>Identification of measures to maintain safe vehicular, pedestrian and bicycle movements in the project area.</i> • <i>Maintenance of access for emergency vehicles in the project area.</i> • <i>Provision of manual traffic control (if required).</i> • <i>Clear demarcation of construction areas along project roadways.</i> • <i>Provision of this plan 14 days prior to the commencement of construction.</i> 	LS	LS

LS = Less than Significant

S = Significant

PS = Potentially Significant

SU = Significant and Unavoidable

NA = Not Applicable

4.0 LAND USE CONSISTENCY AND COMPATIBILITY

4.0 LAND USE CONSISTENCY AND COMPATIBILITY

INTRODUCTION

This chapter of the EIR provides an overview of the land use and planning effects that may result from development of the Township 9 project. Existing and planned land uses in and adjacent to the project site, including land use designations and zoning are described. Section 15125 of the CEQA Guidelines states that the EIR shall discuss “any inconsistencies between the proposed project and applicable general plans and regional plans.” Potential inconsistencies between the proposed project and the City of Sacramento General Plan, the Richards Boulevard Area Plan (RBAP), the Central City Community Plan (CCCP), the American River Parkway Plan, the City’s Comprehensive Zoning Ordinance, the Sacramento Area Council of Governments (SACOG) Blueprint, and the Township 9 Design Guidelines are evaluated in this chapter. An analysis of the project’s consistency with specific adopted goals and policies is included in Appendix C.

An EIR may provide information regarding land use, socio-economic, population, employment, or housing issues, but CEQA does not recognize these issues as direct physical impacts to the environment. A direct physical change in the environment is a physical change in the environment that is caused by and immediately related to the project (CEQA Guidelines section 15064(d) (1)). Therefore, this chapter does not identify environmental impacts and mitigation measures. Physical impacts on the environment that could result from implementation of the project or project alternatives are not addressed in this chapter, but in the appropriate technical sections of this EIR.

No comments relating to land use or planning issues were raised in comment letters received in response to the NOP.

ENVIRONMENTAL SETTING

The majority of the project site is generally flat, with the exception of increase in grade from the toe to the crest of the levee on the north side of the project site. The site contains impervious surfaces such as parking lots and driveways and 16 existing buildings that accommodate industrial, warehouse, commercial, and office uses. Current active businesses on the property include offices of the project applicant, cold storage, concrete storage and delivery, a livestock feed supplier, hay-bail compression and delivery, and a warehouse occupied by the Sacramento Habitat for Humanity. Most of the buildings onsite are approximately 2 to 4 stories tall. Vegetation on the site is sparse and consists of shrubs and trees located sporadically across the site. The northwestern area of the project site is undeveloped, and areas to the north along the American River Parkway contain vegetation, trees, and a gravel path. A portion of the site, approximately 12 acres, is located on the American River side of the levee.

The project site is located in the RBAP area in the City of Sacramento. The approximately 65-acre project site is generally bounded by Richards Boulevard to the south, the American River to the north, North 5th Street to the west, and North 7th Street to the east. Surrounding land uses consist of the American River to the north, industrial, manufacturing, and warehousing uses to the south, industrial and office uses to the east, and industrial and office uses to the west. Regional access to the project site is provided by Interstate 5 (I-5) and State Route 160 (SR 160). Local access is provided by Richards Boulevard.

There are mature trees lining North 7th Street and established landscaping along the east side of the street. Likewise, there are mature trees and landscaping along the west side of North 5th Street. Heavily degraded riparian habitat covers the water side of the American River levee.

Surrounding Land Uses

As described above, the proposed project site is surrounded by several different uses. The American River borders the site to the north. A dirt trail runs along the top of the levee providing a pedestrian and bicycle trail and providing levee and river access for maintenance activities. To the west across North 5th Street are Sump Pump 111, a Sacramento County Sheriff facility, state and county offices, and a FedEx distribution center. To the south across Richard Boulevard are various manufacturing uses, warehouses, and the Office of State Publishing. To the east across North 7th Street are several office buildings, including the Continental Plaza office park. Several buildings house State of California offices. In addition, there are warehousing uses near the northeastern corner of the project site along the levee. Most structures surrounding the project site are 2 to 3 stories in height.

Land Use and Zoning Designations

The City of Sacramento General Plan land use designation for the proposed project site is Special Planning District (SPD). The CCCP designates the proposed project site as Industrial-Residential. The RBAP designates the project site at Industrial/Residential (I/R), Transit Oriented Office (O), Open Space (OS). The SACOG Blueprint currently identifies the site as Parks. The proposed project site is currently zoned American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)) (see Figure 2-3 in Chapter 2, Project Description). These zoning designations are described below under Regulatory Setting.

REGULATORY SETTING

Federal and State Regulations

There are no applicable federal or state agencies, plans, or policies that oversee local planning issues.

Local Regulations

City of Sacramento General Plan

The Sacramento General Plan Update (SGPU) was adopted on January 19, 1988. The SGPU replaced the heavily amended 1974 General Plan for Sacramento. The General Plan is a 20-year policy guide for physical, economic, and environmental growth and renewal of the City. A total of nine sections are contained within the SGPU, each of which contains goals and policies intended to guide buildout of the City. Land use goals and policies from the SGPU that are applicable to the proposed project are listed below. The City is presently in the process of updating its General Plan, with an anticipated completion in 2008.

RESIDENTIAL LAND USE ELEMENT

Goal A Improve the quality of residential neighborhoods Citywide by protecting, preserving and enhancing their character.

Policies

5.

Continue redevelopment and rehabilitation efforts in existing target areas and identify other areas experiencing blighting conditions. Explore methods to expand public or private rehabilitation efforts in potential improvement areas and in areas of opportunity or reuse identified in the General Plan (see exhibits located elsewhere in the General Plan).

6.

Prohibit the intrusion of incompatible uses into residential neighborhoods through adequate buffers, screening and zoning practices that do not preclude pedestrian access to arterials that may serve as transit corridors.

Goal C Develop residential land uses in a manner that is efficient and utilizes existing and planned urban resources.

Policies

1.

Identify areas where increased densities, land use changes or mixed uses would help support existing services, transportation facilities, transit, and light rail. Then proceed with necessary General Plan land use changes for property with service capacities adequate to support more intensive residential development.

2.

Identify areas of potential change where density development would be appropriate along major thoroughfares, commercial strips and near light rail stations, and modify plans to accommodate this change.

6.

Continue to support redevelopment and rehabilitation efforts that add new and reconditioned units to the housing stock while eliminating neighborhood blight and deterioration.

COMMERCE AND INDUSTRY LAND USE ELEMENT

CITYWIDE

Goal A Promote Transit Oriented Development (TOD) within ¼ mile of existing and future light rail transit (LRT) stations.

Policy

1.

Actively support and encourage mixed use commercial, office, and residential development in identified areas of opportunity around light rail stations by establishing minimum development standards, potential financial incentives, and priority processing or streamlined review.

The land use designations of the SGPU define the appropriate types, densities, and function of uses for each land use designation. Special Planning Districts (SPD) establish special processing procedures, flexible development standards, and incentives to regulate properties under multiple ownerships. Examples include the Central Business District, Del Paso Boulevard, Railyards, Richards Boulevard, R Street Corridor, and Alhambra Corridor. A SPD is designated, adopted, amended, or removed in accordance with the provisions for rezoning. Only the City Planning Commission and City Council may initiate the approval procedure and only as a result of a redevelopment, general or community plan update or adoption. Each SPD is required to have its own design standards, development standards, list of permitted uses, and project review procedures. Most SPD projects are approved at staff level review to streamline the approval process.

The Richards Boulevard SPD is outlined in Section 17.120 of the Sacramento Municipal Code. The Richards Boulevard SPD consists of properties bounded by the Sacramento River on the west, the American River on the north, Union Pacific rail line on the south and Sutter's Landing Park on the east – this area includes the proposed project site. The Richards Boulevard SPD is intended to implement the development standards and design guidelines in the Richards Boulevard Area Plan (RBAP).

Central City Community Plan

The CCCP serves as a development guide for the public and private sector when planning physical improvements in the Central City area. The CCCP includes the area bounded by the Sacramento River to the west, the American River to the north, Sutter's Landing and Alhambra Boulevard to the east, and Broadway to the south. The CCCP includes text and land use diagrams that were adopted by the City of Sacramento City Council in May 1980. Since that time, the Community Plan has been amended numerous times. The CCCP is part of the City's General Plan, and provides a refinement of the goals and objectives of the General Plan to serve as a guideline for development specifically within the CCCP area. The primary goal of the CCCP is to continue revitalization of the Central City to provide a viable living, working, shopping, and cultural environment with a full range of day and night activities for residents, employees, and visitors. The CCCP land use designation for the proposed project site is I/R. I/R is defined as follows.

I/R Industrial/Residential: This land use district, situated along the American River, determined by a boundary generally 350 feet north of Richards Boulevard between Sequoia Pacific and Gateway Boulevard (12th Street), provides for the continuation of an expansion of existing industrial uses while prohibiting certain heavy industrial uses and new office development. The intention of the classification is to allow for residential development to occur once industrial uses are phased out. As such, residential uses are allowable, provided they are designed to mitigate noise and other environmental impacts and area compatible with adjacent land uses.

The following CCCP land use goals and policies are applicable to the proposed project:

Primary Goal

The primary goal of the Plan is to continue revitalization of the Sacramento Central City area as a viable living, working, shopping, and cultural environment with a full range of day and night activities.

Urban Development Goal

Provide for organized development of the Central City whereby the many interrelated land use components of the area support and reinforce each other and the vitality of the community.

Housing and Residential Goals

Provide adequate housing for all residents of the Central City at all socio-economic levels, and in particular provide the opportunity for low and moderate income persons to reside within the Central City. And further, provide a choice of housing types by developing new housing and conserving existing housing.

Provide the opportunity for developing viable and livable high density planned residential complexes of various scales within designated areas to meet present and future housing needs.

Provide the opportunity for mixture of housing with other uses in the same building or site at selected locations to capitalize on the advantages of close-in living.

Commercial Goals

Provide for a range of commercial activities which meet the needs of the residents, employees and visitors to the Central City.

Office Goals

Provide the opportunity for office development in appropriate areas of the Central City, placing emphasis for development in and around the Central Business District.

Encourage public and private office development, where compatible with the adjacent land uses and circulation system, in the Central Business District, Southern Pacific Railyards and Richards Boulevard Area. (Amended 12-14-93, Resolution No. 93-741)

Transportation Goals

Provide adequate off-street parking to meet the needs of shoppers, visitors and residents.

Restrain the projected increase in parking spaces needed for long-term employee parking by promoting public transit improvements, carpool programs, employer sponsored bus passes and other alternatives to the single occupant car usage.

Reduce the adverse impact of commuter parking on residential streets.

Environmental Goal

Protect and enhance the unique visual features such as entrances into the Central City, attractive arterials, notable landmarks, and access to view of the rivers.

Energy Goal

Encourage implementation of energy saving measures including passive and solar energy devices which will reduce consumption in existing and new buildings.

City of Sacramento - Smart Growth Implementation Strategy

Smart Growth is about changing traditional development patterns that focus on the automobile and single use zoning by supporting development which revitalizes central cities and existing communities, supports public transportation and preserves open space. The City of Sacramento adopted Smart Growth Principles into the General Plan in 2001. The Smart Growth Implementation Strategy contains principles and initiatives to guide development throughout the city with the overall goal of smart growth. The following Smart Growth Principles were adopted:

1. Mix land uses and support vibrant city centers
2. Take advantage of existing community assets emphasizing joint use of facilities
3. Create a range of housing opportunities and choices
4. Foster walkable, close-knit neighborhoods
5. Promote distinctive, attractive communities with a strong sense of place, including the rehabilitation and use of historic buildings
6. Preserve open space, farmland, natural beauty, and critical environmental areas
7. Concentrate new development and target infrastructure investments within the urban core of the region
8. Provide a variety of transportation choices
9. Make development decisions predictable, fair, and cost-effective
10. Encourage citizen & stakeholder participation in development decisions
11. Promote resource conservation and energy efficiency
12. Create a Smart Growth Regional Vision and Plan

13. Support high quality education and quality schools
14. Support land use, transportation management, infrastructure and environmental planning programs that reduce vehicle emissions and improve air quality
15. Policies adopted by regional decision-making bodies should discourage urban sprawl, promote infill development and the concentration of development

City of Sacramento Zoning Ordinance

The City of Sacramento Zoning Ordinance (Sacramento City Code Title 17) is intended to encourage the most appropriate use of land, conserve, stabilize, and improve the value of property, provide adequate open space for recreational, aesthetic, and environmental amenities, and control the distribution of population to promote health, safety, and the general welfare of the population of the City (§17.04.020). To achieve this goal, the Zoning Ordinance regulates the use of land, buildings, or other structures for residences, commerce, industry, and other uses required by the community. The Zoning Ordinance also regulates the location, height, and size of buildings or structures, yards, courts, and other open spaces, the amount of building coverage permitted in each zone, and population density. The Zoning Ordinance divides the City into districts of such shape, size, and number best suited to carry out these regulations, and to provide for their enforcement.

The proposed project site is zoned American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Parkway Corridor Overlay Zone; Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)), which are defined below.

ARP-F American River Parkway: Applies to areas designated as a floodway likely to be inundated by a flood having a one per cent per annum chance of occurrence or greater. This overlay is intended to prevent the loss of life and property by prohibiting the erection of improvements or structures. Also to protect the natural features of property within the flood plain of the American River to prevent erosion and siltation and to preserve valuable open space in accordance with the provisions of the General Plan.

Parkway Corridor Overlay Zone: Since the American River and its adjacent flood plain are situated within an intensively developed urban area, it is necessary to mitigate the potential adverse environmental impacts associated with contiguous urban development. The Parkway Corridor Overlay Zone designation applies to all property within the city of Sacramento zoned ARP-F and includes special development regulations intended to reduce those impacts which are incompatible with the maintenance of the American River as a natural resource. In addition, the regulations are intended to implement the general plan and the American River parkway plan.

M-2 Heavy Industrial Zone: This zone permits the manufacture or treatment of goods from raw materials. Maximum height is 75 feet. There is no maximum lot coverage. The parking ratio for warehousing uses is no less than 1 space per 1000 square feet gross floor area and no more than 1 space per 500 square feet of gross floor area.

E, W, C, N East, West, Central, or North Richards Blvd: Affixed to zoning in Richards Blvd area as indicators of industrial locations that have different zoning requirements. They are consistent with the Community Plan land use designation for Office, Residential, Utility and Blue Diamond areas. Since these properties were not rezoned with the adoption of Richards Blvd area plan and the land use designations, this is how these zoning areas are identified with different zoning requirements.

SPD Special Planning District: An area designated as a Special Planning District has been determined to be in need of general physical and economic improvement or has special environmental features that land use, zoning and other regulations cannot adequately address.

Property with an SPD designation is subject to the requirements set forth in the SPD Ordinance adopted specifically for the area and the SPD section of the zoning ordinance.

PC American River Parkway Corridor: May be applied to all areas of the City for which the Council determines that development might have an impact upon the preservation or enhancement of the scenic, recreational, fishery, or wildlife value of the American River Parkway.

The proposed zoning designations are Residential Mixed Use – Planned Unit Development (RMX-PUD), Agriculture Open Space – Planned Unit Development (A-OS-PUD), and American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD), which are defined below:

RMX Residential Mixed Use Zone: This is a mixed-use zone. The zone permits multiple family residential, office and limited commercial uses in a mixture established for the area through a special planning district or adopted location standards. Minimum land area per unit is 1,200 square feet, 36 units per acre. Maximum height is 35 feet.

A-OS Agriculture-Open Space Zone: This is an exclusive agricultural zone designed for the long-term preservation of agricultural and open space land. This zone is designated to prevent the premature development of land in this category to urban uses. The maximum height is 50 feet.

ARP-F American River Parkway: Applies to areas designated as a floodway likely to be inundated by a flood having a one per cent per annum chance of occurrence or greater. This overlay is intended to prevent the loss of life and property by prohibiting the erection of improvements or structures. Also to protect the natural features of property within the flood plain of the American River to prevent erosion and situation and to preserve valuable open space in accordance with the provisions of the General Plan.

PUD Planned Unit Development: The purpose of the Planned Unit Development designation is to provide for greater flexibility in the design of integrated developments than is otherwise possible through the strict application of the City's zoning regulations. PUD allows for a variety of land uses in one area to exist through creative and imaginative planning. Properties with a PUD designation are subject to the specific development guidelines of the PUD in which it is located and the Zoning Ordinance section relating to PUDs.

Richards Boulevard Area Plan

The Richards Boulevard Area Plan (RBAP) was adopted by the City of Sacramento on December 13, 1994. The Richards Boulevard planning area is comprised of approximately 1,050 acres defined by the Sacramento River on the west, the American River on the north, Union Pacific rail line on the south and Sutter's Landing Park on the east. The RBAP establishes policies and standards which guide the distribution, location, and intensity of new development in the area; standards and design guidelines which are intended to enhance the character of new development and compatibility between the different uses planned for the area; policies and guidelines that provide direction on expanding existing uses; policies and actions for establishing new housing in the area; and policies and standards related to the provision of community facilities, including schools, parks and open space, police and fire facilities, child care and social service facilities.

The project site is located in the RB-3: Riverfront Central planning subarea as defined in the RBAP. The RB-3 subarea is defined below.

RB-3: Riverfront Central. The RB-3 planning area occupies the central portion of the planning area, including within its limits one of the largest single users in the planning area, the 52-acre Sierra Quality Cannery and Sierra Cold Storage Facilities, located at North 7th Street and Richards Boulevard. Two large floorplates support office buildings, totaling over 400,000 square feet, have recently been developed in the planning area adjacent to the cannery between North 7th and 10th Streets. Warehousing and fabrication uses are located along the American River and Richards Boulevard corridors within the area.

The RBAP designates the project site as Industrial/Residential (I/R), Transit-Oriented Office (O), and Open Space (OS) as defined below.

Industrial/Residential: This designation serves the dual objective of identifying land for future residential development while allowing existing commercial and industrial uses to continue and expand, and is applied to areas that have the best potential for future housing. Existing commercial and industrial uses are allowed to continue within this district, and certain heavy industrial and service commercial uses may locate within the area. New residential development is conditionally allowable, subject to site planning standards for land use compatibility and overall livability.

Transit-Oriented Office: This designation allows the development of a mixed-use office district adjacent to the Intermodal Terminal.

Open Space: The open space designation is applied to the American and Sacramento River corridors, and provides for the protection of the visual, environmental and recreational values for the river corridors.

The Industrial/Residential designation also has a building density requirement of a minimum of 15 dwelling units per acre (du/ac) and a maximum of 65 du/ac. New residential development is limited to a height of 75 feet. Ten-foot setbacks from street frontages, and 15-foot setbacks from all property lines that abut a dissimilar use are required. A 25-foot setback is required along north 7th Street.

The Transit-Oriented Office designation has a 1-3 floor area ratio (FAR).

The RBAP also sets forth objectives and policies that guide development in the area.

LAND USE OBJECTIVES AND POLICIES

Objective 1 Provide for the development of a diverse mixture of uses within the Richards area which will complement Sacramento's downtown district, provide a variety of housing opportunities, and facilitate the enhancement and revitalization of the Richards Boulevard area.

Policies

1.3.

Establish land use standards and design guidelines which promote a comfortable coexistence between the diverse land uses permitted in the Richards Boulevard area.

Objective 3 Maintain and improve retail services in the area.

Policies

3.2.

Encourage retail businesses which serve the shopping and entertainment needs of residents and office workers.

Objective 4 Strengthen Sacramento's Central City as the region's principal employment center, through the creation of a significant transit-oriented support office district in close proximity to the downtown and State Capitol.

Policy

4.1.

Direct the development of new office uses to the southern portion of the Richards Boulevard planning area, where such development would be served by planned regional transit facilities.

Objective 5 Provide opportunities for new housing within the Richards Boulevard planning area, in order to reinforce the Central City as a place to live as well as work.

Policies

5.2.

Identify areas for future housing development.

5.3.

Maintain the current M-2 zoning within the area designated Industrial/Residential. Allow residential rezonings if requested by an applicant.

Objective 7 Configure land uses and development intensity in a way that reinforces transit ridership and supports public investment in transit facilities, particularly the planned Intermodal Terminal and the extension of light rail service through the area.

Policies

7.2.

Create an attractive pattern of streets and block which is more in scale with the downtown, that can accommodate a mixture of uses and activities, and that can add to the diversity and interest of the Richards Boulevard area.

Objective 8 Strengthen the character and livability of the Richards Boulevard area by developing a strong system of public open space, and by preserving historic architectural resources.

Policies

8.1.

Configure new development and land uses to enhance public access and recreational use of the American and Sacramento River Parkways.

American River Parkway Plan

The American River Parkway is an open space greenbelt which extends approximately 29 miles from Folsom Dam to the northeast to the American River's confluence with the Sacramento River to the southwest. The purpose of the Parkway Plan is to provide a guide to land use decisions affecting the Parkway, specifically addressing its preservation, use, development, and administration. The Parkway Plan is a policy and action document. It is written to ensure preservation of the naturalistic environment while providing limited developments to facilitate human enjoyment of the Parkway. A portion of the project site is within the Discovery Park Area outlined in the American River Parkway Plan and is referred to as Jibboom Street East. The proposed overlook would be within the Parkway, but the remainder of the development on the project site would not. The following policies from the 1985 American River Parkway Plan are applicable to the proposed project.

Policies

4.14.

The following activities and facilities, which are incompatible with the Parkway, shall be prohibited:

4.14.2.

Facilities

Off-road vehicle courses, including off-road bicycle course

Permanent backstops

Tennis courts

Permanent net poles

Permanent bleachers
Surfaced courts
Marina
Velodromes
New golf courses
Horseshoe pits unless integrated into designated picnic facilities
Frisbee golf courses
New archery facilities
Swimming pools
Perimeter fences
New, surfaced launching ramps for general public use
Playground facilities, except when integrated into picnic facilities in a visually unobtrusive manner
Permanent stages
Permanent lighting facilities, except security lights
Permanent sound amplification facilities

5.7.

Structures that are in the Parkway or visible from the Parkway shall be of a design, color, texture and scale that minimizes adverse visual intrusion into the Parkway.

5.7.1.

Structures shall be constructed of naturalistic materials which blend with the natural environment.

5.7.2.

Colors shall be earth tones, or shall blend with the colors of surrounding vegetation.

5.7.3.

Structures may emulate authentic historic design, but shall be unobtrusive.

5.7.4.

To the extent possible, structures shall be screened from view by native landscaping or other naturally occurring features.

5.7.5.

Structures shall not include any commercial advertising.

5.7.6.

Structures shall be located so that neither they, nor activities associated with them, cause damage to native plants or wildlife.

5.7.7.

Structures shall be located so that neither they, nor activities associated with them, disrupt the recreational use of the Parkway, and such structures shall be consistent with the goals and policies of this plan.

5.7.8.

Structures shall be fire resistant construction and designed and located in a manner such that adequate emergency services and facilities can be provided.

6.2.

Adverse impacts upon the Parkway caused by adjacent land uses and activities shall be eliminated or mitigated.

6.4.

Levees, landscaping, and other man-made or natural buffers should be used to separate the Parkway visually and functionally from adjoining land uses.

6.10.

Facilities and other improvements in the Protected Areas shall be limited to those which are needed for the public enjoyment of the natural environment. Extensive development is not appropriate.

6.15.

Activities and facilities in the Parkway which attract large numbers of users are to be directed to the less sensitive areas such as Limited Recreation Areas and Developed Recreation Areas so that the areas which are more environmentally sensitive can be protected.

7.2.

Access points and parking lots shall be located where there is the least potential environmental damage and adverse impact on the Parkway environment and surrounding neighborhoods.

9.4.

Discovery Park Area

9.4.1.

Any improvements in the park must be able to withstand inundation for one to several months each year.

9.4.2.

Play apparatus, barbecue pits, public boat launches and similar facilities are not permitted at Jibboom Street East.

10.5.

The City and County of Sacramento Zoning Ordinances shall be used when considering uses and activities not otherwise addressed in the Parkway Plan. All ordinances applicable to the Parkway shall be consistent with the Parkway Plan.

Sacramento Area Council of Governments Blueprint

SACOG conducted several local community workshops to help determine how the Sacramento region should grow through the year 2050. The result of these efforts was the SACOG Blueprint, a transportation and land use analysis suggesting how cities and counties should grow based on these smart growth principles: provide a variety of transportation choices; offer housing choices and opportunities; take advantage of compact development; use existing assets; mixed land uses; preserve open space, farmland, natural beauty, through natural resources conservation; and encourage distinctive, attractive communities with quality design. In 2004, the SACOG Board of Directors adopted the "Preferred Blueprint Scenario." The Blueprint does not approve or prohibit growth in the region, but suggests general land uses and locations for growth; it is not a policy document.

Although the Blueprint is not intended to be applied or implemented in a literal, parcel-level manner, the proposed project site would be considered Park under the Blueprint's Base Case Scenario (how development could occur based on recent past development). Under the Preferred Blueprint Scenario, the project site would be developed as Attached Residential.

Sacramento Riverfront Master Plan

The Sacramento Riverfront Master Plan is a study planning document produced by the Cities of West Sacramento and Sacramento in July 2003. The Plan provides an overall vision for the riverfront that outlines potential future enhancements and developments along the river. The Richards Boulevard Area is within the scope of the Sacramento Riverfront Master Plan; however, the development vision for the Richards area is on a macro level and generally proposes retail/commercial, mixed use, and office/commercial land uses in the area. Because the Sacramento Riverfront Master Plan is a study plan and has not been adopted by the City of Sacramento, its blueprint for development along the riverfront is only a vision and its goals and policies are not binding on the proposed project.

LAND USE EVALUATION

This section evaluates the proposed project for compatibility with existing and planned adjacent land uses and for consistency with adopted plans, policies, and zoning designations. Physical environmental impacts resulting from the proposed project are discussed in the applicable technical sections in this EIR. This section differs from impact discussions in that only compatibility and consistency issues are discussed, as opposed to environmental impacts and mitigation measures. This discussion complies with section 15125(d) of the CEQA Guidelines, which requires EIRs to discuss inconsistencies with general plans and regional plans as part of the environmental setting.

Scenario A and B

Compatibility with Existing and Planned Adjacent Land Uses

The existing adjacent land uses along Richards Boulevard consist primarily of office buildings, industrial uses, and warehousing and manufacturing businesses. The area has a heavy industrial presence, although the Richards Boulevard area is changing and becoming more diverse. Both scenarios of the proposed project would change the use of the site from industrial uses to residential uses with ground-floor retail and parks and open space. Office uses on lots fronting Richards Boulevard would be included under Scenario B.

Although there are no other existing or proposed residential developments adjacent to the project site, the proposed project would be compatible with the surrounding uses. Residential uses coupled with retail and office uses complement existing surrounding offices and provide for living and shopping opportunities near existing employment areas. In addition, placing residential uses adjacent to a potential light rail line and transit station along Richards Boulevard creates an opportunity for non-vehicular transportation in the city.

It is not anticipated that operation of the proposed project would generate excessive noise, light, dust, odors, or hazardous emissions that could be considered incompatible with existing or planned adjacent land uses. For a discussion of these issues, please see Chapter 6.8 Noise and Vibration, Chapter 6.1 Aesthetics, Light and Glare, and Chapter 6.2 Air Quality.

The proposed project would also be adjacent to the American River. Development currently exists adjacent to the river, including on the project site. Development of the proposed project would introduce a new population adjacent to the river. However, access to the river itself would remain restricted in that area while increased access to the American River Parkway system would enhance the overall recreational usage of the area. The proposed project would

create a pedestrian-friendly environment adjacent to the Parkway and would complement the existing trail network.

Consistency with Adopted Plans, Policies, and Zoning (Scenario A and B)

The following discussion analyzes consistency with adopted plans, goals, policies, and zoning for residential, retail/restaurant, parking, and parks and open space uses proposed under either Scenario A or B. The analysis focuses on the project's overall consistency with adopted goals and policies; however, it does not address each goal or policy individually. Appendix C includes a more detailed overview of the project's consistency with specific adopted and draft goals and policies.

City of Sacramento General Plan

The project site is designated as SPD in the General Plan. The proposed project would not change the land use designation and would not require any General Plan Amendments in order to be approved by the City.

The General Plan includes specific goals and policies designed to support a balanced system of residential and retail facilities throughout the city. Policies 1, 2 and 6 under Goal C of the Residential Land Use Element seek to identify areas where a mix of densities and uses would be appropriate and would support redevelopment and rehabilitation efforts. The proposed project would develop high density residential in conjunction with retail uses in an area that is identified for redevelopment and diversification of uses. The proposed project would also be adjacent to Richards Boulevard which is a major thoroughfare and a planned light rail alignment. Policy 1 under Citywide Goal A of the Commerce and Industry Land Use Element also encourages high density mixed uses near light rail stations. Regional Transit is currently planning a light rail extension along Richards Boulevard and a transit station near the intersection of Richards Boulevard and North 5th Street. The proposed project's locating residential and retail development adjacent to transit uses complies with this policy.

Policies 5 and 6 under Goal A in the Residential Land Uses Element aim to improve the quality of residential neighborhoods by protecting, preserving, and enhancing their character. The proposed project would provide for the rehabilitation of a run-down area of Richards Boulevard and give the area enhanced pedestrian access to a transit corridor. The proposed project would include adequate open spaces, walkways, and landscaping to buffer the residential uses from surrounding office and industrial uses.

Therefore, the proposed project would be considered consistent with all applicable General Plan land use goals and policies pertaining to the provision of residential, retail, parking, parks, and open space facilities.

Central City Community Plan

The proposed project would meet the Primary Goal of the CCCP by continuing the revitalization of the Central City as a viable living, working, shopping, and cultural environment. The CCCP also sets forth goals to provide for organized development of the Central City whereby the many interrelated land use components of the area support and reinforce each other and the vitality of the community. The proposed project would add residential and retail uses, creating a dynamic by which the uses strengthen each other and provide for a full range of day and night activities, meeting the CCCP's Urban Development goal. The CCCP's Housing and Residential Goals

aim to provide a variety of high density residential opportunities within the City. The proposed project would construct apartments, condominiums, townhouses, and live/work units near the core of downtown and would help meet the City's present and future housing needs. Please see Chapter 5, Population, Employment, and Housing for a discussion of affordable housing. The provision of ground-floor retail uses would also allow for a range of commercial activities to meet the needs of the residents, employees, and visitors to the Central City (Commercial Goal).

The location of the proposed project adjacent to a planned light rail line and station would promote the uses of public transit. The proposed project would also provide for off-street sub-grade parking for residents, employees, and visitors, reducing the demand for street parking and limiting impacts on residential streets. These elements would meet the CCCP's Transportation Goals.

The CCCP's Environmental Goal seeks to enhance visual features such as arterials and the City's rivers. The proposed project would enhance the frontage along Richards Boulevard by replacing older structures, a warehouse, and dead landscaping with vibrant mixed-use buildings and improved landscaping. Development along the American River levee would provide for enhanced landscaping along the river, improved trails, and a river overlook. However, development of both Scenario A and B would demolish a building that has been determined eligible for listing on the California Register of Historical Resources. Demolition of this structure would be in conflict with the CCCP Environmental Goal which seeks to preserve notable landmarks. Please see Chapter 6.4 Cultural Resources for a more complete discussion of historic resources.

The proposed project would meet all of the applicable land use goals set forth in the CCCP except for the Environmental Goal.

City of Sacramento Zoning Ordinance

The proposed project would rezone the site from American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)) to Residential Mixed Use – Planning District (RMX-PUD) and Agriculture-Open Space – Planning District (A-OS-PUD). The zoning designations for parcels currently designated as ARP-F-SPD would remain zoned that way.

The RMX designation allows for mixed use development including residential, office, and limited commercial uses. The proposed project would develop residential and ground-floor retail and would be consistent with the RMX designation. However, the RMX zone places a maximum building height of 35 feet. The proposed project would construct structures up to approximately 180 feet tall with the exception of one structure that would be a 15-story, 235-foot-tall office building (with ground-floor retail) on lot 13 developed under Scenario B.

The A-OS designation is designed to preserve agricultural uses and open space. The proposed project would develop passive recreation parks, public plazas, and open spaces. At the northern terminus of North 7th Street, the project would construct a river overlook, an open air amphitheatre with a tensile structure, and an open grass seating area. The proposed project would result in more open space than what currently exists on the project site. In addition, there would be a tower structure near the amphitheatre. The maximum height allowable in the A-OS

zone is 50 feet. It is possible that the tensile structure or the tower could be up to 150 feet in height.

The ARP-F zone and Parkway Corridor Overlay Zone apply to areas likely to be inundated by a 100-year flood. Improvements or structures in this zone are prohibited. A majority of the project site within the ARP-F zone would remain undisturbed and unimproved. However, at the northern terminus of North 7th Street, a river overlook would be constructed. The overlook would be an up to 230-foot-wide cast-in-place concrete construction that could extend up to 60 feet from the centerline of the levee toward the American River. The overlook may be in the form of a cantilever that would be supported at the top of the levee, or the overlook could be supported by a retaining wall at its northern edge.

As currently proposed, the project's building heights would not be consistent with the height restrictions under current zoning. However, the creation of a Planned Unit Development (PUD) zoning overlay would be required to provide flexibility in project design and would establish guidelines for allowable building heights. The PUD guidelines, if approved by the City, would rectify any conflicts with the City Zoning Ordinance, and no amendments would be necessary.

Richards Boulevard Area Plan

The RBAP sets forth several Land Use Objectives and Policies designed to guide development in the Richards Boulevard area. Objective 1, Objective 5, Policy 5.2, and Policy 5.3 allow for a variety of uses in the area including housing opportunities. The proposed project would develop residential units which would revitalize an underused area in the Richards Boulevard area and reinforce the Central City as a place to live as well as work. The project's development under the proposed Design Guidelines would meet the intent of Policy 1.3.

Policy 5.3 aims to maintain the current M-2 zoning within the area designated Industrial/Residential. However, the policy also allows residential rezoning at an applicant's request. For the proposed project, the applicant is requesting a rezone of the site from American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)) to Residential Mixed Use – Planning District (RMX-PUD) and Agriculture-Open Space – Planning District (A-OS-PUD). This rezone would be consistent with Policy 5.3.

Development of ground-floor retail throughout the project site would improve retail services in the area which could serve the shopping and entertainment needs of on- and off-site residents and nearby office workers in the area. This project element would meet the goals of Objective 3 and Policy 3.2.

The proposed project's development of residential and ground-floor retail space fronting Richards Boulevard would support Regional Transit's planned light rail line and transit station there. The placement of high-density residential units and shopping opportunities adjacent to a transit line would reinforce transit ridership, which meets Objective 7. Wide rights-of-way along Richards Boulevard and development of urban parks and plazas near the light rail line would create an attractive pattern of streets and blocks that can accommodate a mixture of uses and activities, (meeting the goal of Policy 7.2) and strengthen the character and livability of the area by creating a strong system of open space (meeting Objective 8). However, development of

both Scenario A and B would demolish a building that has been determined eligible for listing on the California Register of Historical Resources. Demolition of this structure would be in conflict with RBAP Objective 8 which seeks to preserve historic architectural resources. Please see Chapter 6.4 Cultural Resources for a more complete discussion of historic resources.

The project's development of Riverfront Drive and uses along the American River levee would enhance public access of the American River Parkway by improving the levee trail, creating a landscaped street along the levee, and creating usable green spaces and parks near the northern terminus of North 7th Street. This would meet the goal of Policy 8.1.

As currently proposed, the project's building heights, densities, and setbacks would not be consistent with the RBAP. However, the creation of a Planned Unit Development (PUD) zoning overlay would be required to provide flexibility in project design and would establish guidelines for allowable building heights, densities, and setbacks. The PUD guidelines, if approved by the City, would rectify any conflicts with the RBAP, and no amendments to the RBAP would be necessary.

American River Parkway Plan

As described above, the only structures that would be constructed within the Parkway would be support structures for the river overlook. The proposed project would not construct any of the prohibited facilities that are identified in Policies 4.14, 4.14.2, and 9.4.2. A river outlook is not prohibited nor expressly allowed in Policy 4.14.2; however, Policy 10.5 allows for the City's Zoning Ordinance to be used to allow or prohibit facilities that are not specifically described in the American River Parkway Plan. The proposed overlook would also be consistent with Policy 6.10 which limits facilities constructed in the Protected Areas in the Parkway to those which are needed for public enjoyment of the natural environment; in this case, development of the overlook would serve the community and the support structures would not significantly encroach on the Parkway. The outlook is not expected to attract large amounts of people to a sensitive portion of the Parkway, as outlined in Policy 6.15. As required by Policy 7.2, the proposed outlook would provide a river access point that would cause little environmental damage and could sustain inundation, consistent with Policy 9.4.1.

The proposed Riverfront Drive, residential units, and retail space along the American River levee would be adjacent to, but not within, the Parkway. Buildings would be set back from the toe of levee at least 30 feet. Landscaping and walkways would serve as a buffer between the Parkway and adjoining land uses, meeting the goal of Policy 6.4. Policy 6.2 requires that adverse impacts on the Parkway caused by adjacent uses be eliminated or mitigated. As presented in Chapter 6 of this EIR, any impacts on the Parkway as a result of construction or operation of the proposed project are mitigated.

Sacramento Area Council of Governments Blueprint

The intent of the Blueprint is to target areas of the Sacramento Region for urban growth while preserving natural resources. Although the Blueprint is not intended to guide development in a parcel-by-parcel manner, the Blueprint Preferred Scenario currently suggests that the project site be developed as Attached Residential, High Density Mixed Use Center or Corridor, and Retail. If the project site were developed in line with current growth trends, the Base Case indicates that the site would be developed with Industrial, Parks, and High Density Mixed Use Center or Corridor. The proposed project would be in line with the smart growth principles identified in the Blueprint: provide a variety of transportation choices; offer housing choices and

opportunities; take advantage of compact development; use existing assets; mixed land uses; preserve open space, farmland, natural beauty, through natural resources conservation; and encourage distinctive, attractive communities with quality design. The proposed project would construct multi-family residential and retail uses, providing compact development in an underutilized urban area. The project's location adjacent to a planned light rail line and station allows for additional transportation choices. Future site residents can take advantage of the existing roadway network in the area and proximity to existing regional connectors. Because the proposed project would meet the objectives set forth in the Blueprint Preferred Scenario, the project would be consistent with the Blueprint.

Consistency with Adopted Plans, Policies, and Zoning (Scenario B Only)

The only difference between Scenario A and Scenario B is that Scenario B would replace residential uses in the three lots fronting Richards Boulevard with office uses. Uses on the interior of the site and site design would remain the same as proposed under Scenario A.

The discussion below identifies issues that would only apply to Scenario B associated with the construction of office uses. Consistency with policies associated with all other proposed land uses are identical to Scenario A and are not repeated in the discussion below.

Central City Community Plan

The CCCP sets forth goals to provide for organized development of the Central City whereby the many interrelated land use components of the area support and reinforce each other and the vitality of the community. Scenario B would develop office space near the Central Business District and within the Richards Boulevard area, meeting the applicable Office Goals in the CCCP. Proposed office uses under Scenario B would include lighting conservation efforts and other energy conservation measures. Lighting conservation efforts would include occupancy sensors to automatically turn off lights when not in use, lighting reflectors, electronic ballasts, and energy-efficient lamps. Conservation efforts are expected to include improved HVAC systems with microprocessor-controlled energy-management systems. The proposed project under Scenario B would also meet all of the CCCP goals discussed above, and would be consistent with the CCCP.

Richards Boulevard Area Plan

In addition to meeting the Objectives and Policies described above, Scenario B would also be consistent with Objective 4 which seeks to direct office development near transit facilities and downtown. Policy 4.1 aims to develop office uses to the southern portion of the Richards Boulevard area where development would be served by planned regional transit facilities. Although development of the proposed project would be north of Richards Boulevard, it would be adjacent to planned light rail track and a light rail station. Therefore, the proposed project under Scenario B would be consistent with RBAP objectives and policies.

5.0 POPULATION AND HOUSING

5.0 POPULATION AND HOUSING

INTRODUCTION

The purpose of this chapter is to identify, estimate, and evaluate changes in population and housing attributed to development of the proposed project that could result in physical environmental effects. This chapter also describes the existing population and housing levels in Sacramento County, the City of Sacramento, and the Richards Boulevard Area neighborhood.

City plans and policies pertaining to housing and commercial/office uses are summarized, including affordable housing policies and policies related to the maintenance of a jobs/housing balance. Potential inconsistencies with adopted City plans or policies are identified.

Sources used in the preparation of this section include:¹

- U.S. Census (2000);
- Sacramento Area Council of Governments (SACOG);
- California Department of Finance (DOF); and
- City of Sacramento Planning Department (market-based population, employment, and housing projections).

The information contained in this chapter is used as a basis for analysis of project and cumulative impacts in the technical sections of this EIR. However, changes in population and housing, in and of themselves, are generally characterized as social and economic effects, not physical effects on the environment. CEQA provides that economic or social effects are not considered significant effects on the environment unless the social and/or economic effects are connected to physical environmental effects. A social or economic change related to a physical change may be considered in determining whether the physical change is significant (CEQA Guidelines Section 15382). The direction for treatment of economic and social effects is stated in Section 15131(a) of the CEQA Guidelines:

Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on physical changes.

While increased population and changes to demographics resulting from new development do not necessarily cause direct adverse physical environmental effects; indirect physical environmental effects such as increased vehicle trips and associated increases in air pollutant emissions could occur. Physical environmental effects associated with the increase in population are discussed in the technical sections contained in Chapter 6.

¹ As shown above, this chapter contains information from a variety of sources. Each of these sources uses different modeling and different assumptions to project growth, resulting in different results. While there are differences in the numbers, however, the growth trend demonstrated by each of these sources is consistent.

No comments were received in response to the NOP relating to population or housing issues.

ENVIRONMENTAL SETTING

The Richards Boulevard Area is comprised of approximately 1,050 acres of land located north of the downtown area within the City of Sacramento. The land is divided into approximately 700 separate parcels held by over 200 property owners. Most of the development is concentrated in the western two-thirds of the planning area (generally west of the Union Pacific Railroad tracks), while the eastern one-third of the planning area (a former landfill site) is largely undeveloped. Uses consist primarily of industrial and office uses, along with highway commercial near I-5, a limited amount of housing, and a variety of social services.

Population

Regional

According to SACOG, the greater Sacramento area, including the counties of Sacramento, Placer, El Dorado, Yolo, Sutter, and Yuba, experienced high population growth between 1990 and 2000. The area had a regional population of approximately 1,565,600 in 1990 and 1,922,600 in 2000, an increase of approximately 23 percent, making it one of the fastest growing areas in the state.² Current trends in population growth are expected to continue, with regional population projected to reach 2,864,387 by 2025.³

City of Sacramento

Between 1990 and 2000 the City of Sacramento grew from 366,500 residents to 411,200 residents, an increase of 12 percent.⁴ According to the U.S. Census, the City's population was 407,018 in 2000 and is estimated to be 445,287 in 2005, an increase of 9.4 percent.⁵ DOF estimates Sacramento's January 1, 2004 population at 444,005 and January 1, 2006 population at 457,514.⁶ SACOG's population projections for the City of Sacramento project a population of 473,125 in 2010 and a population of 517,035 in 2020.⁷

Housing Supply

Regional

The housing supply in the Sacramento region continues to grow. As the Sacramento region continues to build near record numbers of new homes, there are indications that the region may be close to filling the backlog of housing demand and entering a period of more balanced supply and demand.⁸ In 2005, new home sales dropped to 14,094 in the six-county Sacramento

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- 2 Sacramento Area Council of Governments, *Demographics*, <<http://www.sacog.org/demographics/pophsg/coci.cfm/>> (September 15, 2006).
 - 3 Sacramento Area Council of Governments, *SACOG Projections*, <<http://www.sacog.org/>> (September 15, 2006).
 - 4 Sacramento Area Council of Governments, *Demographics*, <www.sacog.org/demographics/pophsg/coci.cfm/> (September 15, 2006).
 - 5 U.S. Census, American FactFinder, <<http://www.factfinder.census.gov>> (September 15, 2006).
 - 6 California Department of Finance, Demographic Research Unit, <<http://www.dof.ca.gov>> (June 16, 2006).
 - 7 Sacramento Area Council of Governments, *Projection Data, 12-16-04*, <<http://www.sacog.org>> (September 15, 2006).
 - 8 Sphere Institute, *Summer 2005 Regional Economic Outlook – Sacramento Region*, <<http://www.sphereinstitute.org/CalRegionalForecast.html>> (June 26, 2006).
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region, down 18 percent from the record 17,155 in 2004.⁹ The housing market has slowed considerably recently due to several factors including higher interest rates and economic uncertainty.

City of Sacramento

The City of Sacramento had a total of 180,840 housing units in 2004, of which 169,582 were occupied units, and 11,258 were vacant.¹⁰ By 2005, there were approximately 182,045 housing units in the city.¹¹ SACOG projects that Sacramento will reach 538,303 housing units in 2025.¹² Since 1999, approximately 87 percent of the constructed units were single-family units, 12.5 percent were multi-family units, and less than one percent were mobile homes.

Richards Boulevard

The Richards Boulevard Area Plan (RBAP) identifies a minimum of 150 acres of land that could be used for the development of approximately 3,900 residential units, assuming an average density of 26 dwelling units (du) per acre. The plan also states that the land north of Richards Boulevard would be most suitable for residential development, while office development would be concentrated south of Richards Boulevard.¹³

The RBAP includes construction and rehabilitation of existing units in the Dos Rios and Dreher-Basler areas. Within these areas, there is an opportunity for alternative housing, such as live/work, single room occupancy, and transitional cottage housing, which could serve low and very low income populations.¹⁴

Jobs-Housing Balance

The concept of jobs/housing balance refers to the relationship of residences to jobs in a given community or area. Assuming a reasonable match between the affordability of housing and the incomes of jobs in the local market, if the number and proximity of residences is proportionate to the number and proximity of jobs, the majority of the employees would have the opportunity to work and reside in the same community. A well-balanced ratio of jobs and housing can contribute to reductions in the number of vehicle trips resulting from commuting due to employment opportunities in closer proximity to residential areas. Such a reduction in vehicle trips would necessarily result in lower levels of air pollutant emissions and less congestion on area roadways and intersections. As noted above, another important consideration in evaluating the jobs/housing balance is whether housing in the community is affordable to local employees. The availability of an adequate housing supply, presenting various price levels including those that are reasonably available to those holding jobs that are offered in the community, provides the potential to reduce the length of commutes between residences and work sites.

9 Sacramento Business Journal, *Homebuilders Cut Staff as Sales Slow*, August 28, 2006, <<http://sacramento.bizjournals.com/>> (October 24, 2006).

10 U.S. Census, American FactFinder, <<http://www.factfinder.census.gov>> (June 26, 2006).

11 U.S. Census, American FactFinder, 2005 American Community Survey, *Selected Housing Characteristics, 2005*, <<http://factfinder.census.gov/>> (October 24, 2006).

12 Sacramento Area Council of Governments, *Projection Data, 12-16-04*, <<http://www.sacog.org>> (September 15, 2006).

13 City of Sacramento, *Richards Boulevard Area Plan*, June 1992, p. 41.

14 City of Sacramento, *Richards Boulevard Area Plan*, June 1992, p. 41.

Sacramento's employment base in 2004 was 219,870 in the labor force, with 180,840 total housing units, and of these units, 169,582 were occupied, resulting in a 6.2 percent vacancy rate.¹⁵ This would mean that there was an employee per unit ratio of 1:3,¹⁶ which would mean that employees would travel from surrounding cities in Sacramento County and outside Sacramento County to fill jobs within the City. The extent to which this occurs depends on a variety of factors related not only to employment and housing in the City, but economic factors affecting the City and region, including, importantly, the affordability of housing. People are often willing to commute longer distances from areas where their housing dollar goes further. Using SACOG projections for employment and housing units for 2025 (854,804 and 691,548, respectively) the countywide jobs/housing balance would be 1.24:1.¹⁷

REGULATORY SETTING

Federal Regulations

There are no specific federal regulations pertaining to population that address environmental impacts associated with the proposed project.

State Regulations

There are no specific state regulations pertaining to population that address environmental impacts associated with the proposed project.

Local Regulations

City of Sacramento General Plan

The various goals, policies, and implementation programs of the City of Sacramento General Plan seek to minimize population-related impacts by providing a comprehensive framework for the preparation of individual specific plans that ensure that local and regional concerns are adequately addressed in the planning of major new growth areas and that such areas are planned to avoid adverse economic impacts on existing urban centers. Although the physical impacts of population and housing are addressed in other chapters in this EIR, the proposed project is subject to applicable General Plan goals and policies. The following are applicable goals and policies relating to employment and housing issues from the adopted City of Sacramento General Plan Housing Element (2003).

HOUSING SUPPLY

Goal 1 Provide adequate housing sites and opportunities for all households.

Policies

1.E.

The City shall continue to promote appropriate and compatible infill housing.

1.F.

The City shall continue to develop and support transit oriented residential development along transit corridors.

15 U.S. Census, American FactFinder, <<http://www.factfinder.census.gov>> (June 26, 2006).

16 An employee per unit ratio that exceeds 1.0 reflects the fact that there are more jobs than housing units within the City. An employee per unit ratio of 1.0 would mean that there is one job per housing unit.

17 Sacramento Area Council of Governments, *Projection Data, 12-16-04*, <<http://www.sacog.org>> (September 15, 2006).

Goal 3 Housing Mix, Balance, and Neighborhood Compatibility: Promote a variety of housing types within neighborhoods to encourage economic diversity and housing choice.

Policy

3.B.

The City shall encourage the development of a variety of housing styles and lot sizes to accommodate residents who wish to “move up” within their community plan area.

Goal 5 Housing Quality and Neighborhood Improvement

Policy

5.B.

The City shall continue to work with neighborhood residents in ensuring that all our neighborhoods are safe, decent, and pleasant places to live and work. This includes working with schools, community oriented policing, addressing problem properties, and ensuring new development is compatible with existing neighborhoods.

5.D.

Promote quality residential infill development in infill areas or designated infill sites through flexible development standards.

Goal 8 Energy Conservation

Policy

8.A.

Wherever possible, develop, incorporate, and support energy conserving programs in the production and rehabilitation of housing to improve the environment and reduce household energy costs.

Affordable Housing Requirements

Chapter 17.190 in the City-Wide Programs Division of the City of Sacramento Zoning Code (the Code) provides direction that “residential projects in new growth areas contain a defined percentage of housing affordable to low income and very low income households, to provide for a program of incentives and local public subsidy to assist in this effort, and to implement the mixed income policies of the housing element of the city’s general plan.” Residential development that is exempted from the provision of affordable housing as well as alternatives to the Standard Inclusionary Housing Component regulations are defined in the Code. The proposed project is not within a new growth area as defined in the code and therefore, is not subject to Chapter 17.190 of the Zoning Code.

Richards Boulevard Area Plan

The RBAP sets forth objectives and policies to guide the distribution, location and intensity of new development in the area; standards and design guidelines which are intended to enhance the character of new development and compatibility between the different uses planned for the area, policies and guidelines that provide direction on expanding existing uses; policies and actions for establishing new housing in the area; and policies and standards related to the provision of community facilities.¹⁸ The following are applicable objectives and policies relating to housing issues from the RBAP.

18 City of Sacramento, *Richards Boulevard Area Plan*, June 1992, p. 3.

HOUSING

Objective 1 Fully realize the potential for new residential development within the redevelopment area.

Objective 2 Provide housing affordable to a range of income groups.

Policy

2.1.

Housing affordability in the planning area should be based upon the housing and affordability needs of the Sacramento workforce.

Objective 3 Provide a diversity of housing types and tenure.

Policy

3.1.

Encourage a wide diversity of multi-family housing types within the project area, including townhouses, stacked flats and mid-rise apartment buildings. Senior housing projects, SRO projects, live/work spaces and transitional housing all should be accommodated, although the focus of the Housing Program should remain on the provision of housing for Central City-based workers and their families.

3.7.

Integrate low and moderate income housing with market-rate units throughout the Redevelopment Area.

Central City Community Plan

The CCCP serves as a development guide for the public and private sector when planning physical improvements in the Central City area. The CCCP includes the area bounded by the Sacramento River to the west, the American River to the north, Sutter's Landing and Alhambra Boulevard to the east, and Broadway to the south. The CCCP includes text and land use diagrams that were adopted by the City of Sacramento City Council in May 1980. Since that time, the Community Plan has been amended numerous times. The CCCP is part of the City's General Plan, and provides a refinement of the goals and objectives of the General Plan to serve as a guideline for development specifically within the CCCP area. The primary goal of the CCCP is to continue revitalization of the Central City to provide a viable living, working, shopping, and cultural environment with a full range of day and night activities for residents, employees, and visitors. The following CCCP housing goals are applicable to the proposed project.

Provide adequate housing for all residents of the Central City at all socio-economic levels, and in particular provide the opportunity for low and moderate income persons to reside within the Central City. And further, provide a choice of housing types by developing new housing and conserving existing housing.

Provide the opportunity for developing viable and livable high density planned residential complexes of various scales within designated areas to meet present and future housing needs.

Provide the opportunity for mixture of housing with other uses in the same building or site at selected locations to capitalize on the advantages of close-in living.

Develop land use policies which encourage the conservation and rehabilitation of sound housing stock and historically significant structures.

Conserve all viable residential neighborhoods from encroachment of non-compatible uses and excessive vehicular traffic.

Provide rental and homeownership opportunities to meet the needs of elderly persons, low and moderate income families, and other groups with specialized housing needs.

Actively develop methods to minimize displacement and the adverse impacts that some of the recommendation in this plan will have on low and moderate income people.

Provide adequate relocation assistance through applicable redevelopment programs.

Create more identifiable neighborhood units which have clear boundaries and a nucleus for activities.

Sacramento Area Council of Governments Blueprint

SACOG conducted several local community workshops to help determine how the Sacramento region should grow through the year 2050. The result of these efforts was the SACOG Blueprint, a transportation and land use analysis suggesting how cities and counties should grow based on these smart growth principles: provide a variety of transportation choices; offer housing choices and opportunities; take advantage of compact development; use existing assets; mixed land uses; preserve open space, farmland, natural beauty, through natural resources conservation; and encourage distinctive, attractive communities with quality design. In 2004, the SACOG Board of Directors adopted the "Preferred Blueprint Scenario." The Blueprint does not approve or prohibit growth in the region, but suggests general land uses and locations for growth; it is not a policy document.

The Blueprint is not intended to be applied or implemented in a literal, parcel-level manner. However, if development were to occur as suggested in the Preferred Scenario, the Sacramento region's housing stock would be comprised of 3 percent rural residential, 45 percent large-lot single-family, 17 percent small-lot single-family, and 35 percent attached homes.¹⁹ In addition, approximately 53 percent of people in the region would be living in a balanced community which includes a balanced mix of jobs and housing in close proximity to each other.²⁰

SETTING AND ANALYSIS

Currently, the proposed project site contains industrial, warehouse, commercial, and office uses. Current active businesses on the property include offices of the project applicant, cold storage, concrete storage and delivery, a livestock feed supplier, hay-bail compression and delivery, and a warehouse occupied by the Sacramento Habitat for Humanity.

Changes in Population and Housing

Population

Scenario A

Under Scenario A, the Township 9 project would construct 2,981 high-density residential units. Assuming an average household size of 2.57 persons would result in a projected population increase of approximately 7,661 residents (see Table 5-1).

Scenario B

Scenario B would construct 2,350 high-density residential units. Assuming an average household size of 2.57 persons, this would result in a projected population increase of approximately 6,040 residents (see Table 5-1).

19 Sacramento Area Council of Governments, *Special Report: Preferred Blueprint Alternative*, January 2005.

20 Sacramento Area Council of Governments, *Special Report: Preferred Blueprint Alternative*, January 2005.

	Scenario A	Scenario B
Housing Units	2,981	2,350
Residential Population	7,661	6,040
Employment	365	3,164
Jobs/Housing Ratio	0.12:1	1.35:1

Source: EIP Associates, a Division of PBS&J, 2006.

Analysis

As stated above, increases in population are not, in and of themselves, considered physical environmental effects. Potential physical environmental effects resulting from the proposed project's population growth are analyzed in the appropriate technical sections of this EIR.

Affordable Housing Component

Scenario A and B

Chapter 17.190 in the City-Wide Programs Division of the City of Sacramento Zoning Code (the Code) provides direction that "residential projects in new growth areas contain a defined percentage of housing affordable to low income and very low income households, to provide for a program of incentives and local public subsidy to assist in this effort, and to implement the mixed income policies of the housing element of the city's general plan." Residential development that is exempted from the provision of affordable housing as well as alternatives to the Standard Inclusionary Housing Component regulations are defined in the Code. The proposed project is not within a new growth area as defined in the code and therefore, is not subject to Chapter 17.190 of the Zoning Code.

Jobs/Housing

Scenario A

Scenario A includes approximately 146,194 square feet of retail and restaurant uses. Neighborhood-serving retail uses could generate jobs such as cashier, customer relations, building maintenance, marketing, advertising, management, administration, information technology, public relations, and accounting.

Using a factor of 1 employee per 400 square feet of retail space,²¹ the proposed project would generate approximately 365 jobs (see Table 5-1).

Based on these numbers, the proposed project would have a jobs/housing balance of 0.12:1. This number represents the concept that there are many more housing units than there are jobs available, and that only 0.12 jobs would be available for each housing unit within the proposed project. This ratio also indicates that most of the workers on the project site would not be able to work on the project site and would be required to find employment in other areas of the city or region.

²¹ Tom Kear, Dowling Associates, written communication, June 28, 2006.

Scenario B

Scenario B includes approximately 146,194 square feet of retail uses and 839,628 square feet of office uses. Using a factor of 1 employee per 400 square feet of retail space and 1 employee per 300 square feet of office space,²² the proposed project would generate approximately 365 retail jobs and 2,799 office jobs, a total of 3,164 jobs (see Table 5-1).

Based on these numbers, the proposed project would have a jobs/housing balance of 1.35:1. This number represents the concept that there is more than one job available per housing unit on the project site. This would represent a jobs/housing relationship closer to balance than the county as a whole, which tends to be an importer of employees living in other counties.

22 Tom Kear, Dowling Associates, written communication, June 28, 2006.

6. ENVIRONMENTAL ANALYSIS

6.0 Introduction to the Analysis

6.0 INTRODUCTION TO THE ANALYSIS

SCOPE OF THE EIR ANALYSIS

The Environmental Analysis chapter of this Draft EIR discusses the environmental and regulatory setting, impacts, and mitigation measures for each of the following technical issue areas (Sections 6.1 through 6.11):

- 6.1 Aesthetics, Light, and Glare
- 6.2 Air Quality
- 6.3 Biological Resources
- 6.4 Cultural Resources
- 6.5 Geology and Soils
- 6.6 Hazardous Materials and Public Safety
- 6.7 Hydrology and Water Quality
- 6.8 Noise and Vibration
- 6.9 Public Services
- 6.10 Public Utilities
- 6.11 Transportation and Circulation

SECTION FORMAT

Each section begins with a description of the project environmental setting and a regulatory setting as it pertains to a particular issue. The environmental setting provides a point of reference for assessing the environmental impacts of the proposed project and alternatives (Chapter 7). The setting description in each section is followed by an impacts and mitigation discussion. The impact and mitigation portion of each section includes impact statements, which are prefaced by a number in bold-faced type. An explanation of each impact and an analysis of its significance follow each impact statement. All mitigation measures pertinent to each individual impact follow directly after the impact statement. The degree to which the identified mitigation measure(s) would reduce the impact is also described.

Examples of the format are shown below.

6.X-X Statement of impact for the proposed project in bold type.

The discussion of impacts for the proposed project is presented in paragraph form and a determination of the impact's significance in ***bold, italic type***.

Two proposed scenarios for development of the Township 9 project are analyzed in this EIR. The following headings are used in the impact analysis to differentiate between the two analyses:

Scenario A and B

If discussion applies to Scenario A and B.

Scenario A

If the discussion is unique to Scenario A

Scenario B

If the discussion is unique to Scenario B

Mitigation Measure

6.X-1 (A & B) or (A) or (B) Statement of what, if any, mitigation measures are required.

TERMINOLOGY USED IN THE EIR

This Draft EIR uses the following terminology to describe environmental effects of the proposed project:

- **Standards of Significance:** 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 are the standards of significance included in the City of Sacramento’s Initial Study Checklist (see Appendix A). If additional standards were determined to be necessary to amplify adopted City standards, then questions from Appendix G of the CEQA Guidelines were included.
- **Less Than Significant Impact:** A project impact is considered less-than-significant when it does not reach the standard of significance and would therefore cause no substantial change in the environment (no mitigation required).
- **Potentially Significant Impact:** A potentially significant impact is an environmental effect that may cause a substantial adverse change in the environment; however, additional information is needed regarding the extent of the impact to make the determination of significance. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.
- **Significant Impact:** A project impact is considered significant if it results in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project effects in the context of specified significance criteria. Mitigation measures and/or project alternatives are identified to reduce these effects to the environment where feasible.
- **Significant and Unavoidable Impact:** A project impact is considered significant and unavoidable if it would result in a substantial adverse change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level if the project is implemented. Findings of Overriding Considerations must be adopted if impacts cannot be mitigated.
- **Cumulative Impacts:** According to CEQA, “cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines, Section 15355). CEQA

requires that cumulative impacts be discussed when the “project’s incremental effect is cumulatively considerable” (CEQA Guidelines, Section 15130 (a)).

- **Mitigation Measures:** The CEQA Guidelines (Section 15370) define 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.

6.1 Aesthetics, Light, and Glare

6.1 AESTHETICS, LIGHT, AND GLARE

INTRODUCTION

This section provides a description of existing visual conditions in the proposed project area and describes the changes to those conditions that would result from implementation of the proposed project.

As discussed in the Initial Study (see Appendix A), the proposed project site is not located in a designated scenic vista area or an adopted view corridor. Accordingly, development of the proposed project would not have a substantial adverse effect on these resources. No concerns related to aesthetics were received in response to the Notice of Preparation (see Appendix B).

Information to prepare this section was obtained from a site visit in August 2006, review of the City of Sacramento General Plan, the Central City Community Plan (CCCP), the Richards Boulevard Area Plan (RBAP), the Sacramento City Code, and the American River Parkway Plan, as well as visual simulations prepared for the proposed project and a review of the proposed Design Guidelines and project-specific material provided by the project applicant.

ENVIRONMENTAL SETTING

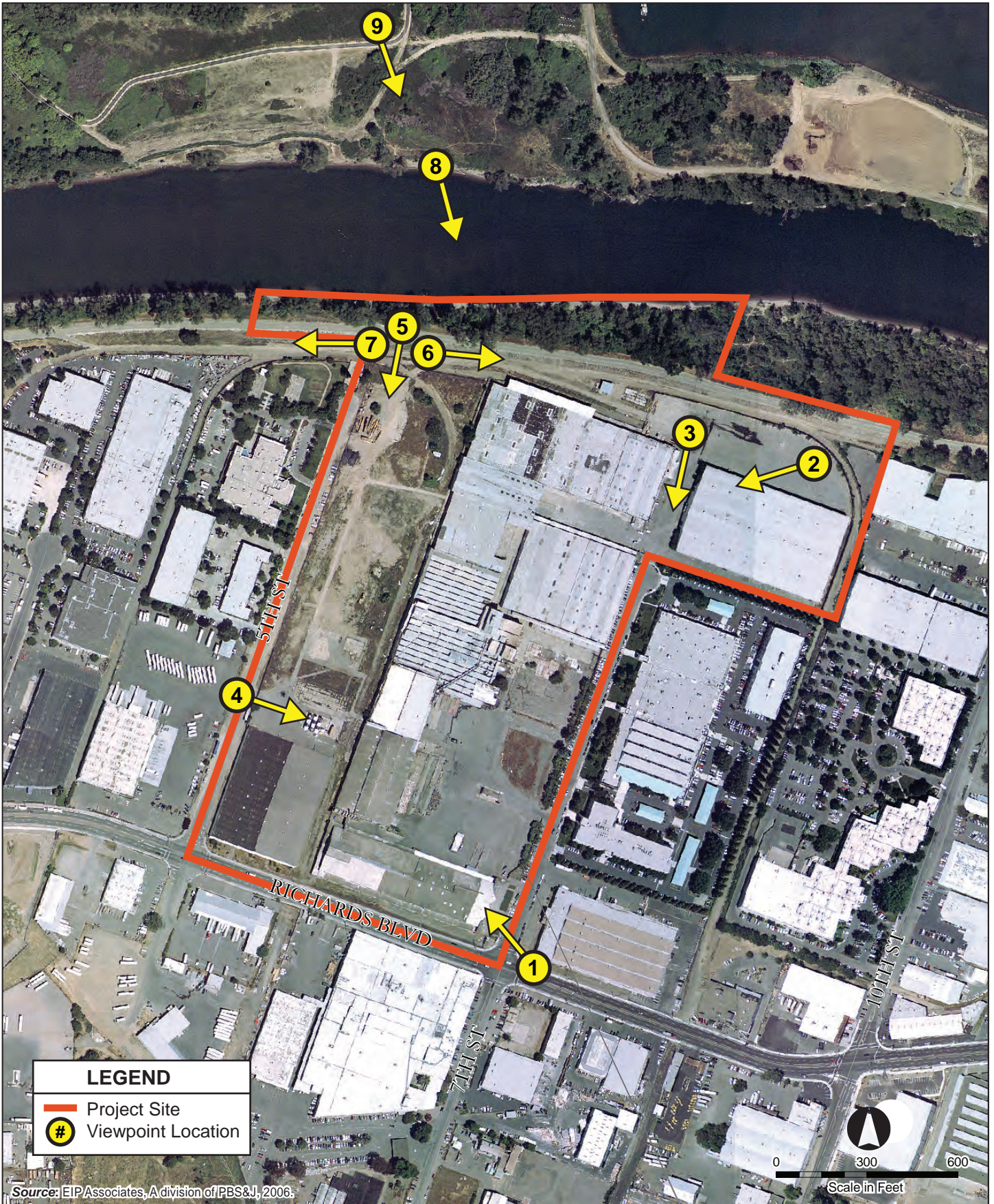
Regional Setting

The project site is located within the Richards Boulevard planning area, which encompasses an area bound by the American River to the north; the Union Pacific Railyards, Central City, Alkali Flat residential neighborhood, and Mid-town neighborhood to the south and east; and the Sacramento River to the west. The elevation in the Richards Boulevard planning area ranges from approximately 20 to 25 feet above sea level and is bounded to the north by levees along the American and Sacramento Rivers that are approximately 10 to 12 feet above the grade of the project site. The Richards Boulevard area is generally built out and comprised of low to mid-rise industrial and office buildings on the eastern side, some low-rise residential buildings east of Dos Rios Street, and some undeveloped properties dispersed throughout the area. The American River and Sacramento River is surrounded by natural vegetation and trees, with some low-lying rock beaches and recreational areas.

Site Characteristics

The site topography is characterized as generally flat, with the exception of an increase in grade from the toe to the crest of the levee on the north side of the project site. The general visual character of the project site is light industrial uses with paved surfaces. The site contains 16 existing buildings ranging from 12 feet for the smaller buildings to 30 feet for the larger warehouses. Figure 6.1-1 provides a viewpoint location map of the photos taken at the project site and Figures 6.1-2 through 6.1-5 provide photos taken from viewpoints.

As shown in Viewpoints 1-6, existing light industrial buildings on the site are characterized as a mix of one and two-story warehouse and office buildings with predominately brick or stucco facades. Most of the warehouse-style buildings include roll-up garages and elevated receiving and loading areas for large deliveries. The interior of the site is mostly covered by paved surfaces that provide internal circulation and surface parking. In between buildings, overhead utility wires are present. Stacks and piles of hay are also present within buildings and paved



LEGEND

- Project Site
- # Viewpoint Location

Source: EIP Associates, A division of PBS&J, 2006.

FIGURE 6.1-1
Viewpoint Locations



Viewpoint 1: View of the former Bercut-Richards cannery complex looking northwest from Richards Boulevard and 7th Street.



Viewpoint 2: View of the project site looking southwest from the northeast portion of the site.

Source: JRP Historical Consulting, and EIP Associates, a Division of PBS&J, 2006.



FIGURE 6.1-2
Views of the Project Site

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Viewpoint 3: View of the project site looking south toward 7th Street and Downtown from the north central portion of the site.



Viewpoint 4: View of the project site looking east from 5th Street.

Source: EIP Associates, a Division of PBS&J, 2006.



FIGURE 6.1-3
Views of the Project Site

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Township 9



Viewpoint 5: View of the project site and Downtown looking south from the levee.

Source: EIP Associates, a Division of PBS&J, 2006.



FIGURE 6.1-4
View of the Project Site

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Township 9



Viewpoint 6: View of the Parkway area and project site looking east near 5th Street.



Viewpoint 7: View of the Parkway area and levee looking west near 5th Street.

Source: EIP Associates, a Division of PBS&J, 2006.



FIGURE 6.1-5
Views of the American River Parkway

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Township 9

areas in the northeast portion of the site (see Figure 6.1-2, Viewpoint 2). Vegetation within the project site is sparse and consists of shrubs and trees located along the perimeter. Portions of the site perimeter are screened by chain-linked fencing. The northwestern area of the project site is primarily undeveloped. Areas to the north along the American River Parkway contain vegetation, trees, and a gravel path.

Views of the Project Site

Views of the project site from Richards Boulevard consist of light industrial buildings with brick and concrete facades, and six-foot-tall chain-linked fence with slats for screening. Fencing surrounding the project is placed at the property line and sidewalk, and buildings are generally setback approximately 20 feet from the fence. Views to the project site from North 7th Street consist of one to two-story light industrial buildings, interior paved surfaces, screened chain-linked fencing, with some landscaping and trees along the project site boundary. Views from north of the site along the levee looking south are elevated above the site. Two-story light industrial buildings along the north are not as densely developed as the area in the south, and provide open loading areas. Paved surface areas in the northeast and open space areas are present on the site. Views from North 5th Street looking east also include one to two-story light industrial buildings paved surfaces and undeveloped open spaces, screened chain-link fencing.

Surrounding Area Characteristics

Industrial and Office Uses

The project site is surrounded by light industrial and office buildings. The American River borders the site to the north. A dirt pedestrian and bicycle trail runs along the top of the levee, and provides views of downtown to the south and views of the American River to the north. To the west across North 5th Street is Sump Pump 111, which is surrounded by an approximately six-foot-tall chain-linked fence with slats for screening, one and two-story buildings within the Sacramento County Sheriff facility, one to two-story state and county office buildings, and a two-story FedEx distribution center building. To the south across Richard Boulevard are various one-story manufacturing buildings with loading areas, warehouses, and the two-story Office of State Publishing building. To the east across North 7th Street are one to two-story office buildings. Several those buildings along North 7th Street house State of California offices. In addition, there are low-scale warehousing uses near the northeastern corner of the project site along the levee. Most structures surrounding the project site are one to two stories in height.

Public Uses

Public uses in the vicinity of the proposed project site include the south side of the American River Parkway, which is within the project site and north of the proposed development area. Figure 6.1-5 provides views of the American River Parkway near the northern boundary of the project site, and Figure 6.1-6 provides views from Discovery Park looking south. The south side of the parkway includes a raised levee approximately 12 feet above project grade, a flat bicycle and pedestrian path at the crest of the levee, and mature trees and vegetation that are not maintained further to the north along the river. Figure 6.1-6 provides views of the Parkway from Discovery Park, which is directly north of the project site and the American River. As depicted on Viewpoints 8 and 9 (Figure 6.1-6), the project site is mostly screened by mature trees along the river. No existing buildings on the project site are visible from those locations.



Viewpoint 8: View of the project site looking south from the edge of the north side of the American River.



Viewpoint 9: View of the project site looking south from the bikeway near the north side of the American River.

Source: Previsualists Inc., 2006.



FIGURE 6.1-6

Views of the Project Site from Discovery Park

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Township 9

Freeways

The Richards Boulevard area is visible from I-5, which is the closest freeway to the project site; however, the project site is not directly visible from I-5, which runs north-south and is elevated further to the southwest. The segment of I-5 nearest to the project site between the American River to the north and downtown Sacramento to the south is not designated as a scenic highway.

Light and Glare

Light that falls beyond the intended area is referred to as light trespass. Types of light trespass include spill light and glare. Minimizing all these forms of obtrusive light is an important environmental consideration. Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments; however, these lights have the potential to produce spill light and glare, waste energy, and if designed incorrectly, could be considered unattractive. Depending on the proposed use, the use of well-designed energy efficient fixtures that face downward that emit the correct intensity of light for the use, and incorporate energy timers would be less obtrusive and efficient features.

Spill light is the light that illuminates surfaces beyond the area intended to be illuminated. Spill light can adversely affect light sensitive uses, such as residential neighborhoods at nighttime. Light dissipates as one moves from the source. Light intensity is often increased at the source to compensate for this dissipated light, which can further increase the amount of light that illuminates adjacent uses. Spill light can be minimized by using only the level of light necessary, and by using cutoff type fixtures or shielded light fixtures, or a combination of fixture types.

Glare results when a light source directly in the field of vision is brighter than the eye can comfortably accept. Squinting or turning away from a light source is an indication of glare. The presence of a bright light in an otherwise dark setting may be distracting or annoying, referred to as discomfort glare, or it may diminish the ability to see other objects in the darkened environment, referred to as disability glare. Glare is particularly associated with high light intensity, as measured in candelas, emitted at angles near horizontal (75 to 90 degrees from straight down). Glare can be reduced by design features that block direct line of sight to the light source and that direct light downward, with little or no light emitted at high (near horizontal) angles, since this light would travel long distances. Cutoff-type light fixtures minimize glare because they emit relatively low intensity light at these angles.

Existing Light and Glare Conditions

Existing ambient light sources within the project site include nighttime lighting for security purposes. The site is generally dark along the undeveloped portion in the northeast and areas adjacent to the American River Parkway. Additional ambient lighting in the project vicinity is generated from nearby light industrial and commercial uses, roadway lighting on Richards Boulevard, North 5th Street, and North 7th Street, and vehicle headlights.

REGULATORY SETTING

The following goals, objectives, and policies are from the City of Sacramento General Plan, CCCP, RBAP, and the American River Parkway Plan.

Federal and State Regulations

There are no federal or state regulations regarding aesthetics that are applicable to the proposed project.

Local Regulations

City of Sacramento General Plan

The following goals and policies related to aesthetic resources from the General Plan are applicable to the proposed project.

RESIDENTIAL LAND USE ELEMENT

Section 2: Residential Land Use Element; Overall Goals

Goal A **Maintain and improve the quality and character of residential neighborhoods in the City.**

Section 2: Residential Land Use Element; Specific Goals, Policies,

CONSERVATION AND OPEN SPACE ELEMENT

Policy

4.

Establish a system of open space, buffers and view sheds that act as neighborhood gateways, and as visual and physical community separators and greenbelts to define the limits of urban growth.

Central City Community Plan

The following goals and policies related to aesthetic resources from the CCCP are applicable to the proposed project.

Environmental Goal

Create an attractive urban setting through the preservation of existing amenities in the Central City and development of an urban design addendum to the Central City Plan.

Sub-Goals

- Encourage new residential office and commercial development which is human in scale, sensitive to open space and aesthetic needs and which will minimize air and noise pollution.
- Improve visual qualities, especially signing, building and yard maintenance, commercial developments, and overhead utilities.
- Develop urban design standards which provide open space, attractive landscaping, and encourage creative design features which are sensitive to the urban forms, scales, and patterns found in the Central City.
- Protect and enhance the unique visual features such as entrances into the Central City, attractive arterials, notable landmarks, and access to views of the river.

Richards Boulevard Area Plan

LAND USE

Policy

7.2.

Create an attractive pattern of streets and blocks which is more in scale with the downtown, that can accommodate a mixture of uses and activities, and that can add to the diversity and interest of the Richards Boulevard area.

HOUSING

Objective 4: Create attractive neighborhood environments which will reinforce the sense of community and enhance the well being of residents.

Policy

4.2.

Create pedestrian-oriented streets which promote an attractive and safe environment.

American River Parkway Plan

The American River Parkway Plan provides guidance for land use decisions affecting the Parkway; specifically addressing its preservation, use, development, and administration. According to the American River Parkway Plan, a portion of the project site along the Parkway is within the Plan's Jibboom Street East area. The following goals and policies related to aesthetic resources from the American River Parkway Plan are applicable to the proposed project.

RECREATIONAL USE OF THE PARKWAY

Policy

4.17.

Facilities shall be designed to blend into the surrounding natural environment.

NON-RECREATIONAL USE OF THE PARKWAY

Policy

5.7.

Structures that are in the Parkway or visible from the Parkway shall be of a design, color, texture and scale that minimizes adverse visual intrusion into the Parkway.

- 5.7.1 Structures shall be constructed of naturalistic materials which blend with the natural environment.
- 5.7.2 Colors shall be earth tones, or shall blend with the colors of surrounding vegetation.
- 5.7.4 To the extent possible, structures shall be screened from view by native landscaping or other naturally occurring features.

LAND USE

Policies

6.2.

Adverse impacts upon the Parkway caused by adjacent land uses and activities shall be eliminated or mitigated.

6.4.

Levees, landscaping, and other man-made or natural buffers should be used to separate the Parkway visually and functionally from adjoining land uses.

Design Commission

The project site is located within the Richards Boulevard Special Planning District, which is an established design review district. According to Section 17.132.040.A, Authority to review, of the City of Sacramento Zoning Code, projects subject to review by the Design Commission (Commission) include any proposed construction of a new multiple family residential project and new nonresidential project within the boundaries of an established design review district that requires review by the Commission. As specified by Section 17.132.050 of the Zoning Code, the Commission shall evaluate each application for design review in accordance with the citywide design review guidelines plan, the design review guidelines plan for the district in which the project is located, the findings and declaration of purpose contained in Section 17.132.010 of the Zoning Code, and any other applicable adopted land use plans. The Commission shall not approve an application for design review unless it finds that the design is consistent with the applicable plans, findings and declaration of purpose listed above. These standards are intended to provide a frame of reference for the applicant as well as a method of review for the Commission.

Methods of Analysis

A description of the proposed project site was prepared from a visit to the site in August 2006. Visual simulations were prepared to demonstrate the potential visual change of the site with implementation of the proposed project. Two viewpoint locations were chosen along the north side of the American River to show the change in views from these publicly accessible areas (see Figure 6.1-1). The site plan and visual simulations for the proposed project were used to evaluate the potential effects of project development on the visual character of the project site and the nearby area. The analysis focuses on the manner in which development could change the visual elements or features that exist on the proposed project site.

The visual impacts of the proposed project are analyzed in relation to existing conditions, which are light industrial, office, and municipal uses. The positive or negative value attached to changes in visual character is largely subjective. The visual effects of construction activities are not evaluated in this section because they would be intermittent and temporary.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if

- The project has a demonstrable negative aesthetic effect; or
- The project casts glare in such a way as to cause public hazard or annoyance for a sustained period of time; or
- The project casts light onto oncoming traffic or residential uses.

Project-Specific Impacts and Mitigation Measures

6.1-1 Development of the proposed project could have a demonstrable negative aesthetic effect.

The perception of a visual impact is personal and subjective; what one person may perceive as a negative impact another may find visually pleasing. Even those experienced in urban design principles and architecture can have differing opinions on the visual “quality” of a particular project. Therefore, because of the subjective nature of interpreting visual impacts, this analysis does not rely on opinion to make a determination as to the significance of impacts. Rather, the analysis relies upon the judgment of the reviewing bodies of the City of Sacramento to apply the City’s adopted design goals and policies. It is assumed that compliance with these adopted plans, as deemed appropriate by the reviewing bodies, would ensure that a project would be substantially consistent with existing development and the direction of future development within the City, and, as a result, would not result in significant negative aesthetic effects.

Scenario A and B

As shown in Figures 6.1-2 to 6.1-5, the project site and immediate project vicinity are characterized by developed uses and the American River. Along the northern site boundary is the American River levee with a public trail and the American River and associated riparian habitat, including mature trees along the river’s edge. Areas immediately west, south, and east of the project site are characterized by roadways, light industrial and office buildings, and ornamental landscaping.

The proposed project would replace existing buildings with new residential and commercial buildings ranging from a maximum height of 50 to 180 feet under Scenario A and 50 to 235 feet (Lot 13) under Scenario B. The proposed project would also include a new circulation system and landscaping and public uses. The maximum height of 180 to 235 feet would be approximately 150 to 205 feet taller than the tallest existing buildings. The proposed project would cover approximately 56.8 acres of the project site with developed uses, compared to 51.5 acres of developed uses under existing conditions. The size and scale of the proposed development, if constructed to its maximum height and density, would be a noticeable change when compared to the existing site visual character. Although the proposed development would be taller and denser than current site development, it would support the overall goals and policies set forth in the RBAP. Specifically, the project supports Land Use Policy 7.2, which calls to “create an attractive pattern of streets and blocks which is more in scale with the downtown, that accommodate a mixture of uses and activities, and that can add to the diversity and interest of the Richards Boulevard area.”

Views of the project site from the American River and Discovery Park, further to the north of the site would also change. Buildings up to eight stories in height located nearest to the Parkway and the American River would have a minimum setback of approximately 220 feet from the American River and a minimum setback of 100 feet from the curb and from other adjacent buildings. Additionally, portions of buildings above eight stories would be setback an additional 30 feet from the curb. According to the proposed Design Guidelines, buildings would be designed to include projecting balconies, changes in the wall plane, and wall detail or color to provide visual relief. The Design Guidelines also include using building materials that include warm colors and natural materials, glass with low reflectivity, and landscaping. The project would support Policy 5.7 of the American River Parkway Plan which states that “structures that

are within the Parkway or visible from the Parkway shall be out of a design, color, texture and scale that minimizes adverse intrusion into the Parkway.” In support of Policy 5.7, the proposed buildings in the Riverfront area adjacent to the American River Parkway would incorporate stepped facades and utilize neutral color schemes that are compatible with the adjacent natural setting. Figures 6.1-7 and 6.1-8 show existing and proposed views of the project site from north of the American River looking south. Development standards would increase the separation between viewers along the American River and the Riverfront buildings so that a sense of open space and southern views of the sky are maintained (see Figures 6.1-7 and 6.1-8). As illustrated in these figures, the buildings nearest to the river would appear similar in height with existing mature trees.

As described in Chapter 2, Project Description, the project would include an overlook that would be up to 230-feet-wide cast-in-place concrete construction. The overlook could extend up to 60 feet from the centerline of the levee toward the American River, but would not exceed the waterside toe of the levee. The overlook could be in the form of a cantilever that would be supported at the top of the levee, or the overlook could be supported by a retaining wall at its northern edge. If the overlook is a cantilever, all of the construction would be done at the top of the levee. Generally, the proposed overlook would be consistent with Policy 4.17 of the American River Parkway Plan, which calls for recreational facilities within the parkway to “be designed to blend into the surrounding natural environment.” The project would also be supportive of Policy 4.17 because the proposed Design Guidelines include direction on how the design and function of the overlook would blend into the American River Parkway through the use of compatible landscaping and design theme at the interface of the two areas to provide a transition to the natural area.

The proposed project would redevelop a currently predominantly developed site. While the scale and density of site development would be greater than current conditions, it would not substantially change the visual character or the views to and from the site. Proposed project development would comply with standards set forth in the proposed Design Guidelines, which would define the character of the project, and would be subject to review by the City, which includes review by the Design Commission, Planning Commission, and the City Council. The reviewing bodies would use the criteria listed in the City’s adopted planning documents in analyzing the proposed project design. In addition, as discussed in Chapter 4.0, Land Use, the proposed project under both Scenarios A and B would be generally consistent with General Plan and American River Parkway Plan policies. Appendix C includes a more detailed overview of the project’s consistency with specific adopted and draft goals and policies. Therefore, the proposed project would not have a demonstrable negative aesthetic effect on adjacent existing uses, views from the American River Parkway, and would not substantially degrade the visual character or quality of the site. This would be a ***less-than-significant impact***.

Mitigation Measures

None required.

6.1-2 The proposed project would create new sources of light and glare that could adversely affect on-site and adjacent uses.

Glare is caused by light reflections from pavement, vehicles, street lights, and building materials, such as reflective glass and polished surfaces. During daylight hours, the amount of glare depends on the intensity and direction of sunlight. Glare can create hazards to motorists



Existing View



Proposed View

Source: Previsualists, Inc., 2006.



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FIGURE 6.1-7
Existing and Proposed Views of the Project Site from the North Side of the American River

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Township 9



Existing View



Proposed View

Source: Previsualists, Inc., 2006.



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FIGURE 6.1-8

Existing and Proposed Views of the Project Site from the Bikeway within Discovery Park

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and nuisances for pedestrians and other viewers. At night, artificial lighting can cause glare or disturb residents.

Scenario A and B

Because the proposed project would be a more intense day and nighttime use of the site than current use, the project would increase nighttime lighting within the Richards Boulevard area. Most of the new light sources would be attributed to proposed residential and retail uses and the associated evening activity of residents and guests. Project roadways would be illuminated, along with pedestrian spaces and architectural features. Lighting elements would blend into the environment by day and operate at night. Exterior illumination, designed to highlight and accent architectural features of buildings would be included on all building facades facing streets, sidewalks, parking areas, and other public spaces. This could include pedestrian-scale lamps, bollards, landscape lighting, and/or step lighting that is complementary to design. Project design includes installation of lighting fixtures which would be directed and controlled to reduce disturbance to on-site residences and neighboring properties. The Design Guidelines include specific guidelines that minimize intrusive lighting along the waterfront. These measures include requirements that all light fixtures would have incandescent, halogen, or metal halide light sources. Along major roadways in the project site, roadway scale illumination located within medians would be required at intervals designed to promote safety, visual continuity, and community identity. However, on most streets, the proposed Design Guidelines encourage that the proposed project include pedestrian-scale lighting in the design of all streetscapes and public spaces. Pedestrian scale illumination would promote visual continuity, safety, and night activity in any community. Sign lighting would originate from a concealed light source that would not be intrusive to vehicular traffic, pedestrians, or neighboring properties.

The proposed project would also include an approximately 150-foot-tall tower structure that would be oriented towards downtown to the south. The tower structure would include a light feature consisting of a controlled neon or laser light source that would operate from dusk until dawn. The light feature would be installed to include cut-off shields that screen the light from shining to the north or onto the riverfront area of the proposed development.

As described above, the project would include exterior lighting for security, signage, and a tower lighting feature that are designed not to infringe on adjacent properties. New light sources associated with project development would not significantly affect the ambient light in the project area due to the amount of night lighting that already exists on and surrounding the site. Prior to development at the project site, all proposed lighting features would be subject to review and approval by the Design Commission.

The proposed project would result in the construction of residential, retail, and office buildings ranging from 3 to 12-stories in height that could include some exterior glass windows on the façade. However, because details of the type of glass material to be used is unknown, exterior materials used to construct proposed buildings could include materials that could result in a substantial amount of glare if the surfaces are highly reflective. These highly reflective materials could result in excessive glare that could adversely affect adjacent uses. This would be a *potentially significant impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce this impact to a ***less-than-significant level***.

6.1-2 (A & B)

- a) *The project contractor shall include a configuration of exterior light fixtures that emphasize close spacing and lower intensity light that is directed downward in order to minimize glare on adjacent uses and minimize impacts to night sky views.*
- b) *The project contractor shall not use highly reflective mirrored glass walls as a primary building material for façades to reduce glare on adjacent uses. Instead, Low E glass shall be used in order to reduce the reflective qualities of the building, while maintaining energy efficiency.*

Implementation of Mitigation Measure 6.1-2 would include a requirement for directing exterior lighting downward and use of lower reflective exterior glass to minimize reflective surfaces and reduce the potential for new sources of glare.

Cumulative Impacts and Mitigation Measures

The cumulative context for the evaluation of cumulative impacts on aesthetics is the surrounding area within the viewshed¹ of the proposed project site. For the purpose of this analysis, three viewsheds are considered: the view from the northern edge of the American River looking south, the view from the elevated portion of I-5 from downtown near the J Street ramp looking northeast, and the view from I-5 at Discovery Park looking east. The cumulative context for light and glare would be other development that could affect the same sites that would be affected by light or glare generated by the project.

6.1-3 Cumulative development in the same viewshed as the proposed project site could result in a demonstrable negative aesthetic effect.**Scenario A and B**

Currently, the Richards Boulevard area from the Sacramento River, I-5/Discovery Park and I-5/J Street viewsheds appears to be uniform in height and density, generally consisting of mature trees and low-rise one- and two-story buildings. Due to a fluctuation in water levels, views from the river sometimes are limited to the riparian habitat along the bank of the river. Since the Richards Boulevard area currently consists of a developed urban environment with a mix of light industrial, commercial, and residential uses, future construction in this area would most likely consist of on-going City of Sacramento redevelopment and roadway projects. It is anticipated that any future projects would be generally consistent with the community design pattern established in the General Plan and embodied in the CCCP and the RBAP. The General Plan, CCCP, and RBAP call for increased density along Richards Boulevard and in the RBAP and anticipate future development that would be larger in scale and height when compared to existing buildings. The Zoning Code would also ensure that the proposed project and other

1 A viewshed is an area visible from a particular vantage point, typically at a higher elevation offering views of higher visual quality.

cumulative projects would develop consistent with the General Plan and the future development's surroundings, in terms of design, massing, and building heights. Therefore, additional development within these areas surrounding the project site would constitute further intensification of an already largely built-out area that would generally occur through infill development and overall changes to the viewshed of the RBAP would also be affected. Future development, including the proposed project, would also be subject to design review, which would consider the types and placement of planned development in the City. Therefore, cumulative development would not have a demonstrable negative aesthetic effect and the cumulative change in visual character of the areas surrounding the project site would be **less than significant**.

Mitigation Measure

None required.

6.1-4 The proposed project, in combination with cumulative development surrounding the project site, would create new sources of light and glare.

Scenario A and B

The project area currently consists of a developed urban environment with a mix of light industrial, commercial, and residential uses, and future construction in this area would most likely consist of on-going City of Sacramento redevelopment and roadway projects. Future redevelopment activities in the Richards Boulevard area would either replace existing buildings with new ones, such as the proposed project, or involve roadway, landscaping, lighting, or signage improvements. The project would include exterior lighting for security, signage, and a tower lighting feature that are designed not to infringe on adjacent properties. New light sources associated with proposed project development would not significantly affect the ambient light in the project area due to the amount of night lighting that already exists on and surrounding the site. Therefore, the project's contribution to new light sources would not be considerable.

Cumulative development, including the proposed project, could introduce highly reflective exterior glass sources which could create glare hazards for motorists and nuisances for pedestrians and other viewers, as discussed under Impact 6.1-2. At night, new artificial lighting could cause glare or disturb residents. Design of future cumulative development, including the proposed project, would be required to undergo review by the Design Commission. This process would ensure that additional light and glare associated with proposed lighting or materials for proposed projects in the Richards Boulevard area would not cause public hazard or annoyance for a sustained period of time or cast light onto oncoming traffic.

Because the details of the type of glass material to be used for proposed project buildings are unknown, the project's contribution to this cumulative effect would be considerable and therefore the cumulative impact is *potentially significant*.

Mitigation Measure

Implementation of the following mitigation measure would reduce the project's contribution to less than considerable and this cumulative impact would be reduced to a **less-than-significant level**.

6.1-4 (A & B) *Implement Mitigation Measure 6.1-2(a) and (b).*

Implementation of Mitigation Measure 6.1-2 would include a requirement for directing exterior lighting downward and use of lower reflective exterior glass to minimize reflective surfaces and reduce the potential for new sources of glare. As a result, the project's contribution to new sources of light and glare would be substantially reduced and its contribution to cumulative light and glare sources would not be considerable.

6.2 Air Quality

INTRODUCTION

This section assesses the potential air quality effects caused by stationary, mobile, and area sources related to construction and operation of the proposed Township 9 project (proposed project). This section describes the climate in the project area; existing air quality conditions in the project area for criteria air pollutants and toxic air contaminants; and applicable federal, State, and regional air quality standards.

Comments received in response to the NOP (see Appendix B) included a letter from the Sacramento Metropolitan Air Quality Management District (SMAQMD), requesting that potential short-term and long-term air quality impacts be analyzed using the URBEMIS 2002 emissions modeling program, version 8.7. For significant operational emissions, the SMAQMD recommended an air quality mitigation plan be created to reduce emissions by 15 percent (%). A draft copy of the Air Quality Mitigation Plan (AQMP) that addresses operational emissions is included in Appendix D. These issues and concerns have been addressed in this section.

As discussed in the Initial Study (see Appendix A), there are no substantial odor sources in the immediate vicinity that could adversely affect the proposed project; therefore, the project would not be affected by substantial odors. Odors could be generated from proposed restaurants included within the project, but restaurant odors are generally not considered offensive. The project description mentions dry cleaning facilities as a potential use on the project site. Uncontrolled dry cleaning fluid emissions could cause odor problems, but dry cleaning facilities operating in the Sacramento area must implement emission control procedures as prescribed by the SMAQMD and this would eliminate the potential for significant odor problems. The Initial Study also found issues associated with air movement, moisture, and temperature to be less than significant. Accordingly, these issues are not discussed further in this section.

Major sources reviewed for this section include the SMAQMD *Guide to Air Quality Assessment in Sacramento County* (Guide), the City of Sacramento General Plan, the Central City Community Plan, the Richards Boulevard Area Plan (RBAP), the American River Parkway Plan, the California Air Resources Board (CARB) web site, and peer reviewed studies.

ENVIRONMENTAL SETTING

A region's air quality is influenced by the region's climate, topography, and pollutant sources. The characteristics of the region encompassing the City of Sacramento are such that the area can, at times, have the potential for high concentrations of regional and localized air pollutants.

Climate and Topography

Hot dry summers and mild rainy winters characterize the Mediterranean climate of the Sacramento Valley. During the year the temperature may range from 20 to 115 degrees (°) Fahrenheit with summer highs usually in the 90s and winter lows occasionally below freezing. Average annual rainfall is about 20 inches with snowfall being very rare. The prevailing winds are moderate in strength and vary from moist clean breezes from the south to dry land flows from the north.

The mountains surrounding the Sacramento Valley (Valley) create a barrier to airflow, which can trap air pollutants in the Valley when meteorological conditions are right. The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells lie over the Valley. The lack of surface wind during these periods and the reduced vertical flow caused by less surface heating reduces the influx of outside air and allows air pollutants to become concentrated in a stable volume of air. The surface concentrations of pollutants are highest when these conditions are combined with smoke from agricultural burning or when temperature inversions trap cool air, fog and pollutants near the ground.

The ozone season (May through October) in the Sacramento Valley is characterized by stagnant air or light winds with the delta sea breeze arriving in the afternoon out of the southwest. Usually the evening breeze transports the airborne pollutants to the north out of the Valley. During about half of the days from July to September; however, a phenomenon called the “Schultz Eddy” prevents this from occurring. Instead of allowing for the prevailing wind patterns to move north carrying the pollutants out of the Valley, the Schultz Eddy causes the wind pattern to circle back south. Essentially this phenomenon causes the air pollutants to be blown south toward the Sacramento area. This phenomenon’s effect exacerbates the pollution levels in the area and increases the likelihood of violating federal or state standards. The Eddy normally dissipates around noon when the delta sea breeze arrives.¹

Criteria Air Pollutants

Criteria air pollutants are a group of pollutants for which federal or state regulatory agencies have adopted ambient air quality standards. The criteria air pollutants of concern in the Sacramento area include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), and particulate matter (PM₁₀). Table 6.2-1 lists the health effects associated with these pollutants. Most of the criteria pollutants are directly emitted. Ozone, however, is a secondary pollutant that is formed in the atmosphere by chemical reactions between oxides of nitrogen (NO_x) and reactive organic gases (ROG). According to the most recent emissions inventory data for Sacramento County, mobile sources are the largest contributors of both ROG and NO_x.²

Criteria air pollutants are classified in each air basin, county, or in some cases, within a specific urbanized area. The classification is determined by comparing actual monitoring data with state and federal standards. If a pollutant concentration is lower than the standard, the area is classified as “attainment” for that pollutant. If an area exceeds the standard, the area is classified as “non-attainment” for that pollutant. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated “unclassified”. Table 6.2-1 lists the health effects associated with these pollutants.

Monitors that collect air quality data are located throughout the Sacramento Valley Air Basin (SVAB). The closest monitoring station to the project site is the Sacramento T Street station, located in downtown Sacramento at 1309 T Street. Due to variations among ambient concentrations in and around downtown, where available, data from the three closest CARB-operated monitoring stations (i.e., the T Street station, the Del Paso Manor station at 2701 Avalon Drive in northeast Sacramento, and the Health Department station at 2221 Stockton

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- 1 Sacramento Metropolitan Air Quality Management District, *Guide to Air Quality Assessment in Sacramento County*, July 2005, page 1-7.
 - 2 California Air Resources Board. Sacramento County 2004 *Estimated Annual Average Emissions Inventory*, <www.arb.ca.gov/app/emsmcat_query> (January 3, 2006).

TABLE 6.2-1	
HEALTH EFFECTS OF MAIN CRITERIA AIR POLLUTANTS	
Pollutant	Adverse Effects
Ozone	<ul style="list-style-type: none"> - Ozone can irritate lung airways and cause inflammation. Other symptoms include wheezing, coughing, and breathing difficulties during exercise or outdoor activities. People with respiratory problems are most vulnerable, but even healthy people that are active outdoors can be affected when ozone levels are high. - Repeated exposure to ozone pollution for several months may cause permanent lung damage. - Even at very low levels, ground-level ozone triggers a variety of health problems including aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses like pneumonia and bronchitis. - Ground-level ozone interferes with the ability of plants to produce and store food, which makes them more susceptible to disease, insects, other pollutants, and harsh weather. - Ozone reduces crop and forest yields and increases plant vulnerability to disease, pests, and weather.
Carbon Monoxide	<ul style="list-style-type: none"> - The health threat from lower levels of CO is most serious for those who suffer from heart disease. For a person with heart disease, a single exposure to CO at low levels may cause chest pain and reduce that person's ability to exercise; repeated exposures may contribute to other cardiovascular effects. - Healthy people can be affected by high levels of CO as well. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn, reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death. - CO contributes to the formation of ground-level ozone, which can trigger serious respiratory problems.
Particulate Matter	<ul style="list-style-type: none"> - Particle pollution, especially fine particles, contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Numerous scientific studies have linked particle pollution exposure to a variety of problems, including: increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; decreased lung function, aggravated asthma, development of chronic bronchitis; irregular heartbeat, nonfatal heart attacks; and premature death. - Particles can be carried over long distances by wind and then settle on ground or water. The effects of this settling include: making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.
Nitrogen Dioxide	<ul style="list-style-type: none"> - One of the main ingredients involved in the formation of ground-level ozone, which can trigger serious respiratory problems. - Reacts to form nitrate particles, acid aerosols, as well as NO₂, which also cause respiratory problems. <ul style="list-style-type: none"> - Contributes to formation of acid rain; to nutrient overload that deteriorates water quality; and to atmospheric particles that cause visibility impairment. - Reacts to form toxic chemicals.
Source: Environmental Protection Agency, 2006. < http://www.epa.gov/air/urbanair/6poll.html >	

Boulevard south of downtown) were considered in compiling the most recent air quality data summarized in Table 6.2-2.

Existing Ambient Air Quality

Criteria air pollutants essential to air quality planning and regulation in the SVAB are listed in Table 6.2-3, along with applicable State and federal ambient air quality standards and attainment classifications. The Clean Air Act (CAA), as described in the Regulatory Setting section, established two types of standards, primary and secondary. Primary standards are designed to establish limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

TABLE 6.2-2			
EXCEEDANCES OF NATIONAL AND STATE AIR POLLUTION STANDARDS IN THE SACRAMENTO AREA			
Pollutant	2003	2004	2005
OZONE (1-hour)			
Highest 1-hour (ppm)	0.145	0.118	0.134
Days>0.12 ppm (National)	6	0	4
Days>0.09 ppm (State)	53	35	43
OZONE (8-hour)			
Highest 8-hour (ppm)	0.122	0.102	0.117
Days>0.08 (National)	43	25	35
Days>0.07 (State) ¹	> 43	> 25	> 35
CARBON MONOXIDE			
Highest 8-hour (ppm)	3.40	3.0	3.6
Days>=9.0 ppm (National and State)	0	0	0
PARTICULATE MATTER (PM₁₀)			
Highest 24-hour Concentration (ug/m ³)	66	58	77
Days>150 ug/m ³ (National)	0	0	0
Days>50 ug/m ³ (State)	12.3	6.1	29.4
NITROGEN DIOXIDE			
Highest 1-hour (ppm)	0.08	0.07	0.07
Days>.25 ppm (State)	0	0	0
Annual Mean (National) > 0.053 ppm	0	0	0
Notes:			
1 State standard went into effect in early 2006 so no historical data is available.			
Source: California Air Resources Board. <www.arb.ca.gov> (June 16, 2006).			

TABLE 6.2-3		
AIR QUALITY STANDARDS ATTAINMENT STATUS CHART FOR SACRAMENTO COUNTY		
Pollutant	Primary Standard	Status
Federal Standards		
Ozone (O₃) – 8 hour	0.08 ppm	Serious Nonattainment
Carbon Monoxide (CO) – 1 hour	35 ppm	Attainment
8 hour	9 ppm	Attainment
Nitrogen Dioxide (NO₂) – Annual Arithmetic Mean	0.053 ppm	Attainment
Inhalable Particulate (PM₁₀) 24 Hour	150 µg/m ³	Moderate Nonattainment*
Annual Arithmetic Mean	50 µg/m ³	
State Standards		
Ozone (O₃) – 1 hour	0.09 ppm	Serious Nonattainment
8 hour	0.07 ppm	Serious Nonattainment
Carbon Monoxide (CO) – 1 hour	20 ppm	Attainment
8 hour	9 ppm	Attainment
Nitrogen Dioxide (NO₂) – 1 hour	0.25 ppm	Attainment
Inhalable Particulate (PM₁₀) Annual Arithmetic Mean	20 µg/m ³	Nontainment
24 Hour	50 µg/m ³	Nontainment
Notes: ppm = parts per million µg/m ³ = micrograms per cubic meter Sacramento County air quality currently meets the Federal PM-10 standards, but the SMAQMD must request redesignation to attainment and submit a maintenance plan to be formally designated to attainment. Source: SMAQMD < www.airquality.org/aqdata/attainmentstat.html > (June 1, 2006).		

There are many sources of criteria pollutants in Sacramento County. These sources can be divided into three categories: mobile, stationary, and “area” sources. Mobile sources consist of vehicles, as well as mobile construction equipment and even boats. Stationary sources are pollution sources that do not move. Examples of stationary sources are large industrial or commercial sources where pollutants may be released via a stack. Stationary sources can also be smaller, as in the case of small emergency generators or boilers. Area source emissions are normally produced by processes and products that are individually small, but are numerous and widely dispersed. Normally, these sources are associated with everyday activities such as landscape maintenance, painting, and the use of fireplaces and barbecues.

The CARB maintains an emission inventory of air pollutants for the State’s air basins as well as for the counties inside those air basins. Table 6.2-4 presents the latest emission inventory of ROG, CO, NO_x, and PM₁₀, for Sacramento County. Relevant criteria pollutants for the Sacramento area and the attainment status for Sacramento County for each of these pollutants are described below.

Ozone is a gas that is formed when ROG and nitrogen oxides undergo slow photochemical reactions in the presence of sunlight. The type of ozone referred to in this section is called tropospheric ozone (otherwise known as “bad ozone”), since it lies very close to the earth’s surface (in the troposphere). Ozone concentrations are generally highest during the

TABLE 6.2-4						
2005 ESTIMATED ANNUAL EMISSIONS FOR SACRAMENTO (TONS/DAY)						
Source Category	ROG	CO	NO_x		PM₁₀	
Stationary Sources						
Fuel Combustion	0.58	3.02	3.16		0.93	
Waste Disposal	0.24	0.14	0.04		0.01	
Cleaning and Surface Coatings	5.39	-	-		-	
Petroleum Production and Marketing	4.21	-	-		-	
Industrial Processes	0.90	0.52	0.29		1.22	
Total Stationary Sources	11.31	3.68	3.49		2.16	
Area-Wide Sources						
Solvent Evaporation	13.17	-	-	-	0.01	
Miscellaneous Processes	4.18	41.00	3.18		38.71	
Total Area-Wide Sources	17.36	41.00	3.18		38.72	
Mobile Sources						
On-Road Vehicles	27.39	255.62	51.79		1.76	
Other Mobile	10.76	89.16	24.85		1.75	
Total Mobile Sources	38.15	344.78	76.64		3.51	
Natural Sources						
Total Natural Sources	10.18	0.18	0.01		0.02	
Grand Total	77.00	389.64	83.31		44.41	
Source: California Air Resources Board. < www.arb.ca.gov/app/emsinv/emssumcat_query > (June 16, 2006).						

summer months when direct sunlight, light wind, and warm temperature conditions are favorable. The federal government uses a number of different classifications to describe the extent to which an area is in nonattainment for the federal ozone standard. Sacramento County was formerly classified as being in “severe” nonattainment for the one-hour ozone standard. However, the one-hour standard was revoked by Environmental Protection Agency (EPA) in June 2005 and replaced with a new eight-hour standard which is now the only applicable ozone standard. The EPA has designated the Sacramento area as a “serious” nonattainment area for the new eight-hour standard.

Carbon Monoxide is a colorless, odorless gas that is formed when carbon in fuel is not burned completely. It is a component of motor vehicle exhaust, which contributes about 56% of all CO emissions nationwide. Other non-road engines and vehicles (such as construction equipment and boats) contribute about 22% of all CO emissions nationwide. Higher levels of CO generally occur in areas with heavy traffic congestion. In cities, 85 to 95% of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves, gas stoves, cigarette smoke, and un-vented gas and kerosene space heaters are sources of CO indoors. The highest levels of CO in the outside air typically occur during the colder months of the year when inversion conditions are more frequent. The air pollution becomes trapped near the ground beneath a layer of warm air.

Because CO is emitted directly from internal combustion engines—unlike ozone—and motor vehicles operating at slow speeds are the primary source of CO in the SVAB, the highest ambient CO concentrations are generally found near congested transportation corridors and

intersections. Additional traffic generated by a project may increase congestion at nearby intersections, and consequently increase the likelihood of creating high levels of CO.

Through control measures adopted by state, local and federal agencies, all areas of the SVAB have attained the state and federal CO standards. However, the potential still exists for incidents of high localized concentrations of CO to occur.

Particulate Matter (PM₁₀) consists of extremely small, suspended particles or droplets 10 microns or smaller in diameter. Some sources of suspended particulate matter, like pollen and wind blown dust, occur naturally. However, in populated areas, most fine suspended particulate matter is caused by road dust, diesel soot, combustion of fuel, abrasion of tires and brakes, and construction activities. Fine particles can remain suspended in the air and travel long distances. For example, exhaust from a diesel truck in Los Angeles can end up over the Grand Canyon.

Monitoring data for the county shows that the county is currently in attainment of the federal PM₁₀ standard. However, the SMAQMD must request re-designation and submit a PM₁₀ maintenance plan to the EPA prior to any re-designation to attainment. Consequently, the EPA has not officially changed the county's designation to attainment for the federal PM₁₀ standard. The Sacramento Region is officially in nonattainment status for the more stringent state PM₁₀ standards.

Nitrogen oxides is the generic term for a group of highly reactive gases, all of which contain nitrogen and oxygen in varying amounts. Many of the nitrogen oxides are colorless and odorless. However, one common pollutant, nitrogen dioxide (NO₂) along with particles in the air can often be seen as a reddish-brown layer over many urban areas. Nitrogen oxides form when fuel is burned at high temperatures, as in a combustion process. The primary manmade sources of NO_x are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuels. Nitrogen oxides can also be formed naturally. The County is in attainment for NO₂.

Toxic Air Contaminants

In addition to the criteria air pollutants, another group of airborne substances, called Toxic Air Contaminants (TACs) are known to be highly hazardous to health, even in small quantities. TACs are airborne substances capable of causing short-term (acute) and/or long-term (chronic or carcinogenic) adverse human health effects (i.e., injury or illness).

TACs can be emitted from a variety of common sources, including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. Farms, construction sites, and residential areas can also potentially contribute to toxic air emissions. Due to mounting scientific evidence of adverse health effects, the CARB has recently identified diesel particulate matter as a TAC. Regulation of TACs is achieved through federal and state controls on individual sources. The 1990 CAA Amendments offer a comprehensive plan for achieving significant reduction in both mobile and stationary source emissions of certain designated Hazardous Air Pollutants (HAP), with a goal of achieving the Environmental Protection Agency's (EPA) one in one million cancer risk from TACs. All major stationary sources of designated HAP's are required to obtain and pay the required fees for an operating permit under Title V of the federal CAA Amendments.

TAC impacts are assessed using a maximum individual cancer risk (MICR) that estimates the probability of a potential maximally exposed individual (MEI) contracting cancer as a result of sustained exposure to toxic air contaminants over a constant period of 24 hours per day for 70 years for residential receptor locations. The CARB and local air districts have determined that any stationary source posing an incremental cancer risk to the general population (above background risk levels) equal to or greater than 10 people out of 1 million to be excessive. For stationary sources, if the incremental risk of exposure to project-related TAC emissions meets or exceeds the threshold of 10 excess cancer cases per 1 million people, the CARB and local air district require the installation of best available control technology (BACT) or maximum available control technology (MACT) to reduce the risk threshold. To assess risk from ambient air concentrations, the CARB has conducted studies to determine the total cancer inhalation risk to individuals due to outdoor toxic pollutant levels. The CARB has conducted studies to determine the total cancer inhalation risk to individuals due to outdoor toxic pollutant levels. According to the map prepared by the CARB showing the estimated inhalation cancer risk for TACs in the State of California, the project area has an existing estimated risk that is between 750 and 1,500 cancer cases per 1 million people in 2010. This represents the lifetime risk that between 750 and 1,500 people in 1 million may contract cancer from inhalation of toxic compounds at current ambient concentrations under an MEI scenario.

Sensitive Receptors

Some individuals are considered to be more sensitive than others to air pollution. Reasons for greater sensitivity can include existing health problems, duration of exposure to air pollutants, or certain peoples' increased susceptibility to pollution-related health problems due to factors such as age. Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be sensitive receptors to poor air quality because the very young, the old, and the infirm are more susceptible to respiratory infections and other air quality related health problems than the general public. Residential uses are considered sensitive because people in residential areas are often at home for extended periods of time, so they can be exposed to pollutants for extended periods. Recreational areas are considered moderately sensitive to poor air quality because vigorous exercise associated with recreation places a high demand on the human respiratory function.

The proposed project would be developed on land currently used for cold storage, concrete storage and delivery, livestock feed supply, hay-bail compression and delivery, and Sacramento Habitat for Humanity warehouse operations. The project area is located within the Richards Redevelopment Area and is surrounded by dense urban uses. Surrounding land uses consist of the American River to the north, industrial uses to the south, industrial and office uses to the east, and industrial uses to the west. Regional access to the project site is provided by I-5 and SR 160. Local access is provided by Richards Boulevard. Dos Rios Elementary School is located approximately 2,000 feet east of the proposed project on Richards Boulevard. The nearest residential uses are located along Dos Rios Street, immediately south of the school across Richards Boulevard.

REGULATORY SETTING

Air quality in Sacramento County is regulated by the U.S. EPA, the CARB, and the SMAQMD. These agencies develop rules or regulations to meet the goals or directives imposed on them through legislation. Although U.S. EPA regulations may not be superseded, both state and local

regulations may be more stringent. In general, air quality evaluations are based on air quality standards developed by the federal and state government.

Since many air pollution problems are regional in nature, the federal government sometimes designates multi-county areas as “Nonattainment Areas”. Because it covers a large area, a nonattainment area can be composed of several different air districts. The “nonattainment area” designation means that these individual local agencies must work together to solve regional air pollution problems. The Sacramento Ozone Nonattainment Area includes all of Sacramento County and parts of Yolo, Solano, Sutter, and Placer counties.

Federal Regulations

The EPA is the federal agency responsible for setting and enforcing the federal ambient air quality standards for atmospheric pollutants. The EPA regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The EPA also has jurisdiction over emission sources outside state waters (outer continental shelf), and establishes various emissions standards for vehicles sold in states other than California.

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs.

Clean Air Act

The Federal CAA, as amended, establishes air quality standards for several pollutants. These standards are divided into primary standards and secondary standards. Primary standards are designed to protect public health, and secondary standards are intended to protect public welfare from effects such as visibility reduction, soiling, nuisance, and other forms of damage. The CAA requires that regional plans be prepared for non-attainment areas illustrating how the federal air quality standards could be met. The CARB approved the most recent revision of the State Implementation Plan prepared by the SMAQMD in 1994, and submitted it to the EPA. The SIP, approved by the EPA in 1996, consists of a list of ROG and NO_x control measures for demonstrating future attainment of ozone standards. The steps to achieve attainment will continue to require significant emissions reductions in both stationary and mobile sources.

State Regulations

The CARB, a part of the California EPA (Cal EPA) is responsible for the coordination and administration of both federal and state air pollution control programs within California. In this capacity, the CARB conducts research, sets state ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. The CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. The CARB also has primary responsibility for the development of California’s SIP, for which it works closely with the federal government and the local air districts.

California Clean Air Act

The California Clean Air Act (CCAA) of 1988 requires nonattainment areas to achieve and maintain the state ambient air quality standards by the earliest practicable date and local air districts to develop plans for attaining the state ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide standards. In compliance with the CCAA, the SMAQMD prepared and submitted the 1991 Air Quality Attainment plan (AQAP) to mainly address Sacramento County's nonattainment status for ozone and carbon monoxide, and although not required, PM₁₀. The CCAA also requires that by the end of 1994 and once every three years thereafter, the districts are to assess their progress toward attaining the air quality standards. The triennial assessment is to report the extent of air quality improvement and the amounts of emission reductions achieved from control measures for the preceding three year period.³

Toxic Air Contaminants

Regulation of TACs is achieved through federal and state controls on individual sources. The 1990 federal CAA Amendments offer a comprehensive plan for achieving significant reduction in both mobile and stationary source emissions of certain designated Hazardous Air Pollutants (HAP). All major stationary sources of designated HAP's are required to obtain and pay the required fees for an operating permit under Title V of the federal CAA Amendments.

The Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588), California Health and Safety Code Section 44300 et seq., provides for the regulation of over 200 air toxics and is the primary air contaminant legislation in the state. Under the Act, local air districts may request that a facility account for its TAC emissions. Local air districts then prioritize facilities on the basis of emissions, and high priority designated facilities are required to submit a health risk assessment and communicate the results to the affected public. The TAC control strategy involves reviewing new sources to ensure compliance with required emission controls and limits, maintaining an inventory of existing sources of TACs, and developing new rules and regulations to reduce TAC emissions. The purpose of AB 2588 is to identify and inventory toxic air emissions and to communicate the potential for adverse health effects to the public.

Assembly Bill 1807 (AB 1807), enacted in September 1983, sets forth a procedure for the identification and control of TACs in California. The CARB is responsible for the identification and control of TACs, except pesticide use. AB 1807 defines a TAC as an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or which may pose a present or potential hazard to human health. The CARB prepares identification reports on candidate substances under consideration for listing as TACs. The reports and summaries describe the use of and the extent of emissions in California resulting in public exposure, together with their potential health effects.

In 1998, the CARB identified diesel particulate matter as a toxic air contaminant under the AB 1807 program. Diesel particulate matter is emitted into the air via heavy-duty diesel trucks, construction equipment, and passenger cars. In October 2000, the CARB released a report entitled *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. This plan identifies diesel particulate matter as the predominant TAC in California and proposes methods for reducing diesel emissions.

3 Sacramento Metropolitan Air Quality Management District website: <www.airquality.org/stateplan> (March 17, 2005).

Reducing Particulate Matter in California

As a first step in the implementation of Senate Bill 656 (SB 656, Reducing Particulate Matter in California), the CARB approved a list of the most readily available, feasible, and cost-effective control measures that can be employed by air districts to reduce PM₁₀ and PM_{2.5} (collectively referred to as PM) in 2004. The list is based on rules, regulations, and programs existing in California as of January 1, 2004, for stationary, area-wide, and mobile sources. As a second step air districts must adopt implementation schedules for selected measures from the list. The implementation schedules will identify the appropriate subset of measures, and the dates for final adoption, implementation, and the sequencing of selected control measures. In developing the implementation schedules, each air district will prioritize measures based on the nature and severity of the PM problem in their area and cost-effectiveness. Consideration is also given to ongoing programs such as measures being adopted to meet national air quality standards or the state ozone planning process. The consideration and adoption of air district rules in their implementation schedules, coupled with ARB's ongoing programs, will ensure continued progress in reducing public exposure to PM and attainment of the State and federal standards.

Local Regulations

Sacramento Metropolitan Air Quality Management District

The SMAQMD is the primary agency responsible for planning to meet federal and state ambient air quality standards in Sacramento County and the larger Sacramento Ozone Nonattainment Area. In order to demonstrate the area's ability to eventually meet the federal ozone standards, the SMAQMD, along with the other air districts in the Nonattainment Area, maintain the region's portion of the SIP for ozone. The Nonattainment Area's part of the SIP is a compilation of regulations that govern how the region and State will comply with the FCAA requirements to attain and maintain the federal ozone standard. The compilation of rules that comprises the Sacramento Nonattainment Area's portion of the SIP is contained in a document called the Sacramento Area Regional Ozone Attainment Plan. The most recent update of the Plan was adopted on November 15, 1994. Currently, the SMAQMD is working to update the 1994 Plan in recognition of the new federal eight-hour standard for ozone. This process is currently ongoing.

As of June 1, 2006, the SMAQMD established an updated mitigation fee rate of \$14,300 per ton of emissions in excess of the SMAQMD NO_x threshold. The mitigation fee is based on the Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) cost effectiveness cap. The Carl Moyer Program was named in honor of Dr. Carl Moyer who worked to create the program in an effort to improve California's air quality in the name of public interest. The Carl Moyer Program is a grant program, implemented by a partnership of ARB and local air districts that fund the incremental cost of cleaner-than-required engines, equipment, and other sources of pollution. The Carl Moyer Program grants provide early or extra emission reductions. It can also accelerate the development and commercialization of advanced emission control technology, accelerate the turnover rate of old equipment to newer and cleaner equipment, and help reduce costs to the regulated community. Projects to reduce emissions from on-road heavy-duty vehicles, idle reduction technologies, off-road diesel equipment, transportation refrigeration units, off road spark-ignition equipment, marine vessels, locomotives, and agricultural engines have been eligible for grants.

For PM₁₀, the other criteria pollutant of concern for the Sacramento Region, Sacramento currently meets the federal standard, but has not yet been officially re-designated to attainment by the U.S. EPA.

Local Air District Rules

The SMAQMD has several rules that relate to the proposed project, which are summarized below:

Rule 201 – General Permit Requirements: Requires any project that includes the use of certain equipment capable of releasing emission to the atmosphere as part of project operation to obtain a permit from the SMAQMD prior to operation of the equipment. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the SMAQMD to determine if a permit is required. Portable construction equipment with an internal combustion engine over 50 horsepower are required to have a SMAQMD permit or a CARB portable equipment registration.

Rule 403 – Fugitive Dust: Requires a person to take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation.

Rule 442 – Architectural Coatings: Sets VOC limits for coatings that are applied to stationary structures or their appurtenances. The rule also specifies storage and cleanup requirements for these coatings.

Rule 460 – Adhesives and Sealants: Limits VOC from the application of products used for bonding two surfaces. Also regulates the storage and disposal of solvents associated with such applications.

Rule 401 – Ringelmann Chart: Prohibits individuals from discharging into the atmosphere from any single source of emissions whatsoever any air contaminant whose opacity exceeds certain specified limits.

Rule 411 – Boiler NO_x: Sets NO_x and CO emissions from industrial, institutional, and commercial boilers, steam generators, and process heaters.

City of Sacramento General Plan

The City of Sacramento General Plan does not contain an Air Quality Element and there are no specific goals or policies that pertain to air quality. The City of Sacramento is currently updating its General Plan.

Sacramento Central City Community Plan

In addition to the General Plan, the City of Sacramento has also developed plans that are more specific to the various communities in the City. The City's "Central City Community Plan" contains the following sub goal under its environmental goal:

Provide an environment which is free of annoying noise and continue to reduce air pollution.

Richards Boulevard Area Plan

There are no goals or policies in the Richards Boulevard Area Plan related to air quality that pertain to the proposed project.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

The analysis in this section focuses on the nature and magnitude of the change in the air quality environment due to construction and operation of the proposed project. Air pollutant emissions would result from construction activities, project operations, and increased traffic volumes.

The SMAQMD has published air quality thresholds of significance for use by lead agencies when making a determination of significance for a project. The SMAQMD thresholds establish standards for three types of impacts – short-term impacts from construction, long-term impacts from project operation, and cumulative impacts. The net increase in emissions generated by these activities and other secondary sources have been estimated and compared to thresholds of significance recommended by the SMAQMD. The methodology for estimating emissions, as described in the SMAQMD Guide and other guidance documents, was used in this analysis.

Construction

Demolition equipment information was received from the applicant's construction consultant and used in the URBEMIS 2002 emissions model, version 8.7, to estimate emissions. Construction equipment was estimated using standard SMAQMD methodology. When possible, details such as horsepower and load factor were estimated using the best available information. Please refer to Appendix E for URBEMIS modeling data.

Operational Emissions

Operational emissions refer to the emissions that are generated by the normal day-to-day activity of the project. These activities include the heating and cooling of buildings, landscape maintenance, emissions from increased traffic, and the use of consumer products by residents and employees.

Average emission factors for operational emissions of criteria pollutants are estimated by using emission factors in the URBEMIS 2002 emissions model, version 8.7. These emission factors are based on CARB's EMFAC2002 (Emission Factors 2002). Mobile source emissions are largely driven by the daily trip generation rates calculated in the traffic study that was conducted for the proposed project. Please refer to Appendix E for modeling assumptions and results.

Localized CO Concentrations

The CALINE4 dispersion model for predicting CO concentrations is the preferred method of estimating pollutant concentrations at sensitive receptors near congested roadways and intersections. For each intersection analyzed, CALINE4 adds roadway-specific CO emissions calculated from peak-hour turning volumes to the existing ambient CO air concentrations. For this analysis, CO concentrations were calculated based on a simplified CALINE4 screening procedure developed by the Bay Area Air Quality Management District. The simplified model is intended as a screening analysis in order to identify a potential CO hotspot. This methodology assumes worst-case conditions and provides a screening of maximum, worst-case CO concentrations.

CO concentration levels are highest near crowded or congested intersections where traffic is slow or idling. The proposed project would increase traffic volumes on surrounding roadways, possibly degrading the existing level of service (LOS) and increasing CO concentrations at nearby intersections. Normally, barring other environmental considerations, CO concentrations should be carefully analyzed at intersections classified as LOS "E" or worse, which is usually considered to be "unacceptable" for traffic circulation.

The closest monitoring station to the project site is the T Street station located in midtown Sacramento. This station collects CO data for the 8-hour standard, but not the 1-hour standard. Consequently, monitoring data can be used to determine an 8-hour CO background value. For

the 1-hour background, a persistence factor of 80% was used. A persistence factor is the ratio between the 8-hour and 1-hour concentrations. To ensure an adequate margin of safety, the highest 8-hour CO reading for the years 2003 – 2005 from the T Street station was used as the eight-hour background concentration.

Particulate Matter

Construction and operation of the proposed project would generate emissions of particulate matter, particularly through additional vehicular trips associated with people living and working at the project. The average size of particulate matter from fugitive dust produced primarily from earth moving activities is larger than particulate matter produced as a byproduct of combustion and emitted as engine exhaust. Particulate matter from fugitive dust generating sources is primarily composed of PM₁₀ with a relatively small fraction consisting of PM_{2.5}. Conversely, particulate matter from combustion sources is primarily composed of PM_{2.5} with a small fraction consisting of PM₁₀.

While PM_{2.5} calculation methodology is still in the draft phase, a significant emission rate for PM_{2.5} of 10 tons per year was proposed in 2005 by the EPA. Converting this annual rate into a daily rate produces an operational significance threshold of approximately 55 pounds per day. Although the EPA and air districts have yet to formally adopt the threshold, it provides a measure with which to gauge potential significance with respect a project. CAAQS do include a concentration-based threshold for PM_{2.5}; however, the City currently does not have an adopted threshold for PM_{2.5} so no analysis is included in this EIR.

Issues Not Addressed in the Impact Analysis

Toxic Air Contaminants

TACs associated with the project could be generated either by stationary sources on-site or by mobile sources, such as diesel trucks, making trips to and from the site. TACs can produce both acute (short-term) and chronic (long-term) adverse health impacts. Usually chronic TAC impacts are measured over a lifetime of 70 years. Both construction and operational activities would emit TACs, but neither the level of project construction activities nor the type of land uses (residential, retail, office) in place after project implementation would pose significant additional health risk to sensitive land uses on or near the project site. To date, there has not been a formally adopted standard for cancer risk attributed to ambient air exposure. Accordingly, this issue is not addressed in the impact analysis; however, a discussion is provided below.

Construction of the proposed project would generate TACs through the burning of diesel fuel. Diesel particulate has recently been identified as a TAC by the CARB. While there are some components of diesel particulate that could conceivably cause short-term acute impacts, the biggest concerns regarding diesel impacts are the potential chronic impacts that can occur with long-term exposure.

The closest sensitive receptors to the proposed project site are the Dos Rios Elementary School and nearby residences along Dos Rios and Richards Boulevard, all more than a quarter of a mile from the project site. Construction of the proposed project would occur over an approximately nine year period. TAC effects from project construction equipment at the closest school and residences would be small relative to their TAC exposure from existing sources such as industrial facilities and diesel truck traffic on local roads and freeways. In addition, all construction equipment would have to adhere to the restrictions set forth in SMAQMD's

standard mitigation measures (see Mitigation Measure 6.2-1), which would require a minimum 45% reduction in particulate matter emissions from project construction equipment.

Once the proposed project is built and occupied, TACs would be generated from project-associated stationary sources (e.g., backup diesel generators, printing operations, dry cleaning operations, etc.) and mobile sources. AB 2588, the Air Toxics “Hot Spots” Information and Assessment Act requires the SMAQMD to compile a list of facilities that emit TACs and prioritize them based on the risk they represent. Facilities with potentially high risk must submit a health risk assessments to the SMAQMD and assure that the health risks they pose to the surrounding population are within acceptable limits. Generally, manufacturing plants, research and development facilities, and hospitals are identified as high-risk sources; office and residential uses are rarely prioritized as high-risk because they do not contain large TAC sources. Even if the proposed project were to incorporate a large TAC source in future plans, a risk reduction and audit plan would have to be prepared by the facility. Furthermore, permitting and operation of any such stationary source would be overseen by the SMAQMD and subject to Rule 904, Air Toxics Control Measures. These measures would ensure that risk from stationary TAC sources on the project site would be reduced to acceptable levels.

Mobile sources (e.g., automobiles and diesel-fueled trucks) associated with the proposed project would also generate TACs. However, the proposed project would not include truck-intensive uses (e.g., large commercial warehouses or distribution centers) that are the most important mobile sources of TACs. The development of any proposed commercial uses that could be a source of stationary TAC would be subject to SMAQMD rules and regulations and permit requirements. These permit requirements would ensure that risk from stationary TAC sources on the project site would be reduced to acceptable levels. In addition, the CARB’s *Air Quality and Land Use Handbook: A Community Health Perspective* (April 2005) cites several recent studies linking concentrations of vehicle-related pollutants to roadway distance. These studies linking traffic emissions with health impacts build on existing data on adverse health effects of ambient air pollution. As a result of these findings, the CARB recommends that new sensitive land uses (including residential) not be sited within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day.⁴ Proposed project residential uses would be located over 2,500 feet from I-5.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- *Ozone*: the project increases nitrogen oxide (NO_x) levels above 85 pounds per day for short-term effects (construction);
- The project increases either ozone precursors, nitrogen oxides (NO_x) or reactive organic gases (ROG), above 65 pounds per day for long-term effects (operation);
- *Particulate Matter (PM₁₀)*: the project emits pollutants at a level equal to, or greater than, 5% of the CAAQS (50 micrograms/cubic meter for 24 hours) if there is an existing or projected violation; however, if a project is below the ROG and NO_x thresholds, it is assumed that the project is below the PM₁₀ threshold as well; or

4 California Air Resources Board, *Air Quality and Land Use Handbook: A Community Health Perspective*, April 2005, pp. 8-10.

- *Carbon Monoxide (CO)*: the project results in CO concentrations that exceeds the 1-hour State ambient air quality standard of 20.0 parts per million (ppm) or the 8-hour State ambient standards of 9.0 ppm.

Project-Specific Impacts and Mitigation Measures

6.2-1 Construction of the proposed project would generate emissions of ozone precursors.

Scenario A and B

Construction activities associated with development of the project would generate emissions of ozone precursors. Since ozone has significant adverse health and environmental effects, it is important to consider ozone precursors ROG and NO_x when addressing project construction impacts. The SMAQMD has not developed a threshold of significance for ROG associated with construction activities because the main source of ROG during construction, architectural coatings, can be effectively regulated by SMAQMD Rule 442, Architectural Coatings. Although some district measures address NO_x emissions from heavy-duty diesel construction equipment, the SMAQMD has also implemented a construction threshold for NO_x of 85 pounds per day. Construction equipment and construction phasing data provided by the applicant's construction consultant, was used with the URBEMIS 2002 model to estimate construction emissions of both ROG and NO_x.

Following SMAQMD's recommended methodology and assumptions, construction emissions of ROG and NO_x were estimated for the proposed project using construction equipment lists and phasing information provided by the project sponsor, which were substantially the same for both development scenarios. ROG and NO_x emissions, as shown in Table 6.2-5, would vary by construction phase and would cease once construction is complete. Modeling indicated that construction equipment NO_x emissions would exceed the district threshold during the earliest project stage (when demolition of existing structures and grading would occur over the entire site) and later project stages (when construction would be in progress on many of the project site parcels simultaneously). Construction impacts would be temporary. However, since the URBEMIS model indicates that NO_x emissions associated with construction activities would exceed the 85 pounds-per-day threshold of significance, this would be considered a *significant impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce this impact to a ***less-than-significant level***.

6.2-1 (A & B)

- a) *The project shall provide a plan, for approval by the lead agency and the SMAQMD, demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, would achieve a project wide fleet-average 20% NO_x reduction and 45% particulate reduction compared to the most recent CARB fleet average at time of construction. The SMAQMD shall make the final decision on the emission control technologies to be used by the project construction equipment; however, acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine*

TABLE 6.2-5				
CONSTRUCTION AND OPERATIONAL EMISSIONS IN PEAK POUNDS PER DAY				
	ROG	NO_x	CO	PM₁₀
Year 2007				
Entire Site Demolition	12.37	144.95	80.24	58.04
Entire Site Mass Grading	12.97	84.64	107.48	119.89
Total	25.34	229.59	187.72	177.93
<i>Exceeds SMAQMD Threshold?</i>		Yes		
Year 2008a				
Phase 1 Site Grading and Improvements	7.56	49.63	62.63	8.52
<i>Exceeds SMAQMD Threshold?</i>		No		
Year 2008b				
Phase 2 Site Grading and Improvements	7.64	50.13	63.43	8.54
<i>Exceeds SMAQMD Threshold?</i>		No		
Year 2008c				
Phase 3 Site Grading and Improvements	6.11	40.50	50.52	8.20
<i>Exceeds SMAQMD Threshold?</i>		No		
Year 2009a				
Phase 3 Site Grading and Improvements	6.11	38.94	51.45	8.06
Phase 2 Parcel 11 Construction	3.94	20.60	43.34	0.63
Total	10.05	59.54	94.79	8.69
<i>Exceeds SMAQMD Threshold?</i>				
Year 2009b				
Phase 2 Parcel 11 Construction	3.94	20.60	41.68	0.65
Phase 2 Parcel 12 Construction	3.89	20.11	41.45	0.64
Phase 4 Site Grading and Improvements	7.55	47.77	63.56	8.36
Total	15.38	88.48	146.69	9.65
<i>Exceeds SMAQMD Threshold?</i>		Yes		
Year 2010a				
Phase 2 Parcel 11 Construction	133.40	20.35	43.34	0.63
Phase 2 Parcel 12 Construction	123.73	19.93	43.97	0.63
Phase 3 Parcel 10 Construction	3.93	20.27	41.54	0.60
Phase 4 Parcel 3 Construction	5.55	27.54	62.14	0.84
Total	266.61	88.09	190.99	2.70
<i>Exceeds SMAQMD Threshold?</i>		Yes		
Year 2010b				
Phase 2 Parcel 12 Construction	123.73	19.93	43.97	0.63
Phase 3 Parcel 10 Construction	5.12	26.26	54.24	0.79
Phase 3 Parcel 4 Construction	3.93	20.27	41.54	0.60
Phase 4 Parcel 3 Construction	5.55	27.54	62.14	0.84
Phase 4 Parcel 5 Construction	6.07	27.41	75.61	0.90
Total	144.40	121.41	277.50	3.76
<i>Exceeds SMAQMD Threshold?</i>		Yes		
Year 2011a				
Phase 3 Parcel 10 Construction	144.03	20.33	43.62	0.65
Phase 3 Parcel 4 Construction	171.38	26.44	58.07	0.85
Phase 4 Parcel 3 Construction	263.54	27.64	65.96	0.94
Phase 4 Parcel 5 Construction	380.15	27.81	84.22	1.04
Phase 4 Parcel 15 Construction	3.61	19.68	34.80	0.56
Phase 4 Parcel 16 Construction	3.69	19.83	36.49	0.57
Total	966.40	141.73	323.16	4.61
<i>Exceeds SMAQMD Threshold?</i>		Yes		

TABLE 6.2-5				
CONSTRUCTION AND OPERATIONAL EMISSIONS IN PEAK POUNDS PER DAY				
	ROG	NO_x	CO	PM₁₀
Year 2011b				
Phase 3 Parcel 4 Construction	171.38	26.44	58.07	0.85
Phase 4 Parcel 5 Construction	380.15	27.81	84.22	1.04
Phase 4 Parcel 15 Construction	3.61	19.68	34.80	0.56
Phase 4 Parcel 16 Construction	3.69	19.83	36.49	0.57
Phase 4 Parcel 13 Construction	5.23	26.39	56.63	0.80
Phase 4 Parcel 14 Construction	5.17	26.32	55.33	0.79
Total	569.23	146.47	325.54	4.61
<i>Exceeds SMAQMD Threshold?</i>		Yes		
Year 2012a				
Phase 4 Parcel 15 Construction	74.15	19.71	35.84	0.58
Phase 4 Parcel 16 Construction	91.63	19.87	37.79	0.60
Phase 4 Parcel 13 Construction	194.68	26.59	60.99	0.86
Phase 4 Parcel 14 Construction	182.06	26.51	59.40	0.85
Total	542.52	92.68	194.02	2.89
<i>Exceeds SMAQMD Threshold?</i>		Yes		
Year 2012b				
Phase 4 Parcel 13 Construction	194.68	26.59	60.99	0.86
Phase 4 Parcel 14 Construction	182.06	26.51	59.40	0.85
Phase 4 Parcel 17 Construction	5.37	26.57	59.91	0.81
Phase 4 Parcel 6 Construction	5.52	26.74	63.19	0.83
Total	387.63	106.41	243.49	3.35
<i>Exceeds SMAQMD Threshold?</i>		Yes		
Year 2013 - 2016				
Phase 4 Parcel 17 Construction	226.72	26.81	65.01	0.89
Phase 4 Parcel 6 Construction	258.77	27.01	69.02	0.92
Phase 4 Parcel 7 Construction	3.81	20.05	39.01	0.59
Phase 4 Parcel 8 Construction	3.67	19.79	36.02	0.57
Phase 4 Parcel 1 Construction	6.63	29.55	85.17	0.97
Total	499.60	123.21	294.23	3.94
<i>Exceeds SMAQMD Threshold?</i>		Yes		
Operational Phase A				
Mobile Emissions	178.37	283.83	2,172.40	204.14
Area Source Emissions	198.73	55.08	24.02	1.40
Total Operational Emissions	377.10	338.91	2,196.42	205.54
<i>Exceeds SMAQMD Threshold?</i>	Yes	Yes	-	
Operational Phase B				
Mobile Emissions	212.16	340.76	2,591.23	245.91
Area Source Emissions	169.07	49.25	23.86	1.11
Total Operational Emissions	381.23	390.02	2,615.10	247.02
<i>Exceeds SMAQMD Threshold?</i>	Yes	Yes		
Source: EIP Associates, a division of PBS&J, 2006.				

retrofit technology, after-treatment products, and/or other options as they become available;

- b) *The project applicant and/or contractor shall submit to SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that shall be used an aggregate of 40 or more hours during any phase of the construction project. The inventory shall include the horsepower rating, engine production year, and projected hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project applicant and/or contractor shall provide SMAQMD with the anticipated construction timeline, including start date and name and phone number of the project manager and on-site foreman.*
- c) *The project applicant and/or contractor shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. Any equipment found to exceed 40% opacity (or Ringelmann 2.0) shall be repaired immediately 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 by contractor personnel certified to perform opacity readings, and a monthly summary of the visual survey results shall be submitted to the SMAQMD 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.*
- d) *Limit vehicle idling time to five minutes or less.*
- e) *The project applicant shall pay into the SMAQMD's construction mitigation fund to offset construction-generated emissions of NO_x that exceed SMAQMD's daily emission threshold of 85 lbs/day. The project applicant shall coordinate with the 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 current SMAQMD Fee of \$14,300/ton of NO_x emissions generated. This fee shall be paid prior to issuance of building permits. Detailed construction information for the proposed project is not yet available. However, based upon the preliminary URBEMIS emissions modeling, the expected payment for remaining construction related construction NO_x emissions over the significance threshold would be \$165,612 under either Scenario A or Scenario B. Fees may be paid on a per/acre basis, in which case the average fee would be approximately \$2,548/acre for both Scenarios A and B. If the projected construction equipment or phases change, the applicant shall coordinate with the SMAQMD to determine if the mitigation fee needs to be recalculated.*

Implementation of Mitigation Measures 6.2-1(a) through (d) (which are the SMAQMD standard mitigation measures for projects with significant construction-phase NO_x emissions) would result in a minimum 20% reduction of NO_x construction emissions according to the SMAQMD Guide.

While the proposed project's impact would be substantially reduced through implementation of Mitigation Measures 6.2-1(a) through (d), the impact during construction would remain significant. However, the mitigation fee (see Table 6.2-6) collected under Mitigation Measure 6.2-1(e) would enable the SMAQMD to buy credits to reduce emissions from other NO_x sources off-site to offset the project construction NO_x emissions that exceed the SMAQMD's threshold. Therefore, compliance with these measures would reduce the impact to a less-than-significant level.

Year	Construction Activity	Mitigation Fee (\$14,300/ton)	
2007	Demolition/Grading	\$45,645	
2008a	Phase 1 Grading/Improvements	\$0	
2008b	Phase 2 Grading/Improvements	\$0	
2008c	Phase 3 Grading/Improvements	\$0	
2009a	Phase 2 Parcel 11 Phase 3 Grading/Improvements	\$0	
2009b	Phase 2 Parcel 11, 12 Phase 4 Grading/Improvements	\$0	
2010a	Phase 2, 3, 4 Parcel 3, 10, 11, 12	\$0	
2010b	Phase 2, 3, 4 Parcel 3, 4, 5, 10, 12	\$11,469	
2011a	Phase 3, 4 Parcel 3, 4, 5, 10, 15, 16	\$26,789	
2011b	Phase 3, 4 Parcel 4, 5, 13, 14, 15, 16	\$30,368	
2012a	Phase 4 Parcel 13, 14, 15, 16	\$0	
2012b	Phase 4 Parcel 6, 13, 14, 17	\$121	
2013-2016	Phase 4 Parcel 1, 6, 7, 8, 17	\$51,220	
<i>Emissions Summary</i>		Total Mitigation fee (\$14,300/ton)	\$165,612
		Total Mitigation fee (\$/acre)	\$2,548
Notes: Acreage of the proposed project is estimated at 65 acres. Calculation sheets are included in Appendix E. Source: EIP Associates, a division of PBS&J, 2006.			

6.2-2 Construction of the proposed project would generate emissions of particulate matter.

Scenario A and B

Particulate emissions during construction would come from demolition of the existing buildings, excavation, grading, other earth-moving activities, construction equipment exhaust, and from vehicle exhaust produced by workers driving to and from the project site. As shown in Table 6.2-5, mass emission levels of particulate matter could reach a maximum of 177.93 pounds per day during the initial demolition and site grading phases (the majority of emissions being fugitive dust). This would be considered a *significant impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce fugitive dust emissions. Compliance with all measures specified below would reduce construction particulate impact to a **less-than-significant level**.

- 6.2-2 (A & B) *The project applicant shall require in all construction contracts that the following measures are implemented during all phases of construction and demolition activities:*
- a) *Demolition contractors shall ensure that all exterior surfaces of buildings are wetted during building demolition activities. The material from any building demolition shall be completely wetted during any period when the material is being disturbed, such as during the removal from the construction site.*
 - b) *All piles of demolished material shall be wetted and covered until removed from the site.*
 - c) *Maintain two feet of freeboard space on haul trucks.*
 - d) *All operations shall expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. The use of dry brushes is expressly prohibited.*
 - e) *Wheel washers for exiting trucks shall be installed or the wheels of all trucks and equipment leaving the site shall be washed off.*
 - f) *Water all exposed soil with sufficient frequency as to maintain soil moisture.*
 - g) *During clearing, grading, earth-moving, or excavation operations, fugitive dust emissions shall be controlled by watering exposed surfaces two times per day, watering haul roads three times per day or paving of construction roads, or dust-preventive measures. All onsite unpaved roads and offsite unpaved access roads shall be effectively stabilized of dust emissions using water or a chemical stabilizer or suppressant.*
 - h) *Onsite vehicle speeds on unpaved roads shall be limited to 15 mph.*
 - i) *Excavation and grading activities shall be suspended when winds exceed 20 mph.*

Implementation of Mitigation Measures 6.2-2(a) through (i) would reduce fugitive dust emissions to a less-than-significant level. The SMAQMD estimates that with implementation of these mitigation measures, particulate emissions from exposed earth surfaces (the largest source of particulate emissions during construction) would be reduced by 75%.⁵

5 SMAQMD *Guide to Air Quality Assessment in the Sacramento County* (July 2004), Table 3.10.

6.2-3 Operation of the proposed project would contribute to emissions of ozone precursors.

Scenario A and B

Once the proposed project is built and occupied, activities associated with various uses in the proposed project would generate ozone precursors ROG and NO_x. These precursors are of chief concern due to their role in the formation of smog, acid rain, and particulate matter. The majority of precursor emissions would be generated by vehicle trips associated with people visiting and working at the proposed project and by the use of consumer products (e.g., cleaning products, aerosol sprays, automotive products) by project residents and employees. Lesser sources of precursors would include energy use (fuel combustion for heating and cooling of buildings) and the application of architectural coatings (paints).

As identified in Table 6.2-5, emissions of ROG (381.23 lbs/day) and NO_x (390.02 lbs/day) would be well above the SMAQMD threshold of significance for operational emissions (85 lbs/day for both ROG and NO_x). It should be noted that modeling assumed the prohibition of wood-burning fireplaces or stoves.

The SMAQMD requires that the applicant prepare an operational Air Quality Mitigation Plan (AQMP) that reduces NO_x and ROG emissions by at least 15% over a "base case" scenario. A copy of the SMAQMD-endorsed draft AQMP prepared for the Township 9 project is included in Appendix D. The Sacramento Metropolitan Air Quality Management District (SMAQMD) *Guide to Air Quality Assessment* (July 2004) and *Indirect Source Review Program Implementation Guidelines* (February 1995) provide guidance to local land use agencies in implementing an indirect source review program. The SMAQMD has prepared a list of measures and corresponding reduction credits that can be applied to meet the required 15% reduction in emissions. Each emission reduction measure is assigned a point value, which is "approximately equivalent to the percentage reduction in emissions from the level that would be produced by a base-case project assuming full trip generation per the current ITE Trip Generation Handbook." The emission reduction measures are organized into the following categories:

- Bicycle, Pedestrian and Transit
- Parking
- Commercial Building Design
- Residential Development
- Mixed Use
- Building Components
- Transportation Demand Management (TDM) measures

The AQMP prepared for the proposed project and endorsed by the SMAQMD includes the following emission reduction strategies (and the associated point value):

- Provision of bicycle lockers and/or racks in non-residential uses (0.5 points);
- The proposed project is located within ½-mile of an existing Class I or Class II bicycle lane and provides a comparable bikeway connection to the existing facility (1.0 points);

- The project provides for pedestrian facilities and improvements such as overpasses and wider sidewalks (1.0 points);
- The project provides a display case or kiosk displaying transportation information in a prominent area, accessible to employees or residents (0.5 points);
- High density residential, mixed, or retail/commercial uses are located within ¼ mile of existing transit, linking with activity centers and other planned infrastructure (1.0 points);
- The proposed project provides the minimum amount of parking required (1.0 points);
- The project provides parking lot shading 20% over the code requirements (1.0 points);
- The project provides commercial office floor area ratio of 0.75 or greater within 1/4 mile of a transit stop (1.5 points);
- The project minimizes setback distances between development and transit, bicycle, or pedestrian corridors (1.0 points);
- The project's average residence density exceeds 7 DU. per acre (4.5 points);
- The project design includes multiple and direct street routing (grid style) (2.5 points);
- Development of the proposed project is predominantly characterized by properties on which various uses, such as office, commercial, institutional, and residential uses re combined in a single building or single site (3.0 points);
- The project provides neighborhood serving as a focal point with parks, schools, and other civic uses located within a ¼ mile (0.5 points);
- The project includes separate, safe, and convenient bicycle and pedestrian paths connecting residential, commercial, and office uses (2.0 points); and
- The project provides a development pattern that eliminates physical barriers such as walls, berms, landscaping, and slopes between residential and non-residential uses that impede bicycle or pedestrian circulation (1.0 points).

The implementation of the above emission reduction measures would exceed the 15% emission reduction/migration guideline established by the SMAQMD for both Scenario A (18.84%) and Scenario B (21.44%). Because the project is designed as a high-density, mixed-use, transit-oriented redevelopment project, the 15% guideline is achieved through project design. None of the selected measures listed above would require monitoring beyond completion of proposed project construction. By meeting the 15% guideline the project is considered to have met the "all feasible measures" required under CEQA for significant impact of regional ozone precursor emissions.⁶ Even with the inclusion of the above-mentioned design features, NO_x and ROG emissions associated with either of the two the project scenarios would still exceed the SMAQMD threshold of 85 lbs/day. Since emissions exceed the threshold, the impact of operational emissions of ozone precursors would be considered *significant*.

Mitigation Measures

Implementation of the emission reduction strategies included in the endorsed AQMP for the proposed project would reduce operational emissions by 18.84% under Scenario A and 21.44%

6 Township 9 Project, Draft Air Quality Management Plan SMAQMD #SAC200600961D, October 2006, p. 11.

under Scenario B which is greater than the 15% guideline. However, even with the implementation of the endorsed AQMP, operational emissions would remain above the SMAQMD significance threshold. Consequently, the operational ozone precursor emissions would remain **significant and unavoidable**.

6.2-3 (A & B) *The project applicant shall implement the emission reduction strategies contained in the endorsed Air Quality Mitigation Plan. Documentation confirming implementation of Air Quality Mitigation Plan shall be provided to the SMAQMD and City prior to issuance of occupancy permits.*

Implementation of the emission reduction strategies contained in the endorsed AQMP would exceed the 15% emission reduction/mitigation guideline established by the SMAQMD. Ozone precursor emissions for Scenario A would be reduced by 18.84% to 309.41 lbs/day of ROG and 316.54 lbs/day of NO_x. Under Scenario B ozone precursor emissions would be reduced by 21.44% to 299.49 lbs/day of ROG and 306.40 lbs/day of NO_x. Because the project is designed as a high-density, mixed-use, transit-oriented redevelopment project, the 15% guideline is achieved through project design; however, the reduction in emissions would not be reduced to below the SMAQMD threshold of 85 lbs/day. None of the AQMP emission reduction strategies would require monitoring beyond completion of the proposed project.

6.2-4 Activities associated with the operation of the proposed project would generate emissions of particulate matter.

Scenario A and B

As shown in Table 6.2-5, operation of the proposed project would generate approximately 205.54 pounds per day of PM₁₀ under Scenario A and 247.02 pounds per day under Scenario B. Natural gas combustion, tire wear particulates, brake wear particulates, road particulate matter, and vehicle exhaust would all constitute a portion of the reported PM₁₀.

Mobile source emissions account for a large portion of the ambient levels of PM₁₀ in Sacramento County. However, the project's mobile sources would be dispersed over a wide area and would be unlikely to cause or significantly contribute to localized PM₁₀ standard violations. Further, provision for alternate transit modes would serve to decrease the proposed project's impact to potential receptors and reduce its contribution to ambient air concentrations. According to the SMAQMD, "at least one study indicated that vehicle trips decrease by 15% with a 50% transit subsidy when the destination is within 660 feet of a transit station; by 25% under the same conditions with a 100% transit subsidy." A light rail station would be located right in front of the proposed project, making the project a prime candidate for transit subsidies. The project design (high density, mixed use) would serve to reduce particulate matter emissions. This is considered a **less-than-significant impact**.

Mitigation Measure

None required.

6.2-5 The proposed project would increase traffic volumes that, in turn, would contribute to CO concentrations near roadways and intersections.

Scenario A and B

CO is a byproduct of motor vehicle fuel combustion. CO concentration levels are highest near crowded or congested intersections where traffic is slow or idling. To accurately quantify CO concentration levels in the project site vicinity, the CO background concentration must be determined and added to CO level caused by project specific emissions.

The highest CO concentration measured at the CARB T Street monitoring station over the past three years was chosen as the background concentration. As shown in Table 6.2-2, the maximum measured CO 8-hour concentration level over the past three years was 3.6 parts per million (ppm).

Modeling using the CALINE4 model was used to provide the project-specific CO component to add to the background and determine whether total CO concentration near congested local intersections would exceed the CO ambient standards. CO modeling was completed for those intersections identified in the traffic report as having LOS E or worse. The modeling results of these intersections summarized in Table 6.2-7 show that CO concentrations would not exceed 7.3 ppm over an 8-hour period. Since this concentration would be below the ambient standard, CO impacts would be considered *less than significant*.

Intersection	Estimated CO Concentrations in Parts per Million (ppm)					
	LOS		25 Feet		50 Feet	
	A.M.	P.M.	8-hour	1-hour	8-hour	1-hour
I-5 SB Ramps & Richards Blvd	F	F	5.1	6.4	4.8	6.0
I-5 NB Ramps & Richards Blvd	F	F	6.1	7.7	5.5	6.9
Bercut Dr & Richards Blvd	F	C	5.9	7.4	5.3	6.7
N 5th Street & Richards Blvd	D	F	5.7	7.1	5.2	6.5
N 7th Street & Richards Blvd	F	F	5.7	7.1	5.2	6.5
Dos Rios St & Richards Blvd	C	E	5.0	6.2	4.7	5.8
12th/N 16th St/ Richards Blvd	F	F	7.3	9.2	6.5	8.1
N 7th Street & North B Street	F	F	4.7	5.9	4.5	5.6
12th Street & North B Street	E	C	5.0	6.0	4.6	5.7
7th Street & F Street	A	E	4.4	5.5	4.2	5.3
7th Street & G Street	C	F	4.4	5.4	4.2	5.2
Signature Street & 7th Street	< C	< C	4.9	6.1	4.6	5.7

Notes:
 1 – 'Baseline' is defined in the traffic study as development of the following projects:
 1. Crocker Art Museum Expansion
 2. 301 Capitol Mall
 3. 601 Capitol Mall
 4. Metro Place Office / Residential
 5. 15th & L Street Hotel
 6. CalPERS Headquarters Expansion
 7. Sutter Medical Center and the Trinity Cathedral
 8. CADA East End Gateway Residential
 9. Capitol West Side Projects
 10. Discovery Center
 11. Continental Plaza

Source: EIP Associates, a division of PBS&J, 2006. Calculation sheets are provided in Appendix E.

Mitigation Measures

None required.

Cumulative Impacts and Mitigation Measures

The cumulative context of an air pollutant is dependent on the specific pollutant being considered. Ozone precursors is a regional pollutant, therefore, the cumulative context would be existing and future development over the entire SVAB. This means that ozone precursors generated in one location do not necessarily have ozone impacts in that area. Instead, precursors from across the region can combine in the upper atmosphere and be transported by winds to various portions of the air basin. Consequently, all ozone precursors generated throughout the air basin are part of the cumulative context.

For localized pollutants such as CO and PM₁₀, the cumulative context would include existing and proposed future development in the immediate vicinity of the proposed project. The localized nature of PM₁₀, means that emissions generated by project-related activity would only affect the area in, and directly around, the project site. Consequently, only PM₁₀ emissions from non-project sources near the project site could conceivably combine with project emitted emissions and create a cumulative impact.

For CO, which is the product of fuel combustion, the cumulative context would be all existing and future traffic on local roads in the vicinity of the project site. The existing and future traffic would include all the development currently contributing to traffic volumes on the local roads analyzed in the traffic study, as well as all reasonable foreseeable future development, including the proposed project, that would contribute to traffic volumes on the local roads analyzed in the traffic study. The traffic is accounted for in the traffic study produced for the proposed project, and CO modeling at intersections uses the cumulative numbers in the traffic study.

6.2-6 Construction of the proposed project would increase cumulative levels of ozone precursors.

Scenario A and B

Construction activities that occur simultaneously with proposed project construction in the SVAB would contribute emissions of ozone precursors. While those emissions would be temporary, combined they could exceed the SMAQMD thresholds. As specified in Impact 6.2-1, significant levels of ozone precursors could be generated during project construction which would exceed SMAQMD thresholds. Therefore, the project's contribution to this cumulative impact would be considerable and this would be a *significant cumulative impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce the project's contribution to less than cumulatively considerable and this cumulative impact would be ***less than significant***.

6.2-6 Implement Mitigation Measures 6.2-1(a) through (e).

Implementation of Mitigation Measures 6.2-1(a) through (d) (which are the SMAQMD standard mitigation measures for projects with significant construction-phase NO_x emissions) would result in a minimum 20% reduction of project NO_x construction emissions. The implementation of the

mitigation fee collected under Mitigation Measure 6.2-1(e) would enable the SMAQMD to buy credits to reduce emissions from other NO_x sources off-site to offset the project construction NO_x emissions that exceed the SMAQMD's threshold; this would substantially reduce project emissions. Further, implementation of the SMAQMD standard mitigation measures would be required for all other projects in the Sacramento area with significant construction-phase NO_x emissions. Therefore, compliance with these measures would reduce the project's contribution to cumulative construction-phase NO_x emissions to a less than considerable level.

6.2-7 Operation of the proposed project would increase cumulative levels of ozone precursors.

Scenario A and B

As specified in Impact 6.2-4, significant levels of ozone precursors would be generated by project operational mobile and stationary sources. According to the SMAQMD *Guide* development projects are considered cumulatively significant if the project would require a change in the existing land use designation (e.g., general plan amendment, a rezoning) and if the projected ozone precursor emissions from the new uses would be greater than the emissions anticipated for the site under the existing land use designation. The change in an existing land use designation would depart from assumptions used in the AQAP and could jeopardize regional attainment of the ozone standard. Since the proposed project would require a rezone to a more intense use than is currently planned for, ozone precursor emissions would be above those assumed in the AQAP and the project's contribution would be considerable. Therefore, cumulative long-term operational ozone precursor emissions would be considered a *significant impact*.

Mitigation Measures

Implementation of the emission reduction strategies included in the endorsed AQMP for the proposed project would reduce the project's contribution to operational emissions by 18.84% under Scenario A and 21.44% under Scenario B which is greater than the 15% guideline. However, even with the implementation of the endorsed AQMP, the project's contribution to operational emissions would remain above the SMAQMD significance threshold. Consequently, the project's contribution would remain considerable and cumulative operational ozone precursor emissions would remain **significant and unavoidable**.

6.2-7 Implement Mitigation Measure 6.2-3.

Implementation of the emission reduction strategies contained in the endorsed AQMP required to be implemented under Mitigation Measure 4.2-3 would exceed the 15% emission reduction/mitigation guideline established by the SMAQMD. Ozone precursor emissions for Scenario A would be reduced by 18.84% to 309.41 lbs/day of ROG and 316.54 lbs/day of NO_x. Under Scenario B ozone precursor emissions would be reduced by 21.44% to 299.49 lbs/day of ROG and 306.40 lbs/day of NO_x. Because the project is designed as a high-density, mixed-use, transit-oriented redevelopment project, the 15% guideline is achieved through project design; however, the reduction in emissions would not be reduced to below the SMAQMD threshold of 85 lbs/day; therefore, the project's contribution would remain considerable.

6.2-8 Construction of the proposed project would increase cumulative levels of particulate matter in the vicinity of the project site.

Scenario A and B

As specified in Impact 6.2-2, significant levels of particulate matter could be generated during project demolition, excavation, grading and other construction activities. These PM₁₀ emissions when combined with other construction projects in the vicinity of the site that occur at the same time could result in a significant cumulative increase. Because the project's particulate matter emissions would exceed established thresholds its contribution would be considerable and this is a *significant cumulative impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce fugitive dust emissions. Compliance with all measures specified below would reduce the project's contribution to construction particulate matter emissions to less than cumulatively considerable and this cumulative impact would be ***less than significant***.

6.2-8 Implement Mitigation Measures 6.2-2 (a) through (i).

Implementation of Mitigation Measures 6.2-2(a) through (i) would reduce the project's contribution of fugitive dust emissions to less than considerable. The SMAQMD estimates that with implementation of these mitigation measures, particulate emissions from exposed earth surfaces (the largest source of particulate emissions during construction) would be reduced by 75%.

6.2-9 Operational activities associated with the proposed project would contribute to cumulative levels of particulate matter in the vicinity of the project site.

Scenario A and B

Particulate matter emission is an inherent byproduct of any combustion process (although combustion is not the sole source). Operation of the proposed project, in combination with other project's, would contribute to cumulative levels of particulate matter. The only operational measure available would be a significant reduction in motor vehicle trips. The close proximity of the future light rail stop would encourage the use of alternative modes of transportation. Never the less, since the Sacramento Region does not currently attain the PM₁₀ ambient standards, and since the project is likely to make a cumulatively considerable contribution to PM₁₀ levels in the project site vicinity by virtue of its relatively large size (compared with other projects on the transportation study's cumulative list), cumulative operational particulate emissions would be ***significant and unavoidable***.

Mitigation Measures

None available.

6.2-10 The proposed project, in conjunction with other future developments, would contribute to cumulative CO levels in the vicinity of the project site.

Scenario A and B

The project-specific CO analysis (see Impact 6.2-5 discussion) showed that the CO emissions from the proposed project's motor vehicle traffic would not violate the ambient CO standards (CO concentrations exceeding the 1-hour State ambient air quality standard of 20 ppm or the 8-hour State ambient standards of 9 ppm). Additional CO emissions in the project site vicinity would be produced by motor vehicle traffic associated with other cumulative developments in the area. CO standard violations would most likely occur at the busiest and most congested intersections on and around the project site, generally intersections classified LOS E or worse. Modeling based on the CALINE4 CO model was completed for all intersections identified as having LOS E or worse under 2030 conditions with traffic from the proposed project and all other projects on the transportation study's cumulative list. The results of that modeling are shown in Table 6.2-8. Modeling demonstrated that even with a large increase in traffic, CO levels would remain below the significance thresholds. It should be noted that these results do make the fundamental assumption that CO emissions from mobile sources would decrease in the future, which is an expected and realistic assumption. Since CO levels are estimated to be below significance thresholds with all project and cumulative traffic included in the analysis, the project's contribution to the cumulative impact would not be considerable and this cumulative impact would be *less than significant*.

TABLE 6.2-8						
LOCALIZED CARBON MONOXIDE CONCENTRATIONS (CUMULATIVE 2030 ¹)						
Intersection	Estimated CO Concentrations in Parts per Million (ppm)					
	LOS		25 Feet		50 Feet	
	A.M.	P.M.	8-hour	1-hour	8-hour	1-hour
I-5 NB Ramps & Richards Blvd	A	F	4.1	5.0	4.0	4.9
Bercut Dr & Richards Blvd	B	E	4.2	5.2	4.1	5.1
N 7th Street & Richards Blvd	D	F	4.1	5.1	4.0	5.0
7th Street & Big Four Blvd	D	F	4.2	5.2	4.0	5.0
7th Street & F Street	F	F	4.1	5.1	4.0	5.0
6th Street & G Street	F	F	4.4	5.5	4.2	5.3
7th Street & G Street	F	F	4.0	5.0	3.9	4.9
7th Street & H Street	F	F	3.9	4.9	3.8	4.8
7th Street & I Street	F	F	4.0	5.0	3.9	4.9
7th Street & J Street	B	F	4.0	5.0	3.9	4.9
12th Street & Bannon Street	B	E	4.4	5.4	4.2	5.2
Signature Street & 7th Street	< C	< C	4.0	5.0	3.9	4.9

Notes:
 1 - 'Cumulative' is defined in the traffic study as development of the baseline projects and other roadway improvements.
 Source: EIP Associates, a division of PBS&J, 2006. Calculation sheets are provided in Appendix E.

Mitigation Measures

None required.

6.3 Biological Resources

6.3 BIOLOGICAL RESOURCES

INTRODUCTION

Information contained in this section is based on reconnaissance-level field surveys; queries of the California Department of Fish and Game's (CDFG) Natural Diversity Database (CNDDDB) and California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California; project plans and graphic renderings; the City's General Plan; and other relevant data sources as identified throughout this section. This section identifies the biotic communities and special status species that could be affected by implementation of the Township 9 project (proposed project). Included in the discussion is a summary of applicable laws and regulations related to biological resources and agencies responsible for their implementation.

The Initial Study (Appendix A) determined that the proposed project could result in potentially significant impacts to endangered, threatened, or rare species or their habitats, locally designated species, and wetland habitat. These issue areas will be addressed in this EIR.

No comments were received in response to the NOP that addressed biological resources.

ENVIRONMENTAL SETTING

Project Setting





The project site is generally bounded by Richards Boulevard to the south, the American River to the north, North 5th Street to the west and North 7th Street to the east (Figure 2-2). The project site has previously been developed for industrial use and contains more than 1.4 million square feet of industrial/warehouse buildings, that are actively used for warehousing, cold storage and related uses. The majority of the project site is covered with impervious surfaces (buildings, concrete or asphalt) while the northwestern portion is bare ground.

Habitat Types

There are two habitat types present at the proposed project site; urban/ruderal and riparian habitat. Urban/ruderal habitat occupies most of the project site, except for an approximately six acres of riparian vegetation along the American River.

Urban/Ruderal Habitat

Urban/Ruderal habitat exists within developed areas where pre-development vegetation has been removed and new species of plants introduced, intentionally (ornamental species) or inadvertently (weeds). Urban vegetation accounts for most of the habitat acreage present on the project site. At present, the dominant plant species include wild oats (*Avena fatua*), riggut brome (*Bromus diandrus*), yellow star thistle (*Centaurea solstitialis*), vetch (*Vicia* sp.), field bindweed (*Convolvulus arvensis*), milk thistle (*Silybum marianum*), and tarweed (*Holocarpa* sp.) Other plants observed during field surveys included cutleaf geranium (*Geranium dissectum*), wild mustard (*Brassica* spp.), and Italian thistle (*Carduus pycnocephalus*). One valley oak tree (*Quercus lobata*) was found within this habitat type (Figure 6.3-1). The valley oak tree would qualify as a heritage tree pursuant to the City of Sacramento Tree Preservation Ordinance. Heritage trees are valued for their ability to promote scenic beauty, enhance property values,

-  Project Site
-  Elderberry Shrub
-  Potentially Impacted Elderberry Shrub
-  Valley Oak



Source: EIP Associates, July 2006

FIGURE 6.3-1
Natural Resources in the Project Vicinity

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reduce soil erosion, improve air quality, abate noise, and provide shade to reduce energy consumption. The intent and purpose of protecting heritage trees is to promote the health, safety, and welfare of present and future residents of the City of Sacramento. Ornamental trees on the west side of North 7th Street would also qualify as heritage trees.

Riparian Woodland Habitat

Riparian woodland is the predominant vegetation community found within the south bank of the American River, which is the northern boundary of the site. Most of the existing habitat has been heavily degraded by human activity. The overstory is dominated by Fremont's cottonwood (*Populus fremontii*), with some valley oak (*Quercus lobata*) and arroyo willow (*Salix lasiolepis*). Shrub cover is heavy throughout the area and is comprised primarily of Himalayan blackberry (*Rubus discolor*), poison oak (*Toxicodendron diversilobium*), and California wild grape (*Vitis californica*). The herbaceous understory consists of creeping wild rye (*Leymus triticoides*), wild oats, wild pea (*Lathyrus jepsonii* ssp. *californicus*), field bindweed, and white sweetclover (*Melilotus alba*).

Wildlife Resources

The proposed project site is predominated by non-native vegetation and vacant areas that primarily support common birds and mammals. Wildlife species that were observed or expected to occur in the project site are western scrub jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), Brewer's blackbird (*Euphagus cyanocephalus*), yellow-billed magpie (*Pica nuttalli*), house finch (*Carpodacus mexicanus*), house mouse (*Mus musculus*), black rat (*Ratus ratus*), house cat (*Felis silvestris catus*), raccoon (*Procyon lotor*), and skunk (*Mephitis mephitis*).

In addition to the terrestrial species identified above, both resident and migratory fish species use the American River. Fish residing within the American River include channel catfish (*Ictalurus punctatus*), white catfish (*Ictalurus catus*), hardhead (*Mylopharodon conocephalus*), largemouth bass (*Micropterus salmoides*), redeared sunfish (*Lepomis microlophus*), Sacramento sucker (*Catostomus occidentalis*), Sacramento pikeminnow (*Ptychocheilus grandis*), tule perch (*Hysterocarpus traski*), and Sacramento sucker (*Catostomus occidentalis*). The Sacramento splittail (*Pogonichthys macrolepidotus*) spawns in the Sacramento area, but lives in the Delta. Anadromous¹ fish species use the American River as migration corridors between the ocean and spawning areas upstream. These species include steelhead (*Oncorhynchus mykiss*), Chinook salmon (*Oncorhynchus tshawytscha*), striped bass (*Morone saxatilis*), green sturgeon (*Acipenser medirostris*), white sturgeon (*Acipenser transmontanus*), and American shad (*Alosa sapidissima*). Although striped bass is an anadromous species, young striped bass are present in the American River area year-round.

The open water zones of the American River provide foraging habitat for bird species. Many species of waterfowl, such as American coot (*Fulica americana*), use the open water for resting and escape. Gulls (*Larus* sp.) forage on open water, and species of insectivorous birds, such as black phoebe (*Sayornis nigricans*) and violet-green swallow (*Tachycineta thalassina*), hunt insect prey over the water.

1 Anadromous species are those that spawn in freshwater, migrate to the ocean as juveniles, rear in the ocean for a period of time before returning to their natal streams as adults to spawn.

In general, near shore waters, riverbanks, and adjacent riparian vegetation provide several specialized habitats for a variety of bird species. Steep banks provide nesting habitat for northern rough-winged swallow (*Stelgidopteryx serripennis*). In the near shore waters, mallard (*Anas platyrhynchos*) and wood duck (*Aix sponsa*) feed upon plants, green heron (*Butorides striatus*) and belted kingfisher (*Ceryle alcyon*) forage for fish. Fish feed upon "insect drop" from riparian vegetation overhanging the water, and rocky substrates provide habitats for crayfish, sunfish, and bass.

Wildlife Movement

Terms such as habitat corridors, linkages, crossings, and travel routes, are used to describe physical connections that allow wildlife to move between patches of suitable habitat in undisturbed landscapes as well as environments fragmented by urban development. To clarify the meaning of these terms and facilitate the discussion of wildlife movement in this analysis, these terms are defined below.

Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Wildlife corridors link areas of suitable habitat that are otherwise separated by areas of nonsuitable habitat such as rugged terrain, changes in vegetation, or human disturbance. Wildlife corridors are essential to the regional ecology of a species because they provide avenues of genetic exchange and allow animals to access alternative territories as dictated by fluctuating population densities. Fragmentation of open space areas by urbanization creates "islands" of wildlife habitat that are more or less isolated from each other. Wildlife corridors are typically relatively small, linear habitats that connect two or more habitat patches that would otherwise be fragmented or isolated from one another. Although it is commonly used as a synonym for wildlife corridor, a habitat linkage refers to a more substantial, or wider, land connection between two habitat areas. **Habitat linkages** allow for the periodic exchange of animals between habitat areas, which is essential to maintain adequate gene pools. This linkage is most notable among populations of medium-sized and larger animals. A **travel route** is usually a landscape feature (such as a ridgeline, drainage, canyon, or riparian corridor) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It provides adequate food, water, or cover for individuals moving between habitat areas and provides a relatively direct link between target habitat areas. **Wildlife crossings** are small, narrow areas that are relatively short in length. They allow wildlife to bypass an obstacle or barrier. Crossings typically are manmade and include culverts, underpasses, drainage pipes, bridges, and tunnels to provide access past roads, highways, pipelines, or other physical obstacles. Wildlife crossings often represent "choke points" along a movement corridor.

The project site would have minimal wildlife movement through it due to its highly disturbed nature and urban activities. However, there are two areas where greater amounts of movement could occur: the American River and the riparian habitat adjacent to the river.

Riparian habitats provide food, water, and cover, as well as migration and dispersal corridors. At least 50 species of amphibians and reptiles occur in lowland riparian systems. Many are permanent residents, while others are transient or seasonal users. As many as 147 species of birds and 35 species of mammals are known to use California's Central Valley riparian systems.

However, in the case of the riparian vegetation on the project site, the habitat is highly disturbed. It also terminates around the urban portions of Old Sacramento and the development along that portion of the river. Consequently this area does not function as a regional wildlife corridor, an important linkage, travel route or wildlife crossing, although it does provide for local movement.

The Sacramento River and American River are regional wildlife corridors for anadromous fish including sturgeons, salmonids, and other riverine species. The proposed project does not propose any uses in the American River so it would not affect any fish or wildlife movement in the river.

Special Status and Sensitive Biological Resources

The following section addresses special-status biological resources observed, reported, or having the potential to occur on the project site. These resources include plant, habitat, and wildlife species that have been afforded special status and/or recognition by federal and state resource agencies, as well as private conservation organizations and special interest groups such as the CNPS. In general, the principal reason an individual taxon (species, subspecies, or variety) is given such recognition is the documented or expected decline or limitation of its population size or geographical extent and/or distribution that results in most cases, from habitat loss.

Information on sensitive species and habitats occurring in the vicinity of the project was obtained from the CNDDDB (information dated September 2006) for the U.S. Geological Survey's 7.5-minute Taylor Monument, Rio Linda, Sacramento West, Sacramento East, Florin, and Clarksburg quadrangle maps, and the CNPS's Electronic Inventory of Rare and Endangered Vascular Plants of California² (Figure 6.3-2). Table 6.3-1 is a list of species likely to occur in and/or be affected by the proposed project, which was derived from the CNDDDB and CNPS database queries. This list represents those species identified in the review as having the highest likelihood to occur in the project site (i.e., within the known range, or with potential habitat present). Special status species with zero to low potential of occurring in the project site have been identified and are included in Appendix F.

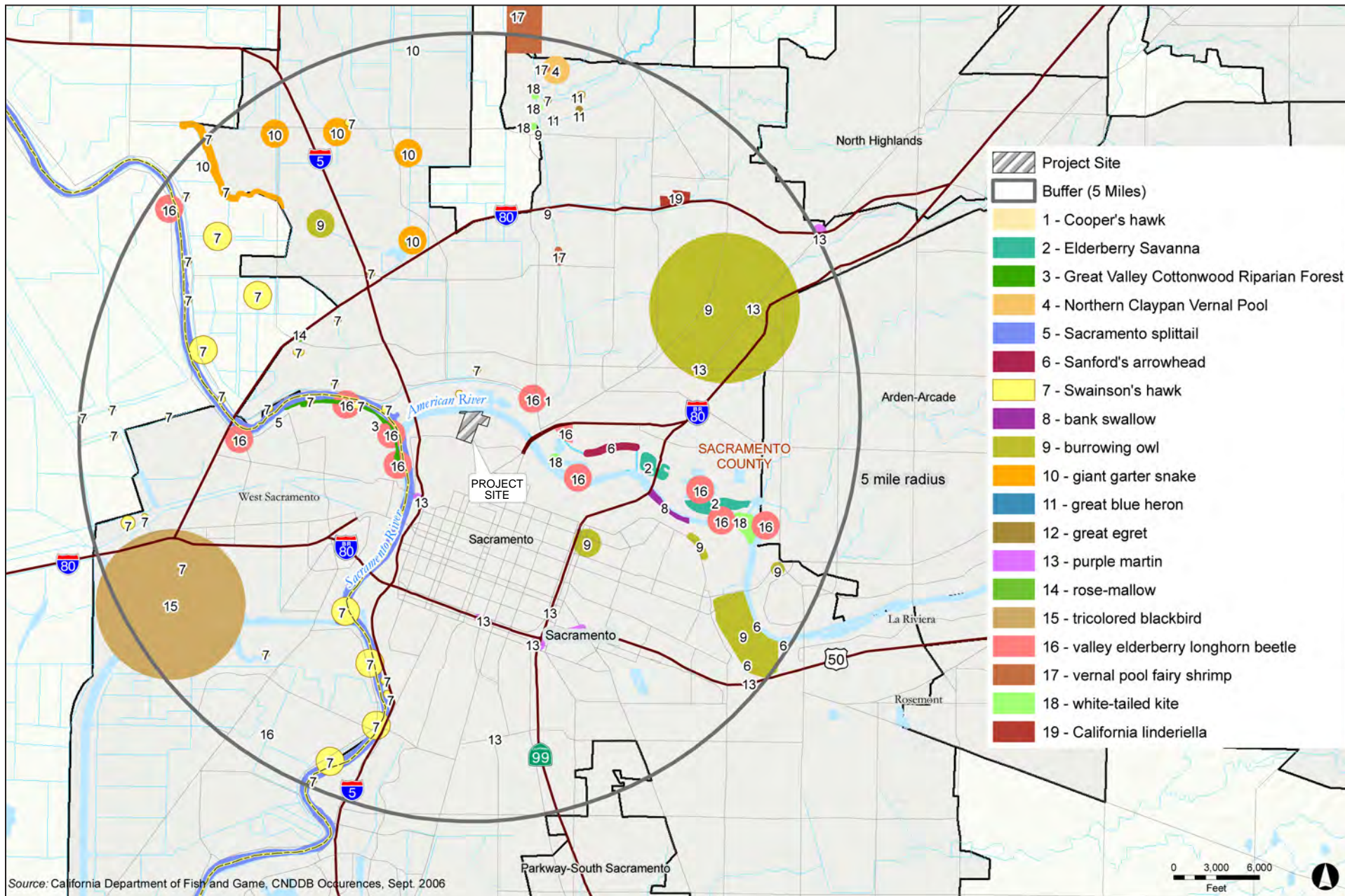
Valley Elderberry Longhorn Beetle

The valley elderberry longhorn beetle (VELB) (*Desmocerus californicus dimorphus*) is listed as a threatened species under the federal Endangered Species Act (ESA). In September 2006, the USFWS recommended to delist the VELB based on the findings from the VELB 5-Year Review: Summary and Evaluation prepared by the Sacramento Fish and Wildlife Office.³ Until such time the delisting becomes final, the VELB is still considered threatened and protected by the ESA, the applicant would have to comply with any requirements in accordance with the most current USFWS mitigation guidelines.

The VELB occurs throughout the year in riparian woodlands and other Central Valley habitats containing elderberry shrubs (*Sambucus* spp.), upon which the VELB are completely dependent for all stages of their life cycle. The females lay their eggs in crevices in the bark. After

2 CNPS Electronic Inventory of Rare and Endangered Vascular Plants of California. V7-06C.

3 U.S. Fish and Wildlife Service, *Valley Elderberry Longhorn Beetle 5-Year Review: Summary and Evaluation*, 2006, Sacramento Fish and Wildlife Office. Sacramento, California, <<http://www.fws.gov/>> (October 17, 2006).



Source: California Department of Fish and Game, CNDDDB Occurrences, Sept. 2006

FIGURE 6.3-2
CNDDDB Occurrences in the Project Vicinity



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Township 9

TABLE 6.3-1				
SPECIAL STATUS SPECIES AND HABITATS POTENTIALLY OCCURRING WITHIN THE TOWNSHIP 9 PROJECT SITE				
Common Name	Scientific Name	Status Fed/CA/CNPS	Habitat	Likelihood of Occurrence Within the Project Site
Invertebrates				
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	FT/none/none	Associated only with elderberry shrubs (<i>Sambucus</i> sp.), usually in or near riparian areas.	High. Elderberry shrubs are present in the project site.
Reptiles				
Western pond turtle	<i>Actinemys marmorata</i>	none/CSC/none	Streams, rivers, ponds, marshes and other aquatic habitats. Requires secure basking area where they can easily escape to water. Upland nesting sites can be as much as 300 feet from aquatic habitat, but are usually closer.	Moderate. The American River bank would be suitable habitat for this species.
Fish				
Central Valley spring run Chinook salmon	<i>Oncorhynchus tshawytscha</i>	FT/ST/none	Occurs in the Pacific Ocean for most of its life. Travels to clean gravel beds in the upper Sacramento and portions of the American River for spawning.	High. Suitable habitat exists within the Sacramento and American River. No spawning habitat exists.
Central Valley Winter run Chinook salmon	<i>Oncorhynchus tshawytscha</i>	FE/SE/none	Occurs in the Pacific Ocean for most of its life. Travels to clean gravel beds in the upper Sacramento and portions of the American River for spawning.	High. Suitable habitat exists within the Sacramento and American River. No spawning habitat exists.
Central Valley steelhead	<i>Oncorhynchus mykiss</i>	FT/none/none	Occurs in the Pacific Ocean for most of its life. Travels to clean gravel beds in the upper Sacramento and portions of the American River for spawning.	High. Suitable habitat exists within the Sacramento and American River. No spawning habitat exists.
Sacramento splittail	<i>Pogonichthys macrolepidotus</i>	none/CSC/none	Endemic to the lakes and rivers of the central valley, but now confined to the Delta, Suisun Bay & associated marshes. Prefers slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning & foraging for young.	High. Suitable habitat exists within the Sacramento and American River. No spawning habitat exists.
Birds				
Swainson's hawk	<i>Buteo swainsoni</i>	none/ST/none	Grasslands and cultivated lands with scattered trees; nests in large trees or open riparian forest.	Moderate (nesting). Suitable nest trees are present along the river. Patchy ruderal vegetation does not provide suitable foraging habitat for this species
White-tailed kite	<i>Elanus leucurus</i>	None/FP/none	Forages in grasslands and croplands. Nests in large trees adjacent to foraging habitat.	Moderate. Suitable nest trees are present along the river. Patchy ruderal vegetation provides marginal foraging habitat for this species.
Purple martin	<i>Progne subis</i>	none/CSC/none	Nest in cavities in trees, under bridges and other human-made structures	Moderate. Colony exists under I street bridge 1.5 miles southwest of the project site.

TABLE 6.3-1

**SPECIAL STATUS SPECIES AND HABITATS POTENTIALLY OCCURRING WITHIN
THE TOWNSHIP 9 PROJECT SITE**

Common Name	Scientific Name	Status Fed/CA/CNPS	Habitat	Likelihood of Occurrence Within the Project Site
Mammals				
Pallid bat	<i>Antrozous pallida</i>	none/CSC/ none	Roosts in crevices in caves, mines, large rock outcrops, under bridges and in abandoned buildings. Forages on or near the ground in a wide variety of open habitats.	High. Roosting bats were observed under the I street bridge 1.5 miles southwest of the project site.
Pacific western big eared bat	<i>Corynorhinus townsendii townsendii</i>	none/CSC/none	Roosts in the open in large caves, abandoned mines and buildings. Very sensitive to roost disturbance.	High. Roosting bats were observed under the I street bridge 1.5 miles southwest of the project site.
Small-footed myotis bat	<i>Myotis ciliolabrum</i>	none/SAL/none	Occurs in most of California except the coastal redwood region; roosts in buildings, trees, and crevices in cliffs.	High. Roosting bats were observed under the I street bridge 1.5 miles southwest of the project site.
Long-legged myotis bat	<i>Myotis volans</i>	none/SAL/none	Roosts in crevices in caves, mines, large rock outcrops, under bridges and in abandoned buildings. Forages in a wide variety of open habitats, frequently over water.	High. Roosting bats were observed under the I street bridge 1.5 miles southwest of the project site.
Yuma myotis bat	<i>Myotis yumanensis</i>	none/SAL/none	Common along wooded canyon bottoms throughout California; roosts in buildings, large trees with hollows, and crevices in cliffs.	High. Roosting bats were observed under the I street bridge 1.5 miles southwest of the project site.
Notes: Status: Federal FE Federally listed as Endangered FT Federally listed as Threatened State ST State-listed as Threatened CSC California Department of Fish and Game designated "Species of Special Concern" SAL Species included on the CDFG "Special Animals List" FP Fully Protected CNPS 1B Rare or Endangered in California and elsewhere 2 Rare or Endangered in California, more common elsewhere Source: CDFG Natural Diversity Database (CNDDDB, September 2006), and the CNPS Electronic Inventory September 2006.				

hatching, the larvae burrow into the stems of the shrub where they feed on the interior wood for the next one to two years until they form pupae, from which the adults emerge. The adults bore their way out of the stems, leaving a distinctive oval-shaped hole. As the larvae and adults are rarely seen, these borer holes are often the only evidence of this species' presence. After emergence from the stems, the adults remain in association with the elderberries, where they will feed on the elderberry foliage and eventually reproduce. All elderberry shrubs within the known range of the VELB that have one or more stems with diameters of one inch or greater at ground level, are considered potential habitat for this species. This potential habitat (i.e., elderberry shrubs) occurs primarily in the Elderberry Savanna along the American River Parkway, although groups of elderberry shrubs also occur along the south bank of the American River and within the project site (Figure 6.3-1). Critical habitat was designated by the USFWS in 1980 (45 FR 58803) but it does not fall within the project site.⁴

Although a USFWS protocol survey was not conducted for VELB, elderberry shrubs were observed during the June 22, 2006 survey at two separate locations within the project site (Figure 6.3-1). Elderberry shrubs were observed at the end of North 7th Street, in the riparian woodland in the south bank of the American River. One small shrub was observed outside of the eastern boundary but within 100 feet of the project site. Exit holes were found on one of the shrubs at the end of North 7th Street, but not all shrubs were surveyed.

Western Pond Turtle

The western pond turtle (*Actinemys marmorata*) is an aquatic turtle that ranges throughout much of the state - from the Sierra Nevada foothills to the coast - and in coastal drainages from the Oregon border to Baja California.⁵ It occurs in suitable habitat throughout its range in ponds, slow moving streams and rivers, irrigation ditches, and reservoirs that have abundant emergent and/or riparian vegetation. The turtle requires adjacent (i.e. within 200-400 meters of water) uplands for nesting and egg-laying - typically in soils with high clay or silt component on unshaded, south-facing slopes. There is suitable western pond turtle wintering habitat in the riparian woodland area of the project site. The northwestern pond turtle is a State Species of Special Concern and is fairly common along the Sacramento and American Rivers.

Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) is listed as a threatened species under the California Endangered Species Act (CESA). This raptor is found primarily in open country, foraging in grasslands and agricultural fields, especially after disking or harvest. They use tall riparian trees (typically oaks or cottonwoods) for nesting, but will occasionally nest in large eucalyptus or other large ornamental trees if there is suitable foraging habitat nearby. The species has lost much of its former nesting habitat as a result of the significant reduction in riparian woodland and forest habitat throughout the state over the last 100 years, and is increasingly losing foraging habitat to urban development. Swainson's hawks can forage as far as 20 miles from the nest, but nests are generally more successful if suitable foraging habitat is present within an approximate 10-mile radius. Suitable foraging habitat is defined as annual grasslands, fallow fields, dry and irrigated pasture, and a variety of croplands including alfalfa, beet, tomato and other low growing row or field crops, rice (when not flooded), and cereal grain crops (including corn after

4 U.S. Fish and Wildlife Service, *Valley Elderberry Longhorn Beetle, Final Critical Habitat, Sacramento County, California*, 2006, <<http://www.fws.gov/>> (September 12, 2006).

5 Stebbins, Robert C., *A Field Guide to Western Reptiles and Amphibians, Second Edition, Revised*. Houghton Mifflin Company, 1985.

harvest). The greatest concentration of nesting records for Swainson's hawks within the region occurs along the Sacramento River. Although no Swainson's hawks were observed within project site on June 22, 2006, the site is within the foraging range of numerous Swainson's hawk nests. However, it is highly unlikely that the discontinuous patches of ruderal vegetation within the project site represents significant foraging habitat for this species due to the high level of disturbance that occurs on-site.⁶

White-Tailed Kite

The white-tailed kite (*Elanus leucurus*) is listed as a "fully protected" raptor under Section 3511 of the California Fish and Game Code. White-tailed kites feed on rodents, small reptiles, and large insects in fresh emergent wetlands, annual grasslands, pastures, and ruderal vegetation. They breed between February and October. Kites often roost, and occasionally nest communally, especially during the non-breeding season. Therefore, disturbance of a relatively small roost or nesting area could affect a large number of birds. The white-tailed kite can commonly be observed foraging in open grasslands throughout the region, but breeding sites are primarily located near riparian corridors along the Sacramento and American Rivers. No white-tailed kites were observed during the survey on June 22, 2006, but suitable nesting habitat occurs along the American River adjacent to the project site.

Purple Martin

The purple martin (*Progne subis*) can be found throughout nearly the entire United States east of the Rocky Mountains. Although declining in many western states, it is also found in isolated areas of Canada, Oregon, Washington, California, Utah, Colorado, Arizona, New Mexico and Mexico. In California it is a CDFG species of special concern. It is an early spring migrant from its wintering grounds in South America. Generally, purple martins inhabit open areas with an open water source nearby. Martins adapt well in and around people, but are out-competed by starlings and sparrows in urban areas. Purple martins are colonial cavity nesters in abandoned woodpecker holes, human-made nest boxes, or cavities in other structures such as bridges and overpasses. Once established at a nest location, martins usually come back to the same site every year. There is a colony of martins that is known to use the underside of the I Street on-ramp to I-5, approximately 1.5 miles southwest from the project site.

Special-Status Bats

Special-status bat species with the potential to occur within the project site include the pallid bat (*Antrozous pallida*) and Pacific Western big eared bat (*Corynorhinus townsendii townsendii*); both are CDFG species of special concern. These species use hollow trees, caves, and rock crevices for roosting, but also use man-made structures such as mines, old buildings, and bridges if suitable structure and seclusion are available. Potential habitat for these species is present within the riparian area, and six roosts of unknown bat species were observed under the I-5 and I Street Bridge. Because specific identification was not possible, it is assumed that one of the species discussed above is roosting near the project site or in crevices in the warehouses and buildings.

6 California Department of Fish and Game, *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California*, November 8, 1994, p. 6.

REGULATORY SETTING

Federal Regulations

Federal Endangered Species Act of 1973

Section 3 of the ESA defines an endangered species as any species or subspecies of fish, wildlife, or plants “in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as any species or subspecies “likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” Designated endangered and threatened species, as listed through publication of a final rule in the Federal Register, are fully protected from a “take” without an incidental take permit administered by the U.S. Fish and Wildlife Service (USFWS) under Section 10 of the ESA. Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (50 CFR 17.3). The term “harm” in the definition of “take” in the Act means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering (50 CFR 17.3). The term “harass” in the definition of “take” means an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering (50 CFR 17.3). Proposed endangered or threatened species are those for which a proposed regulation, but not a final rule, has been published in the Federal Register.

Section 7 of the ESA requires that federal agencies ensure that their actions are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its critical habitat. This obligation requires federal agencies to consult with the USFWS on any actions (issuing permits including Section 404 permits, issuing licenses, providing federal funding) that may affect listed species to ensure that reasonable and prudent measures will be undertaken to mitigate impacts on listed species. Consultation with USFWS can be either formal or informal depending on the likelihood of the action to affect listed species or critical habitat. Once a formal consultation is initiated, USFWS will issue a Biological Opinion (either a “jeopardy” or a “no jeopardy” opinion) indicating whether the proposed agency action will or will not jeopardize the continued existence of a listed species or result in the destruction or modification of its critical habitat. A permit cannot be issued for a project with a “jeopardy” opinion unless the project is redesigned to lessen impacts.

In the absence of any federal involvement, as in a privately-funded project on private land with no federal permit, only Section 10(a) of the ESA can empower the USFWS to authorize incidental take of a listed species provided a habitat conservation plan (HCP) is developed. To qualify for a formal Section 10(a) permit, strict conditions must be met including a lengthy procedure involving discussions with USFWS and local agencies, preparation of a HCP, and a detailed Section 10(a) permit application.

Migratory Bird Treaty Act (MBTA)

The Migratory Bird Treaty Act (MBTA) makes it unlawful to “take” (kill, harm, harass, etc) any migratory bird listed in 50 CFR 10, including their nests, eggs, or products. Migratory birds include geese, ducks, shorebirds, raptors, songbirds, and many others. There are over 800 species listed in the MBTA including common species observed within the project site such as the American robin (*Turdus migratorius*), Brewer's blackbird (*Euphagus cyanocephalus*), and northern mockingbird (*Mimus polyglottos*).

State Regulations

California Endangered Species Act

The CESA declares that deserving plant or animal species will be given protection by the state because they are of ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the state. CESA established that it is state policy to conserve, protect, restore, and enhance endangered species and their habitats. Under State law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. Listed species are generally given greater attention during the land use planning process by local governments, public agencies, and landowners than are species that have not been listed.

CESA authorizes that “Private entities may take plant or wildlife species listed as endangered or threatened under the federal ESA and CESA, pursuant to a federal incidental take permit issued in accordance with Section 10 of the federal ESA, if the California Department of Fish and Game (CDFG) certifies that the incidental take statement or incidental take permit is consistent with CESA (Fish & Game Code § 2080.1[a]).

California Environmental Quality Act—Treatment of Listed Plant and Animal Species

Although threatened and endangered species are protected by specific federal and State statutes, Section 15380(b) of the CEQA Guidelines 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 specified criteria. These criteria have been modeled after definitions in the ESA and the section of the California Fish and Game Code dealing with rare or endangered plants and animals. Section 15380 independently defines “endangered” species of plants, fish or wildlife as those whose survival and reproduction in the wild are in immediate jeopardy and “rare” species as those who are in such low numbers that they could become endangered if their environment worsens. Therefore, a project will normally have a significant affect on the environment if it will substantially affect a rare or endangered species or the habitat of the species. The significance of impacts to a species under CEQA must be based on analyzing actual rarity and threat of extinction despite legal status or lack thereof.

Fish and Game Code of California

The Fish and Game Code provides specific protection and listing for several types of biological resources.

Section 2081(b) and (c) of the CESA allows CDFG to issue an incidental take permit for a state listed threatened and endangered species only if specific criteria are met. These criteria can be found in Title 14 CCR, Sections 783.4(a), (b) and CDFG Code Section 2081(b). Additionally the CDFG Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the code. Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird. Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act (MBTA) or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA. If a project is planned in area where a species or specified bird occurs, an applicant must design the project to avoid all take; the CDFG cannot provide take authorization under CESA.

Native Plant Protection Act of 1977

Native Plant Protection Act of 1977 and implementing regulations in Section 1900 et seq. of the Fish and Game Code designates rare and endangered plants, and provides specific protection measures for identified populations. It is administered by the CDFG.

Local Regulations

City of Sacramento General Plan

The City of Sacramento General Plan's conservation strategy focuses on habitat conservation, minimization of impacts on sensitive biological resources, and the preservation of plant and animal diversity as the most effective way to protect individual special status species.

The following City of Sacramento General Plan policies will guide the conservation and protection of biological resources in regards to the proposed project:

Preservation of Natural Resources

Goal A

Policy 2

Continue to implement the Heritage Tree Program.

Goal B

Policy 1

Protect the wooded areas along the waterways and drainage canals insofar as possible.

Goal C

Policy 1

Retain the habitat areas where known endangered wildlife exists to the extent feasible.

City of Sacramento Tree Preservation Ordinance

The City of Sacramento has adopted an ordinance to protect trees as a significant resource to the community. It is the City's policy to retain 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. Removal of, or construction around, trees that are protected by the tree ordinance are subject to permission and inspection by City arborists. The City of Sacramento Tree Service Division reviews project plans and works with City of Sacramento Public Works during the construction process to minimize impacts to street trees in the City. The Sacramento City Code includes the following provisions to protect City trees:

12.56.020 Definitions.

"City street tree" means and includes any tree growing on a public street right-of-way. City street trees are maintained by the city.

"Director" means the director of the department of parks and recreation or the director's designated representative.

"Maintenance easement private street tree" means and includes any tree growing within a maintenance easement. No parcel contains more than one maintenance easement private street tree per forty (40) feet of street frontage. If there is more than one tree in the maintenance easement per forty (40) feet of street frontage, only the one closest to the street is a maintenance easement private street tree, and the other(s) are private trees.

"Street tree" means and includes both city street trees and maintenance easement private trees (Prior code §45.01.002).

12.56.60 Protection of trees.

- (a) No person shall remove, trim, prune, cut or otherwise perform maintenance on any city street tree without first obtaining a permit from the director pursuant to Chapter 12.56.070. (Prior Code Section 45.01.006).
- (c) No person shall injure or destroy any city street tree by any means, including but not limited to the following:
 - 1. Constructing a concrete, asphalt, brick or gravel sidewalk, or otherwise filling up the ground area around any tree so as to shut off air, light or water from its roots, unless ordered or authorized to do so by the city.
 - 2. Piling building material, equipment or other substance around any tree so as to injure the tree.
 - 3. Pouring any deleterious matter on or around any tree or on the surrounding ground, lawn or sidewalk.
 - 4. Posting any sign, poster, notice, or similar device on any tree, tree stake or guard, or by fastening any guy wire, cable, rope, nails, screws, or other device to any tree, tree stake or guard for any purpose other than supporting the tree.
 - 5. Causing any fire or burning near or around any tree.
 - 6. Cutting roots with a diameter of two inches or greater for sidewalk repair or any other purpose; provided, however, that roots with a diameter of two inches or greater may be cut if authorized in advance by the director.

12.64.020 Definitions.

"Heritage tree" means:

- (1) Any tree of any species with a trunk circumference of one hundred (100) inches or more, which is of good quality in terms of health, vigor of growth, and conformity to generally, accepted horticultural standards of shape for its species.
- (2) Any native species of oak (*Quercus* spp.), California buckeye (*Aesculus californica*), and sycamore (*Platanus racemosa*), having a circumference of 36 inches or greater when a single trunk or cumulative circumference of 36 inches or greater when a multi-trunk tree.
- (3) Any tree thirty (36) inches in circumference or greater in a riparian zone. The riparian zone is measured from the center line of the water course to thirty (30) feet beyond the high water line.
- (4) Any tree, grove of trees or woodland trees designated by resolution of the city council to be of historic or environmental value or of significant community benefit. (Prior code Section 45.04.211)

12.64.040 Protection of heritage trees during construction activity.

During construction activity on any property upon which is located a heritage tree, the following rules shall apply. Unless the express written permission of the director is first obtained, no person shall:

- (a) Change the amount of irrigation provided to any heritage tree from that which was provided prior to the commencement of construction activity;
- (b) Trench, grade or pave into the drip line area of a heritage tree;
- (c) Change, by more than two (2) feet, grade elevations within thirty (30) feet of the drip line area of a heritage tree;
- (d) Park or operate any motor vehicle within the drip line area of any heritage tree;

- (e) Place or store any equipment or construction materials within the drip line area of any heritage tree;
- (f) Attach any signs, ropes, cables or any other items to any heritage tree;
- (g) Cut or trim any branch of a heritage tree for temporary construction purposes; and
- (h) Place or allow to flow into or over the drip line area of any heritage tree any oil, fuel, concrete mix or other deleterious substance. Where written permission of the director [City Neighborhood Services Director] is sought under this section, the director may grant such permission with such reasonable conditions as may be necessary to effectuate the intent and purpose of this chapter. (Prior code Section 45.04.216).

Richards Boulevard Area Plan

No section within the Richards Boulevard Area Plan contains policies regarding biological resources, but direction on biological resources preservation is given in the American River Parkway Corridor Zone section. This section states: "Throughout the American River Parkway Corridor, new development shall be designed to minimize loss of riparian habitat. A combination of avoidance and restorative strategies should be used to ensure no net loss of riparian habitat."⁷

American River Parkway Plan

The American River Parkway Plan is a policy document which provides guidelines for preservation, recreational use, development and administration of the American River Parkway. The riparian habitat along the American River is designated as a Protected Area in the American River Parkway Plan. Construction of the proposed overlook could impact the riparian area.

The following American River Parkway Plan policies will guide the conservation and protection of biological resources in regards to the proposed project:

RESOURCES OF THE PARKWAY

Policies

2.1.

Any development within the Parkway, including buildings, roads, parking lots and turfed areas, shall be designed and located such that any impact upon native vegetation is minimized, and appropriate mitigation measures are incorporated into the project.

2.2.

Phased plans with short and long-term measures for the enhancement of native vegetation and the elimination of undesirable nonnative vegetation shall be developed and implemented.

2.2.1.

A list of trees and shrubs, and herbaceous plants native to the Parkway that are suitable for planting in the Parkway shall be approved by the Recreational and Parks Commission upon recommendation by the Director of the Department of Parks and Recreation, working in cooperation with the California Native Plant Society. This list shall include a designation of the appropriate plant community, habitat and exposure for each species along with a description of known pest problems and wildlife impacts. Only plants on this approved list shall be planted within the Parkway, the exception being grass in permitted locations.

7 City of Sacramento, *Richards Boulevard Area Plan*, October 1994, p. 119.

2.2.2.

Native plants shall be reintroduced in areas of their natural occurrence that have been disturbed by construction, past gravel mining and agricultural activity, except in sites of human historical value.

2.2.3.

Nonnative trees and shrubs shall be removed in accordance with a long-range phasing plan to be approved by the Recreation and Parks Commission except as noted in the area plans, and with the exception of existing golf courses. Priority shall be given to removal of those exotics that compete with natives, such as, but not limited to, pampas grass, eucalyptus, and pyracantha.

2.2.4.

New irrigation and planting within the dripline of existing native oaks shall be prohibited. Irrigated turfed areas shall be placed only in areas where there are no mature native trees that could be damaged by changes in the environment, such as water summering.

2.4.

Protection of the environmental quality of the Parkway shall be the first priority management responsibility.

5.7.6.

Structures shall be located so that neither they, nor activities associates with them, cause damage to native plants or wildlife.

LAND USE

Policy

6.0.

Facilities and other improvements in Protected Areas shall be limited to those which are needed for the public enjoyment of the natural environment. Extensive development is not appropriate.

Description and Purpose

Protected Areas contain tracts of naturally occurring vegetation and wildlife which although capable of sustaining light to moderate use, would be easily disturbed by heavy use. Protected Areas differ from Nature Study Areas in that general access in Protected Areas is encouraged, and convenience-type facilities are permitted to accommodate the anticipated increase in users. However, facilities and other improvements are limited to those which are needed for the public enjoyment of the natural environment. Emphasis is on protection and restoration of large portions of relatively natural areas which stand a better chance of preservation than smaller pieces.

Activities

The intended user-groups in these areas range from the individual (one to two persons), to the family group (three to ten persons), although special events may occasionally attract larger groups. Activities in the Protected Areas include all Group One activities (Nature Study), all Group Three activities (recreational Locomotion), other than motorized boating, and Group Five activities (Fishing). Group Two activities are restricted to limited family unit picnicking along trails, and in certain instances, limited educational or youth group overnight use may be appropriate as well.

Facilities

Permitted facilities and improvements include surfaced and unsurfaced trails, water fountains, occasional family unit picnic tables, and portable restrooms located at trail rest stops. Primitive

group camps (no tables, electricity, or permanent restrooms) may be designated in Protected Areas.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

Analysis of potential project impacts to biological resources is based on a combination of background and historic record searches and a reconnaissance level visit to the project site. Background research included use of the California Department of Fish and Game's Natural Diversity Database (CNDDDB), a species list from the USFWS Quad Species List website, a review of environmental documents prepared for this and related projects and a review of the California Native Plant Society's Electronic Inventory to determine what special-status plant or wildlife species are expected to occur in the vicinity of the project site.

The reconnaissance level site visit was conducted on June 22, 2006, to determine the habitat types that are present on the project site. Using that information, the list of species that was derived from the background research was analyzed to determine which of those species were likely to occur on the project site. The Biological Assessment prepared for the project, the CNDDDB query results, the USFWS Quad Species List, and the CNPS Rare and Endangered Plants List are included as Appendix F.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project creates a potential health hazard, or involves the use, production or disposal of materials that pose a hazard to plant or animal populations in the affected area;
- The project results in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of threatened or endangered species of plant or animal;
- The project affects other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands); or
- The project violates the Heritage Tree Ordinance (City Code 12.64.040).

Project-Specific Impacts and Mitigation Measures

6.3-1 Proposed demolition and construction activities could result in the disturbance of nesting habitat for Swainson's hawks.

Scenario A and B

Trees existing in the riparian area of the American River could support nesting habitat for Swainson's hawks. While nesting activities were not observed during the June 22, 2006 survey of the proposed development site, the riparian area could support nesting Swainson's hawks in the future. As noted in Table 6.3-1, suitable nest trees for Swainson's hawk are present along the river. Construction activities associated with the proposed project, including the operation of the temporary recycling facility, could disturb nesting pairs of Swainson's hawk possibly resulting in nest abandonment, forced fledging and/or mortality.

The nesting season for Swainson's hawks begins around February 15 and runs through September 15. Nesting Swainson's hawks are protected under the CESA, MBTA, Fish and Game Code 3503.5. The CNDDDB contains 36 recorded nests within five miles of the project site. One nest is within one half mile (2,640 feet) from the project site and is located across the American River.

Numerous studies have sought to measure the sensitivity of raptors (birds of prey) to a variety of human activities and have shown that raptor pairs may react to human activities very differently. Some pairs nest successfully just dozens of yards from human activity, while others abandon nest sites in response to activities much farther away. This variability may be related to a number of factors, including visibility, duration, noise levels, extent of the area affected by the activity, prior experiences with humans, and tolerance of the individual nesting pair. Human activities that cause prolonged absences of breeding adults from their nests can jeopardize eggs or young. Depending on weather conditions, eggs may overheat or cool too much and fail to hatch. Unattended eggs and nestlings are subject to predation. Irregular feeding due to human disruption can harm young. Adults startled while incubating or brooding young may damage eggs or injure their young as they abruptly leave the nest. Older nestlings may be startled by loud or intrusive human activities and prematurely jump from the nest before they are able to fly. Some examples of project related activities that may cause nest abandonment or forced fledging are: large mobile construction equipment (i.e., tractors, land movers, etc.) working directly under the nest for long periods of time, any equipment elevated to the level of the nest or higher, or anybody attempting to climb the nest tree.

The recycling facility would be an interim use in operation for approximately six weeks during initial project construction. The facility would be used to recycle material from the demolition of buildings and paved areas on-site. These materials could include brick, tile, concrete, and asphalt as well as other materials. Some material would be re-used on the project site for new buildings and some would be hauled off-site. The recycling facility would also be used to recycle demolition material from off-site for use in new construction, subject to appropriate conditions and restrictions. The recycling operation would be located in an open area along the north end of North 5th Street. A temporary access off North 5th Street would be used for truck traffic. The recycling facility location may be moved if phasing of the project changes.

Disruption of nesting birds, resulting in the abandonment of active nests or the loss of active (occupied) nests through tree removal would be considered a *potentially significant impact*.

Mitigation Measures

Implementation of the following mitigation measure would reduce this impact to a ***less-than-significant level***.

6.3-1 (A & B)

- a) *Prior to any demolition/construction activities that occur between February 15 and September 15 the applicant shall have a qualified biologist conduct surveys for nesting Swainson's hawk in the riparian area along the American River and within a half mile⁸ of demolition/construction activities. If no active Swainson's hawk nests are identified on or within half mile of construction activities, a letter*

8 Swainson's Hawk Technical Advisory Committee. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. May 31, 2000.

report summarizing the survey results shall be sent to the City of Sacramento and no further mitigation is required.

- b) *If active nests are found, measures consistent with the CDFG Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California⁹ shall be implemented as follows:*
1. *Nest trees shall not be removed unless there is no feasible way of avoiding their removal.*
 2. *If there is no feasible alternative to removing a nest tree, a Management Authorization (including conditions to offset the loss of the nest tree) shall be obtained from CDFG with the tree removal period (generally between October 1 and February 1) to be specified in the Management Authorization.*
 3. *No intensive disturbances (e.g., heavy equipment operation associated with construction, use of cranes or draglines, new rock crushing activities) or other project-related activities that could cause nest abandonment or forced fledging, shall be initiated within 1,320 feet (¼ mile) (buffer zone as defined in the CDFG Staff Report) of an active nest between February 15 and September 15 or until August 15 if a Management Authorization or Biological Opinion is obtained from CDFG for the project. The 1,320 foot buffer zone could be adjusted in consultation with CDFG.*
 4. *If demolition/construction activities are unavoidable within the buffer zone, the project applicant shall retain a qualified biologist to monitor the nest to determine if abandonment occurs. If the nest is abandoned and the nestlings are still alive, the project proponent shall retain the services of a qualified biologist to reintroduce the nestling(s) (recovery and hacking). Prior to implementing, any hacking plan shall be reviewed and approved by the Environmental Services Division and Wildlife Management Division of the CDFG.*

Implementation of Mitigation Measure 6.3-1(a) would require surveys for nesting Swainson's hawks to confirm the presence of active nests during the appropriate nesting season. If construction activities can not be avoided during the nesting season, then implementation of Mitigation Measures 6.3-1(b) ensures that active nests are protected by instituting appropriate buffer zones and avoiding or minimizing loss or take of this species. Implementation of Mitigation Measures 6.3-1(a) and (b) would reduce the potential disturbance of nesting Swainson's hawk to a less-than-significant level.

6.3-2 Proposed demolition and construction activities could result in the disturbance of nesting habitat for protected avian species, including raptors.

Scenario A and B

The riparian area in the project site could provide nesting habitat for a number of protected avian species including white-tailed kite, tree swallow, western blue bird, purple martins, and American robin. The white-tailed kite is a California fully protected species, the tree swallow, purple martins, western blue birds and other avian species are protected under the Migratory

9 California Department of Fish and Game, *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo Swainsoni*) in the Central Valley of California*, 1994.

Bird Treaty Act (MBTA). While nesting activities were not observed during surveys of the proposed development site, the riparian area could support nesting birds in the future. As shown in Table 6.3-1, the white-tailed kite and the purple martin have a moderate likelihood of nesting in and adjacent to the project site.

Nesting raptors and migratory nesting birds are protected under the MBTA and/or Fish and Game Code 3503, 3503.5, 3511 and 3513. Demolition and construction activities, including the operation of the temporary recycling facility, could result in the disturbance to protected nesting avian species potentially leading to nest abandonment and mortality. This would be considered a *potentially significant impact*.

Mitigation Measures

Implementation of the following mitigation measure would reduce this impact to a ***less-than-significant level***.

6.3-2 (A & B)

- a) *Between March 1 and August 1, the applicant shall have a qualified biologist conduct nest surveys 30 days prior any demolition/construction activities that are within 500 feet of potential nest trees. A pre-construction survey shall be submitted to CDFG and the City of Sacramento that includes, at a minimum: (1) a description of the methodology including dates of field visits, the names of survey personnel with resumes, and a list of references cited and persons contacted; and (2) a map showing the location(s) of any bird nests observed on the project site. If no active nests of MBTA, CDFG or USFWS covered species are identified then no further mitigation is required.*
- b) *Should active nests of protected bird species be identified in the survey conducted in accordance with Mitigation Measure 6.3-2(a), the applicant, in consultation with the City of Sacramento and CDFG, shall delay construction in the vicinity of active nest sites during the breeding (March 1 through August 1) while the nest is occupied with adults and/or young. A qualified biologist shall monitor any occupied nest to determine when the nest is no longer used. If the construction cannot be delayed, avoidance shall include the establishment of a non-disturbance buffer zone around the nest site. The size of the buffer zone will be determined in consultation with the CDFG, but will be a minimum of 100 feet. The buffer zone shall be delineated by highly visible temporary construction fencing.*
- c) *No intensive disturbance (e.g. heavy equipment operation associated with construction, use of cranes or draglines, new rock crushing activities) or other project-related activities that could cause nest abandonment or forced fledging, shall be initiated within the established buffer zone of an active nest between March 1 and August 1.*
- d) *If demolition/construction activities are unavoidable within the buffer zone, the project applicant shall retain a qualified biologist to monitor the nest site to determine if construction activities are disturbing the adult or young birds. If abandonment occurs the biologist shall consult with CDFG or USFWS for the appropriate salvage measures. This could include taking any nestlings to a local wildlife rehabilitation center.*

Implementation of Mitigation Measure 6.3-2(a) would require surveys for protected bird species to confirm the presence of active nests during the appropriate nesting season. If construction activities cannot be avoided during the nesting season, then implementation of Mitigation Measure 6.3-2(b) through (d) ensures that active nests are protected by instituting appropriate buffer zones and avoiding or minimizing loss or take of this species. Implementation of Mitigation Measures 6.3-2(a) and (d) would reduce the potential disturbance of nesting avian species to a less-than-significant level.

6.3-3 Development of the proposed project could result in the loss of foraging habitat for Swainson's hawk.

Scenario A and B

The project site is within the foraging territories of at least 36 historical Swainson's hawks nest sites.¹⁰ However, this species has not been observed foraging within the project site, and it is unlikely that Swainson's hawk utilize the project site as foraging habitat because of the highly disturb and urbanized nature of the site. The highly disturbed and discontinuous ruderal habitat that occurs in the project site is not recognized as suitable foraging habitat by the CDFG.¹¹

Therefore, this is a *less-than-significant impact* on Swainson's hawk foraging habitat.

Mitigation Measure

None required.

6.3-4 Development of the proposed project could result in the loss of habitat or potential disturbance of valley elderberry longhorn beetle (VELB).

Scenario A and B

Development within the project site could result in the disturbance (from construction or operation) or removal of elderberry shrubs. Elderberry shrubs are the host plant for the VELB, a species federally listed as threatened. The USFWS considers all elderberry shrubs with stems equal or greater than one inch in diameter in the Central Valley potential habitat for the beetle. The USFWS assumes that impacts to VELB would occur wherever there is disturbance within 100 feet of suitable habitat. Therefore, adverse effects on the shrubs with stems equal or greater to one inch in diameter would be considered "take" under the federal ESA.

Although a USFWS protocol survey was not conducted for VELB, elderberry shrubs were observed at two separate locations within the project site (Figure 6.3-1). Two elderberry shrubs were observed at the end of North 7th Street. The largest concentration of elderberries (more than 50 shrubs) was in the riparian woodland in the south bank of the American River. One small shrub was observed outside of the eastern boundary of the project site, within 100 feet of the project boundaries. Exit holes were found on one of the shrubs at the end of North 7th Street but not all shrubs were surveyed.

Loss or disturbance of individual VELB or their habitat (elderberry shrubs), including ground disturbance within 100 feet of the dripline of an elderberry shrub with stems greater than or

10 California Natural Diversity Database, September 2006.

11 California Department of Fish and Game, *Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (Buteo swainsoni) in the Central Valley of California*, 1994.

equal to one inch in diameter (from construction or operation), or changes in the water regime, that would result in additional water could result in an adversely impact VELB. This would be considered a *significant impact*.

In September 2006, the USFWS recommended to delist the VELB based on the findings from the VELB 5-Year Review: Summary and Evaluation prepared by the Sacramento Fish and Wildlife Office. If the VELB is delisted prior to the initiation of construction activities, then the applicant would have to proceed consistent with any requirements that accompany the VELB delisting notice.

Mitigation Measures

Implementation of the following mitigation measures would reduce this impact to a ***less-than-significant level***.

6.3-4 (A & B)

- a) *Prior to any demolition/construction activities, the project applicant shall retain a qualified biologist to conduct a survey to identify and document all potential VELB habitat. Survey and evaluation methods shall be performed consistent with the USFWS's 1999 VELB survey and mitigation guidelines.¹² The survey shall include a stem count of stems greater than or equal to one inch in diameter and an assessment of historic or current VELB use.*
- b) *The proposed project shall be designed to avoid ground disturbance within 100 feet of the dripline of elderberry shrubs identified in the survey (conducted consistent with Mitigation Measure 6.3-4(a)) as having stems greater than or equal to one inch in diameter. The 100 foot buffer could be adjusted in consultation with the USFWS. If avoidance is achieved, a letter report confirming avoidance shall be sent to the City of Sacramento and no further mitigation is required.*
- c) *If disturbance within 100 feet of the dripline of the elderberry shrub with stems greater than or equal to one inch in diameter is unavoidable, then the project applicant shall retain the services of a qualified biologist to develop a formal VELB mitigation plan in accordance with the most current USFWS mitigation guidelines for unavoidable take of VELB habitat pursuant to either Section 7 or Section 10(a) of the Federal Endangered Species Act. Prior to implementation by the applicant the mitigation plan shall be reviewed and approved by the USFWS.*
- d) *If the VELB is delisted by the USFWS prior to the initiation of any ground disturbing, demolition, or construction activities, the project applicant shall proceed consistent with any requirements that accompany the VELB delisting notice.*

Implementation of Mitigation Measure 6.3-4(a) would require that a site-specific protocol survey be conducted to confirm the presence of VELB habitat. If habitat is identified, then implementation of Mitigation Measures 6.3-4(b) and (c) would ensure the project is designed to

12 United States Fish and Wildlife Service, *Conservation Guidelines for the Valley Elderberry Longhorn Beetle*, 1999.

avoid disturbance or if disturbance within the buffer is unavoidable, the transplantation and replacement of VELB habitat as specified by the USFWS's VELB Mitigation Guidelines. In the event VELB is delisted prior to demolition/construction activities, then Mitigation Measure 6.3-4(d) would require the applicant to comply with any applicable requirements contained in the VELB delisting notice. These mitigation measures would reduce impacts to VELB to less-than-significant levels.

6.3-5 Development of the proposed project would include removal of trees that could be protected by the City of Sacramento Tree Preservation Ordinance.

Scenario A and B

As described in Chapter 2, Project Description, all trees and shrubs on the project site would be removed to accommodate the proposed development. Trees within the project site consist of tree-of-heaven (*Ailanthus altissima*), cottonwood (*Populus* sp.), valley oak (*Quercus lobata*), elm (*Ulmus* sp.), and willow (*Salix* sp.).

There is one valley oak tree on the site boundaries that would qualify as a heritage tree pursuant to the City of Sacramento Tree Preservation Ordinance that could be removed. There are also trees located along North 7th Street that would be removed and if they are located in the public street right-of-way would qualify as City street trees. Impacts to heritage trees or City street trees would be considered a *potentially significant impact*.

Mitigation Measures

*Implementation of the following mitigation measures would reduce this impact to a **less-than-significant level**.*

6.3-5 (A & B)

- a) *Prior to approval of final project design, the project applicant shall retain a certified arborist to survey trees on the proposed project site, including potential laydown/construction areas, to identify and evaluate trees that shall be removed. If the arborist's survey does not identify any protected trees that would be removed or damaged as a result of the proposed project, a letter report confirming that project design would avoid loss of protected trees shall be sent to the City of Sacramento and no further mitigation is required.*
- b) *If protected trees (or their canopy) are identified that can not be avoided by project design, measures shall be taken to avoid impacts on protected trees, as detailed in the City's tree ordinance. Protected trees that are lost as a result of the project shall be replaced according to the provisions of the ordinance (Section 12.64.040), which generally requires a 1-inch-diameter replacement for each inch lost. Tree replacement shall occur after project construction and shall be monitored by a qualified arborist.*
- c) *All native oaks greater than 6 inches in diameter at 48 inches above grade that are approved for removal or are critically damaged during construction shall be replaced by a greater number of the same species. At a minimum, one tree shall be planted for each inch in the diameter of the removed tree at 48 inches above grade. The exact size and number of replacement trees shall be determined by the City of Sacramento Tree Service Division. A qualified arborist shall monitor*

trees during construction and the following spring and monitor the growth and survival of the newly planted trees. All revegetation plans shall require monitoring the newly transplanted trees for at least 5 years and the replacement of all transplanted trees that die during that period.

Implementation of Mitigation Measure 6.3-5(a) through (c) requires the applicant to comply with the requirements of the City of Sacramento Tree Ordinance which requires identification of protected trees and either avoidance or replacement of protected trees for which their removal can not be avoided through project design.

6.3-6 Development of the proposed overlook could result in the disturbance or loss of riparian vegetation on the water side of the levee.

Scenario A and B

Construction of the proposed overlook could result in the disturbance or removal of riparian vegetation on the water side of the levee. These activities could include clearing of ground vegetation, trimming of tree branches to allow free access to equipment (i.e. backhoe) or crews, and removal of shrubs (including elderberry shrubs). The overlook would be an up to 230-foot-wide cast-in-place concrete construction that could extend up to 60 feet from the centerline of the levee toward the American River. The overlook may be in the form of a cantilever that would be supported at the top of the levee, or the overlook could be supported by a retaining wall at its northern edge. If the overlook is a cantilever, all of the construction would be done at the top of the levee. If the overlook is supported by a retaining wall, construction activity would take place no further than 10 feet from the wall location toward the American River. A temporary construction area of approximately 700 feet by 70 feet centered on North 7th Street will be required for the overlook. Following construction, as stated in the project description, the overlook would not exceed the waterside toe of the levee. Based on the biological resource assessment conducted by EIP Associates, it is evident that the vegetation on the water side of the levee would constitute riparian vegetation. Therefore, the potential impact to riparian vegetation due to the construction of the overlook is considered a *potentially significant impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce these impacts to a ***less-than-significant level***.

6.3-6 (A & B)

- a) *Once the overlook design is finalized and before any ground clearing activities related to the overlook, the applicant shall retain a qualified biologist to conduct a vegetation survey of the overlook foot print and construction area to assess the extent of the potential impacts to riparian vegetation.*
- b) *Project design shall minimize the removal of riparian vegetation to only the amount needed to achieve the construction of the overlook.*
- c) *If the overlook is supported by a retaining wall, construction activity shall take place no further than 10 feet from the wall location toward the American River. If the overlook is a cantilever, all of the construction shall be done at the top of the levee.*

- d) *Trimming or removal of any trees in the riparian area shall be accomplished consistent with Mitigation Measures 6.3-1, 6.3-2 and 6.3-5.*
- e) *For unavoidable removal of elderberry shrubs implement Mitigation Measure 6.3-4.*

Implementation of Mitigation Measures 6.3-6(a) and (c) shall ensure that the minimum amount of riparian vegetation is lost to accommodate construction of the overlook. If any trees require trimming or removal, then Mitigation Measure 6.3-6(d) would ensure that it would be accomplished consistent with the requirements of the City Tree Ordinance and in a manner to protect nesting raptors, as appropriate. If elderberry shrubs must be removed to accommodate the overlook, then Mitigation Measure 6.3-4 would protect VELB through avoidance and re-vegetation activities, as appropriate.

6.3-7 Construction of the proposed project could adversely affect special status bats.

Scenario A and B

The nearest known bat roosting sites are located approximately 1.5 miles southwest of the project site. Special-status bat species with the potential to occur within the project site include the pallid bat and Pacific western big-eared bat; both are CDFG species of special concern. These species use hollow trees, caves, and rock crevices for roosting, but also use man-made structures such as mines, old buildings, warehouses and bridges if suitable structure and seclusion are available. Potential habitat for these species is present within the riparian area, warehouses and old buildings within the project area. Because specific identification was not possible at the six known bat roosting sites, it is assumed that one of the species discussed above is roosting near the project site or in crevices in the warehouses and buildings. The disturbance of roosting sites for these species would be considered a *potentially significant impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce this impact to a ***less-than-significant level***.

6.3-7 (A & B)

- a) *Prior to demolition activities, the project proponent shall retain a qualified biologist to conduct a focused survey for bats and potential roosting sites within the project site. If no roosting sites or bats are found within the project site, a letter report confirming absence shall be sent to the City of Sacramento and no further mitigation is required.*
- b) *If bats are found roosting at the site outside of nursery season (May 1st through October 1st), then they shall be evicted as described under (c) below. If bats are found roosting during the nursery season, then they shall be monitored to determine if the roost site is a maternal roost. This could occur by either visual inspection of the roost bat pups, if possible, or monitoring the roost after the adults leave for the night to listen for bat pups. If the roost is determined to not be a maternal roost, then the bats shall be evicted as described under (c). Because bat pups cannot leave the roost until they are mature enough, eviction of a maternal roost cannot occur during the nursery season. A 250-foot (or as*

determined in consultation with CDFG) buffer zone shall be established around the roosting site within which no construction shall occur.

- c) *Eviction of bats shall be conducted using bat exclusion techniques, developed by Bat Conservation International (BCI) and in consultation with CDFG, that allow the bats to exit the roosting site but prevent re-entry to the site. This would include but not be limited to the installation of one way exclusion devices. The devices shall remain in place for seven days and then the exclusion points and any other potential entrances shall be sealed. This work shall be completed by a BCI recommended exclusion professional.*

Implementation of Mitigation Measure 6.3-7 would reduce this impact to a less-than-significant impact by identifying potential roosting sites, bat species and providing bat exclusion techniques that will allow for the passive relocation of the bats before construction begins.

6.3-8 Proposed lighting along River Front Drive and the Two Rivers Trail would create new sources of light that could adversely affect wildlife use of adjacent riparian habitat.

Scenario A and B

As described within the Environmental Setting the project site does not serve as a regional wildlife corridor, an important linkage, travel route or wildlife crossing. However, there is riparian habitat on the water side of the levee adjacent to the American River along the north boundary of the project site. The adjacent riparian habitat provides food, cover and breeding sites for wildlife like bats, river otters, western pond turtle, Pacific chorus frog, migratory and resident avian species like wood duck, black phoebe, blue bird, American kestrels, and mammals such as raccoons, coyotes, and deer.

New sources of light associated with River Front Drive, the Two Rivers Trail, and the riverfront pavilion (that could include an outdoor performance venue, a tower structure, an overlook, and other public urban park uses) could spill over into this riparian habitat. New lighting sources disorient and sometimes “entrap” wildlife. Disorientation due to new artificial light sources refers to the phenomenon of wildlife attraction to artificial lights. Low illumination intensity of the environment around a light source interferes with the normal photic orientation, resulting in a drift towards the light sources. Animals moving through the lighted area are hesitant to go out into the darkness and instead they stay in the lighted site, thus becoming entrapped. This entrapment can have implications to community ecology i.e. increase of predation.

As discussed in Section 6.1, Aesthetics under Impact 6.1-2, lighting fixtures would be directed and controlled to reduce spillover, and to reduce effects on sky glow. All light fixtures would have incandescent, halogen, or metal halide light sources. Along roadways (such as River Front Drive), the proposed Design Guidelines encourage that the proposed project include pedestrian-scale lighting in the design of all streetscapes and public spaces. Pedestrian scale illumination would promote visual continuity, safety, and night activity in any community. The proposed project would also include an approximately 150-foot-tall tower structure that would be oriented towards downtown. The tower structure would include a light feature consisting of a controlled neon or laser light source that would operate from dusk until dawn. The light feature would include cut-off shields that screen the light from shining to the north or onto the riverfront. In addition, prior to development at the project site, all proposed lighting features would be

subject to review and approval by the Design Commission. Existing security lighting on the project site does not appear to be affecting wildlife usage of the riparian habitat. The proposed lighting would include shields, and would be directed and controlled in order to prevent spillage onto the riparian area as to not affect the wildlife use of the adjacent riparian habitat.

However, because the proposed project would introduce additional light sources adjacent to riparian habitat, this is considered a *potentially significant impact*.

Mitigation Measures

Implementation of the following mitigation measure would reduce this impact to a ***less-than-significant level***.

6.3-8 *Implement Mitigation Measure 6.1-2(a).*

Implementation of Mitigation Measure 6.1-2(a) would include a requirement for directing exterior lighting downward to minimize spillover to the adjacent riparian area.

Cumulative Impacts and Mitigation Measures

Cumulative impacts on biological resources are analyzed assuming buildout of the City's General Plan and the SACOG regional buildout in the Sacramento Valley.

6.3-9 Implementation of the project in combination with potential development in the region would contribute to cumulative impacts associated with significant effects to special-status wildlife and habitat loss.

Scenario A and B

Development over the past 150 years has encroached upon and displaced 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 development pressures to accommodate California's rapidly growing human population within this portion of the state. The proposed project area does support open space that can be used by special status species. While by no means pristine or undisturbed, this open space habitat can still be used by special-status species that include but are not limited to VELB, Swainson's hawk and other special-status avian species.

As previously described under impacts 6.3-1, 6.3-2, and 6.3-4 through 6.3-7, the project could result in significant impacts to special status species, heritage trees and riparian vegetation along the American River. Project impacts in addition to other development activities in the region would result in a significant cumulative impact on biological resources. Even though the quality of the habitat on the project site is low given the developed nature of the site and surrounding lands, project development does contribute to cumulative loss of special status species and habitat. Therefore, the project's contribution would be considerable and this is a *significant cumulative impact*.

Mitigation Measures

Implementation of the following mitigation measures would substantially limit the project's contribution and this cumulative impact would be a ***less than significant***.

6.3-9 Implement Mitigation Measures 6.3-1, 6.3-2 and 6.3-4 through 6.3-7.

Implementation of Mitigation Measures 6.3-1, 6.3-2, and 6.3-4 through 6.3-7 would substantially limit the project's contribution to cumulative impacts to special-status wildlife and habitat loss. Mitigation Measures 6.3-1 and 6.2-3 include processes and measures that would reduce the project's contribution to loss or take of nesting Swainson's hawk and other protected bird species attributed to nest disturbance to a less than considerable level through avoidance of active nests and/or buffers within which intensive disturbances could not occur.

Implementation of Mitigation Measure 6.3-4(a) would require that a site-specific protocol survey be conducted to confirm the presence of VELB habitat on the project site. If habitat is identified, then implementation of Mitigation Measures 6.3-4(b) and (c) would ensure the project is designed to avoid disturbance or if disturbance within the buffer is unavoidable, the transplantation and replacement of VELB habitat as specified by the USFWS's VELB Mitigation Guidelines. This would reduce the project's contribution to the cumulative loss of VELB habitat to a less than considerable level. In the event VELB is delisted prior to demolition/construction activities, then Mitigation Measure 6.3-4(d) would require the applicant to comply with any applicable requirements contained in the VELB delisting notice.

Mitigation Measure 6.3-5 requires the applicant to comply with the requirements of the City of Sacramento Tree Ordinance which requires identification of protected trees and either avoidance or replacement of protected trees for which their removal can not be avoided through project design. This would reduce the project's contribution to the cumulative removal of trees protected under the City's ordinance to a less than considerable level.

Mitigation Measures 6.3-6 would ensure that the minimum amount of riparian vegetation is lost to accommodate construction of the overlook and would substantially limit the project's contribution to cumulative loss of riparian habitat.

Mitigation Measure 6.3-7 would ensure that potential roosting sites of special bat species on the project site are protected through implementation of bat exclusion techniques that will allow for the passive relocation of the bats before construction begins. This would reduce the project's contribution to the cumulative loss or take of special-status bat species attributed to nest disturbance to a less than considerable level.

6.4 Cultural Resources

6.4 CULTURAL RESOURCES

INTRODUCTION

This section of the EIR assesses potential effects to cultural resources that could result from implementation of the proposed Township 9 project. Cultural resources are defined as historic-period buildings and structures and prehistoric or historic-period archaeological resources. This section briefly describes the cultural setting of the project area and discusses known cultural resources on the project site and within the project area. Applicable state, federal, and local regulations are identified, followed by impact analysis and mitigation measures, where available, to reduce adverse impacts on cultural resources.

No comments were received during the NOP comment period concerning cultural resources.

Potential project impacts to paleontological resources or existing religious or sacred uses have been addressed in the Initial Study prepared for the proposed project (see Appendix A) and are not discussed in this section.

This section of the EIR is based primarily on the report titled Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814, prepared by JRP Historical Consulting LLC¹ and included as Appendix G. Other sources consulted for the preparation of this section include the cultural resources records search results for the proposed project² and the current updated versions of the Sacramento City General Plan, the Sacramento Central City Community Plan (CCCP), the Richards Boulevard Area Plan (RBAP), and the American River Parkway Plan. It should be noted that some technical materials and correspondence referenced in this section refer to the original name for the proposed project, Capitol Station 65, which has since been renamed Township 9. There is no physical difference between the former Capitol Station 65 project and the Township 9 project; only the name of the project has changed.

ENVIRONMENTAL SETTING

The former Bercut-Richards cannery occupies a large portion of the Township 9 project site and has been determined to be a significant historical resource under CEQA. Accordingly, the following cultural resource setting focuses primarily on the history of the canning industry in the Sacramento area and the history of the Bercut-Richards cannery.

Early Sacramento

Native American settlement in Sacramento County began 12,000 years ago. The Nisenan were attracted to the area by its year-round water supply and the food sources it provided, including game, fish, seeds, and nuts. Their hunting and gathering culture survived longer than other California tribes because of their relative isolation from the Spanish mission system along the

1 *Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814*, prepared by JRP Historical Consulting LLC, December 2006.

2 North Central Information Center, *Records Search Results for Capitol Station 65 Project, Richards Boulevard Area Plan*, EIP Project #D51214.01, NCIC File No.: SAC-06-139, August 9, 2006, on file at EIP Associates, a Division of PBS&J, Sacramento, California.

coast. Significant contact with non-natives eventually came in the early nineteenth century as Spanish, Mexican and American explorers began to investigate the Sacramento Valley. Those who were not killed by the diseases carried by the Europeans were forced away from their lands by intimidation and violence. American trappers and settlers arrived around what became Sacramento in the 1830s, encouraged by the fur trade and Mexican government land grants. John A. Sutter arrived in 1839 and established a fort and trading post, forming the core of the settlement that became Sacramento. The Gold Rush of 1849 and the 1850s caused a rush of fortune seeking emigrants to California. Sacramento's location near the goldfields led to it becoming a primary supply point for the influx of gold seekers. The Sacramento River allowed the city to serve as the main port for shipping gold bound for San Francisco.

As the small settlement grew, Sacramento's citizens began to address the problem of flood management. Major floods of the American River and Sacramento River destroyed much of the city several times between 1850 and 1880. To combat this threat, the city's citizens redirected the American River in 1862 to eliminate a curve in its course through the city. The redirected route created the west end of the American River that passes to the north of the Township 9 project site. Levees were also built to reduce the risk of flooding, allowing the land south of the American River to be developed, including agricultural uses where the Bercut-Richards cannery would later be built.

The climate, soil conditions, and ample supply of irrigated water that developed around Sacramento during the late nineteenth century, as well as its location as a river and railroad transportation hub, led to the area's importance as one of California's leading agricultural regions. With successful diversification of produce, technical innovations, and growing national and international demand for California-grown fruits and vegetables, Sacramento flourished and canning became one of the region's most important industries, ensuring distribution of the area's agricultural products and employing thousands of workers through much of the early to mid-twentieth century.

Early Canning in Sacramento

The earliest canning in Sacramento was of salmon, not fruit and vegetables. With the abundant salmon found in the Sacramento River and American River, salmon canning began in Sacramento in 1864. Packing companies built and operated twenty canneries along the Sacramento River over the next two decades, with the peak coming in 1882 when 200,000 cases of salmon were packed. Following this high point, the salmon population declined dramatically around Sacramento because of mining debris in the rivers upstream from the city and wasteful netting practices. Output declined to 56,000 cases in 1884 and all of the salmon canneries along the Sacramento River closed by 1886.

Although Sacramento had a good climate for fruit and vegetable crops, and there was ample water supply with which to irrigate crops, the agricultural output of produce was limited during the 1860 to 1880s. As was true in many areas of Northern California, wheat was the dominant crop around Sacramento in the 1850s, 1860s, and 1870s. The transcontinental railroad reached Sacramento in 1869 and opened the possibility of shipping fresh produce to eastern markets. In 1870 a shipment could reach Chicago in seven days and Boston in ten days. Growers began to take advantage of these new markets by planting larger, irrigated orchards. However, preservation proved a serious problem, as the fruit often spoiled after passing a week in a boxcar, and fruit from irrigated orchards spoiled faster because it was not as firm as non-irrigated fruit when harvested.

Economic developments of the late nineteenth century made fruit and vegetable crops more profitable. Demand for preserved foods began during the Civil War and continued in the West with various mining booms. This combination of factors encouraged many growers to expand their fruit and vegetable crops so they could increase their profits by meeting the growing demand for their products. This development spurred a new direction in the canning industry away from salmon and toward agricultural produce. By 1870, fruit and vegetable canning operations in the San Francisco Bay Area packed 36,000 cases per year. The first successful fruit and vegetable cannery in Sacramento, the Capitol Packing Company, opened in 1882. Within six years, this company employed 450 people and produced 100,000 cases per year. Smaller canneries opened in the following years, typically needing only 25 employees to operate. Fruit and vegetable production was bolstered further when the wheat market began to decline in the mid 1880s, prompting Sacramento area farmers to grow alternative crops.

Technological developments of the late nineteenth century and early twentieth century also benefited fruit and vegetable growers and processors. In the late 1880s, the Armour Packing Company of Chicago introduced refrigerated rail cars to California for the transport of fresh produce. This development and Sacramento's central location allowed the city to become the shipping hub of the West by the late 1880s, accounting for 90 percent of the deciduous fruit shipped by rail to eastern markets. In the following years, processing improvements also increased production and profitability. Beginning around 1905, most plants switched from hand peeling fruits to using chemicals such as lye to remove the skins. In the following decade, the packing companies began to use new machines that could sort the produce by size, increasing efficiency and production.

Mass production of cans began before the turn of the century, eliminating the costly practice of canneries purchasing metal and cutting their own cans. The industry experienced an early example of consolidation when the American Can Company formed in 1901, incorporating 123 smaller can companies. Another large operation, the Continental Can Company organized in 1904. The increase in can supplies brought production costs down for the canneries, as did new machinery introduced before 1915 that automatically sealed the cans at the plant.

The canning industry came to be dominated by large companies, often ones that consolidated several smaller operations. Libby, McNeill and Libby formed in Maine in 1868 and began canning operations in California in 1909. Its first plant in Sacramento, opened in 1912 and quickly became one of the state's four largest. Five companies and 53 canneries merged in 1915 to form the California Packing Company, known as Cal-Pac, which also had a presence in the Sacramento River Valley. Another company, Hunt Brothers, opened in 1896 and grew into a large operation with several plants in the valley over the next decades. This trend toward consolidation into large companies resulted in part from the growing ease of transporting the produce. This trend grew more common with the rise of the automobile and the trucking industry in the early years of the twentieth century, which meant that packing plants no longer needed to be located along a navigable river or a railroad and therefore could move to locations that were more convenient rather than remain scattered in smaller towns.

Demand for canned goods increased dramatically after the Panama Canal opened in 1914 and during World War I. Growers increased their fruit and vegetable acreage accordingly. They also began to plant other crops like tomatoes and pumpkins to be harvested and processed after the fruit harvest concluded. Growers also extended the season by developing new varieties of crops, such as peaches, that would ripen at different times during the summer. These techniques allowed the growers and canners to prosper during and after the war.

History and Expansion of the Bercut-Richards Packing Company

During the early twentieth century, San Francisco businessmen and brothers Peter and Henri Bercut owned the American River Ranch beside the American River near Sacramento (including the current project area). In 1928, the Bercut brothers agreed to lease a portion of this land to the California Cooperative Producers Company, who wished to establish a tomato cannery. The Co-op constructed a large sawtooth roof cannery building and a brick warehouse in 1928 and 1929 to store their goods for shipping. Despite the promising beginning, the company failed in just a few years, owing wages to 600 employees by the time it closed in 1930. In 1931, Thomas H. Richards, Sr., a Sacramento businessman, persuaded the Bercut brothers to reopen the cannery under his management. Richards was born in California in 1897 and moved to Sacramento in 1930. Before his arrival in the Capitol city, he worked in orchards and mining operations, servicing harvesting and mining machinery. He also served in World War I. Richards put his experience to work at the cannery, bringing the cannery's output to 300,000 cans packed in the first year and beginning a regular series of expansion projects that continued through the next decades.

The first years of operation for the Bercut-Richards Packing Company coincided with the worst part of the Great Depression in the early 1930s. During these initial years Bercut-Richards tried several tactics to prevent the company's failure. In 1933, Thomas Richards used newspaper announcements, for example, to reassure his seasonal workforce that the plant would resume operations in August of that year for the peach harvest, which was one of the largest single products canned at the plant. Such efforts were stymied by federal quotas for certain products, and by September 1933 peach packing at the plant ceased because the region met its federally mandated allocation of 170,000 cases, which was down from 244,600 cases in 1932. The Bercut-Richards cannery continued operations through its early years by processing small scale canning of tomatoes and pears, for example.

Economic and production difficulties spread to many Sacramento industries during the Great Depression, causing the railyards, schools, and county government to lay off large portions of their workforces. Unemployment in the city reached 27,000 by 1932 and shanty towns for transients sprang up in the area north of the city and near the Bercut-Richards plant. The cannery continued to operate with its seasonal workforce that expanded to fulfill demand. Bercut-Richards also provided aid to the community, along with larger operations in Sacramento such as Libby, McNeill and Libby, by participating in food-aid relief programs. This assistance included donating surplus produce to welfare agencies, including the local orphanage, the Ladies Relief Society, and the Salvation Army. Sacramento weathered the depression through these local efforts as well as through New Deal funding from the federal government which helped pay for public improvement projects, including city streets, hospital construction, and building the Tower Bridge over the Sacramento River in 1935. These federally funded projects were essential to lowering unemployment.

As federal aid began to mollify the worst of the economic effects of the depression in Sacramento, and the economic future seemed stronger, the situation improved at the Bercut-Richards plant. In 1935, the company expanded the cannery building to allow more room for its packing operations and added an office to the 1928 warehouse. This construction, the first since the original plant's completion in 1928, represented improved confidence and prospects for future success. Bercut-Richards also found additional use for their property during this period by growing its own canning peaches on an adjoining thirty acres. This corresponded with the company's general practice of canning local produce. Expansions were also the result of a

new trend in the canning industry at the time. Distributors and retailers were decreasing their storage capacities for inventory, resulting in the need for canneries, such as Bercut-Richards, to expand their storage needs. Bercut-Richards constructed a large warehouse in 1936 and several more in 1937. The cannery's major expansion in 1937 cost \$160,000. Storage needs were being addressed again with two new warehouses built of brick and hollow clay tile. By this time, the plant's railroad spur line that was connected to the Sacramento railyards located south of North B Street to the south was in place and was the main route for distribution.

The cannery building also expanded for the second time in two years. This phase of expansion also included a large new office building and a cafeteria for the employees and landscaping and parking areas. For many years, the roof of the cafeteria supported a large sign that read "Bercut Richards Packing Co Sacramento Brand." The company also purchased eight acres for future expansion in order to continue this growth. In 1938, the company expanded the packing plant again with the construction of another new warehouse. Also in that year, a fire partially destroyed one of the 1937 warehouses on the northwestern corner of the plant's property. Damages to the building totaled \$190,000 with the loss of a large section of the roof and framework. The brick walls survived, however, and the company began plans to reconstruct the building. The cans being stored in the warehouse fared worse, as the heat from the fire caused many cans to explode and others to lose their seals, ruining their contents. Sacramento's health inspectors required that Bercut-Richards bury over two million cans in the landfill, bringing the total loss close to \$1 million. The result was that major construction slowed at the plant for a few years.

Demand for canned goods continued to grow as World War II began in Europe. Prices for canned goods and wages for cannery workers rose as packing companies received government contracts for their products. Bercut-Richards benefited from this increased demand. The company also participated in other support functions following Pearl Harbor and the nation's entry into the war. Sacramento began a victory garden program to encourage civilians to assist with the war effort. The Sacramento Bee sponsored victory garden festivals and Bercut-Richards canned the produce with a special "V for Victory" label.

The Bercut-Richards plant participated in the war effort in a much more direct way beginning in the fall of 1942 when the Army Signal Depot moved from the state fairgrounds to the cannery. Sacramento's inland location and access to major rail lines made it safe from Japanese air attack and ideal for shipping military goods on the West coast for the war in the Pacific Theater. The depot served as a supply center for other Army installations. The cannery's warehouses, open space, and proximity to the rail depot made it an excellent location for this supply function. Although the military built many new facilities in California during the war, the use of existing industrial sites like the Bercut-Richards cannery allowed vital supply operations to continue without the delay of waiting for acquisition and construction of a new site. The Army used existing buildings at Bercut-Richards and left behind no permanent structures from its use of the property.

As the war intensified, the need for military supplies grew, as did the workload at the Signal Depot. By the end of the war, hours worked increased 650 percent, and shipments grew from 10,500 items in 1943 to 60,800 items in 1945. This workload translated into much needed jobs for civilians, causing an increase in employees from 244 to 1,800. The army supplemented the Sacramento workforce by recruiting specialists from across the country, bringing new expertise to the area. The workforce also diversified as the depot hired more women and a few minorities. It also diversified after April 1944 when the army opened a prisoner of war camp at

the cannery site. German prisoners from General Rommel's Afrika Korps lived in a tent city and worked in the depot's warehouses. The POW population peaked at 554.

The Sacramento Army Signal Depot was valuable to the war effort and from its success it began to outgrow its space at the Bercut-Richards site as supply demands increased. The Army began to lease other warehouses in the city to hold the surplus goods and started work on a larger permanent depot in Sacramento. The war ended prior to the Signal Depot's departure from the Bercut-Richards plant. The Army moved the Signal Depot to Fruitridge Road east of Power Inn Road in late 1945.

Demand for canned goods continued to grow in the post-war period and provided Bercut-Richards the opportunity to further expand their facilities. After the war the company constructed new buildings and additions that were integrated into the plant over the next decade. The new expansion phase began in 1945 with the construction of a new office building and a fruit preparation, quick freeze, and cold storage building along the newly-established Richards Boulevard, named for the cannery's manager, Thomas Richards. An additional new building housed a fruit salad cannery.

Between 1945 and 1947 the Continental Can Company, which Thomas Richards also owned, constructed a can manufacturing plant on the east side of North 7th Street, directly across from the Bercut-Richards plant. The two companies operated closely, as evidenced by the construction of a conveyor system in 1946 or 1947 that carried cans from the factory, over North 7th Street, along the edge of the cannery warehouses, across the sawtooth roof of the old cannery and into the two story can loft on the west of the plant. This innovation eliminated the shipping costs to supply cans to the plant. Other modifications to the plant during this period included construction of a small scale-house that was flanked by two 50-ton scales in the company parking lot in 1951. In 1955, the southern section of the cannery building (Building 4) was removed and replaced by a large, steel-frame warehouse that remained partially opened adjacent to the north side of the fruit cocktail cannery. This portion of Building 4 was again modified around 1964 to enclose the area next to Building 3.

With the new facilities, added capacity, and ample warehouse storage, Bercut-Richards continued to increase its production. The company continued to focus on packing local products, canning 20,000 tons of tomatoes from nearby Natomas in 1951, for example. In addition, innovations allowed the company to remain independent from the national canneries in Sacramento and to remain competitive with larger corporations. Bercut-Richards was among the first companies to can and distribute fruit cocktail, making use of by-products of the whole fruit canning process. The company was also among the earliest to can tomato juice on a large scale, further expanding the market for Sacramento's tomatoes. Bercut-Richards also distributed waste from pear and tomato processing to Midwestern farmers to use as hog feed.

Several years later, the Bercut-Richards Packing Company built two additional warehouses / storage buildings, as well as a small corrugated metal shed, all of which were unattached and disconnected from the main plant. The concrete tilt up storage buildings were built between 1957 and 1963 and appear to have had little impact to the plant's function and capacity. One of these buildings was built where a wood shop operated following the closure of the POW camp after World War II. The other tilt up concrete building was added to the property at the corner of North 5th Street and Richards Boulevard (APN 001-200-012) to the west of the cannery. It is unclear what function, if any, these buildings served with the Bercut-Richards operation besides as storage facilities. The metal storage building was constructed after 1964.

Decline of the Canning Industry in Sacramento

Demand for canned goods began to decline in the 1950s and 1960s with the reduction of military consumption of canned goods during peacetime, the development of frozen foods, and the growing preference for fresh goods produce as a healthy alternative to canned goods. New technologies improved facilities to transport fresh produce and also reduced the workforce necessary to operate packing plants. These factors pushed many canneries to choose consolidation with larger companies, like Del Monte or Libby, McNeill and Libby in order to survive.

The Bercut-Richards Packing Company resisted this trend, remaining one of the largest independent packing plants in the world during the 1950s and 1960s. Thomas Richards astutely managed the company for 37 years through a system of expansion, diversification and innovation. During his tenure, the company grew from a \$1.5 operation packing 300,000 cans in 1931 to an \$18 million operation that packed 5 and a half million cans in 1968. Richards retired in 1968 and passed away in 1974.

When Richards retired in 1968, Borden Foods purchased the cannery. It operated under the management of Richards' son, Thomas H. Richards, Jr., who tried to continue the operation of a local, if no longer independent, cannery until the 1970s, when Borden sold the plant to a San Francisco group. Richards attempted to reestablish the company under the name T.H. Richards Processing in 1979, but the business closed in 1982 as the industry continued to decline in Northern California. Even the large consolidated packing companies struggled during these years. Libby, McNeill and Libby, for example, closed its Sacramento operation in 1980.

Sierra Quality Cannery reopened the cannery in 1987, but sold its operation to Tri Valley Growers in 1993. After allowing a five year lease to expire in 1998, Tri Valley sold their equipment to the Lodi Mission Partners from Stockton. After development plans failed to materialize, the Applicant purchased the cannery site and some surrounding parcels in 2000.

Cultural Resources

NCIC Records Search

The North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) conducted a records search for known cultural resources within a ¼-mile radius of the Township 9 project site. Records reviewed included the State of California Office of Historic Preservation records, base maps, historic maps, and literature for Sacramento on file at the NCIC.

Prehistoric Resources

The records search revealed no recorded prehistoric archaeological sites on the project site. Three prehistoric archaeological sites have been recorded within a ¼-mile radius of the project site and 12 records of archaeological studies have been conducted within a ¼-mile of the project site. The records search results conclude that, given the environmental setting of the project site (developed, urbanized), there is a low potential for locating additional prehistoric or ethnohistoric-period resources within the project site or within a ¼-mile radius.³

3 North Central Information Center, *Records Search Results for Capitol Station 65 Project*, p. 1.

Historic Resources

The records search results indicated that historic maps show the original course of the American River and the marshy slough known as “Sutter Lake” once occupied the Richards Boulevard/Sacramento Railyards area. During Sacramento’s initial population boom of the 1850s–1870s, city leaders undertook massive engineering projects to prevent recurring floods in the downtown area. These included straightening the course of the American River to its current (more northerly) configuration, filling the sloughs, constructing levees, and raising the street levels of downtown by three to ten feet.

The levee along the south bank of the American River has been recorded with the CHRIS as an historic resource. Portions of the Southern/Western Pacific and Sacramento Northern Railroads have also been recorded as historic resources; however, none of the recorded segments of these resources are located within a ¼-mile radius of the project site.⁴

The City of Sacramento has conducted an inventory of the historic buildings within the Richards Boulevard Special Planning Area.⁵ The Bercut-Richards cannery complex located on the Township 9 project site is listed in the survey as a property that appears to meet criteria for listing in the National Register of Historic Places and the Sacramento Register (both registers are described in the Regulatory Setting below). The records search results conclude that, given the recorded resources and the known patterns of local historic land use, there is a moderate-to-high sensitivity for historic-period cultural resources in the project area. The NCIC also recommended consultation with a cultural resource professional to ensure that the significance of historic resources and potential impacts to the resources are addressed in the EIR prepared for the proposed project. Accordingly, JRP Historical Consulting was retained to prepare an Historical Resource Inventory and Evaluation Report for the proposed project. The results and recommendations of the JRP study are included in this section of the EIR. The complete report is included as Appendix G.

Native American Consultation

EIR Tribal Consultation

On October 4, 2006, EIP cultural resources staff requested the Native American Heritage Commission (NAHC) to search its sacred lands database to determine if any Native American cultural resources are located on or near the project site. The NAHC response letter stated that the search of the sacred lands database failed to indicate the presence of Native American resources in the immediate project area. The NAHC letter included a list of Native American organizations and individuals who may have knowledge of cultural resources in the project area. Letters that included a brief description of the project and a project map were sent to each organization/individual identified on the NAHC list. As of the printing of this document, EIP has received no responses from tribal representatives indicating the presence of Native American cultural resources in the project area. However, the absence of site-specific information in the sacred lands file or through correspondence with tribal representatives does not indicate the absence of cultural resources on the project site or in the immediate vicinity. Copies of Native American correspondence are included as Appendix H of this EIR.

⁴ North Central Information Center, *Records Search Results for Capitol Station 65 Project*, p. 2.

⁵ Boghosian, Paula, *Richards Boulevard Area Architectural and Historical Property Survey*, Prepared for the City of Sacramento, Revised September 2000.

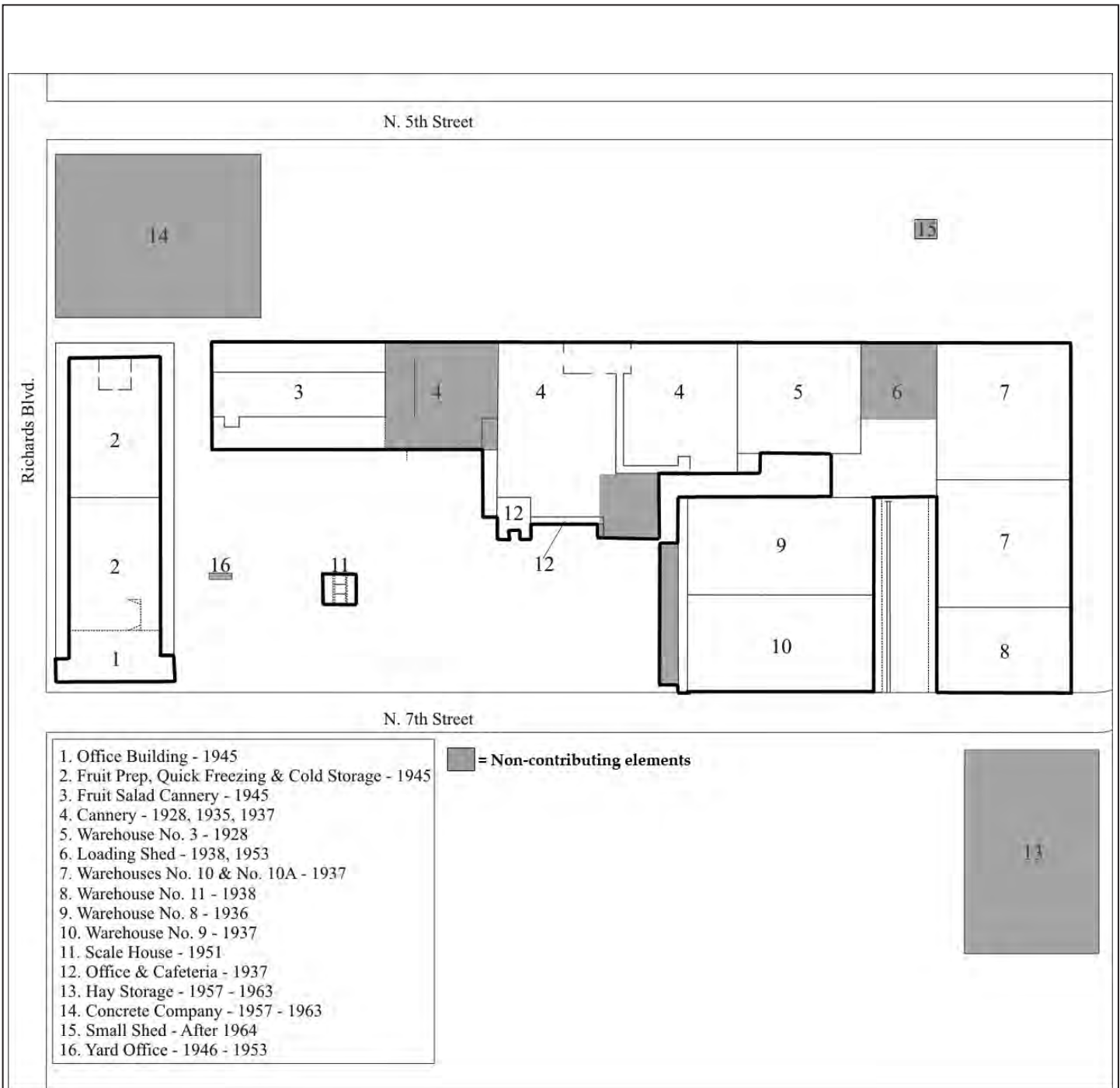
Bercut-Richards Cannery Complex

As previously stated, the former Bercut-Richards cannery complex occupies a large portion of the Township 9 project site and has been identified in the Richards Boulevard Area Architectural and Historical Property Survey as a potentially significant historical resource. JRP Historical Consulting inventoried and evaluated the Bercut-Richards cannery complex to assess whether it should be considered a historical resource for the purposes of CEQA (i.e., whether it is listed in, determined eligible for, or appears to meet the criteria for listing in the California Register of Historical Resources, the National Register of Historic Places, or under the City of Sacramento historic preservation ordinance). Most of the buildings on the former cannery complex were built between 1928 and 1953. Three buildings on the property were built between 1957 and 1963. A previous evaluation of this property in the "Richards Boulevard Area Architectural and Historical Property Survey" concluded that the former cannery was eligible for inclusion in the Sacramento Register as a Priority Structure. The Sacramento City Council adopted the Richards Boulevard survey in Ordinance 2001-27, requiring all properties in that survey identified as Essential Structures or Priority Structures, as well as contributing properties within the potential North 16th Street Preservation Area, be considered potential city landmarks. The buildings that comprise the cannery complex are described below. The buildings have been assigned reference numbers that correspond to the sketch map on Figure 6.4-1.

Building 1

Building 1 is a two story office building constructed in 1945. It served as the corporate offices for the Bercut-Richards Packing Company and is currently being used as office space. This 194 feet by 44 feet, rectangular building has a concrete foundation, structural brick exterior walls, and a low-pitched timber truss hip roof. The main entrance is inset with a wide marble frame and is centered in the east side of the building. The doorway is surrounded by fixed multi-pane windows and shows Moderne architectural elements with its thin metal window frames, streamlined door handles and light fixtures. The entire entryway retains its original appearance. The entryway also features a terrazzo floor that extends to the interior lobby area of the building. A marble stairway leads from the lobby to the second floor. The streamlined, aluminum balustrade adds to the Moderne styling, but it appears to not be original because it not only appears to be new, but also holes in the stair treads indicate that the stairs had a previous balustrade.

The exterior of the building is clad with multiple shades of light orange brick construction in a horizontal pattern. Under the eaves, a line of 13 windows is spaced symmetrically, with one in the center over the marble entryway and six evenly spaced on either side. These steel casement windows have thin metal frames like those surrounding the door and form a three across and four down pattern. A brick ribbon runs below this line of windows. The window pattern is repeated on the first floor, with six windows on either side of the entryway and aligned with the windows over the door. The windows on each end and those closest to the door are glass block, while the remaining eight are covered by louvered shutters. The north and south ends of the building feature a similar window pattern, with two windows on the second story with a two across and four down pattern and two casement windows below. The casement windows on the south end, facing Richards Boulevard, are also covered by shutters. There are two metal utility doors below the glass block windows on each end of the east side of the building. The brick walls surrounding each door feature a corbelled pattern.



Source: JRP Historical Consulting LLC, 2006.



A Division of PBS

FIGURE 6.4-1
Sketch Map of the Former Bercut-Richards Cannery Complex

D51214.01

Township 9

Building 2

Building 2, the Fruit Preparation, Quick Freeze and Cold Storage building, was also constructed in 1945 and is currently being leased as cold storage space. It is a long rectangular building that abuts Building 1 and runs perpendicularly from its west side. The building is 558 feet by 151 feet and has a low-pitched gable roof covered by corrugated metal. The building's structure is load bearing clay tiles that are situated in the walls, which are divided by pilasters on each side. A vertical concrete firewall bisects the roof, dividing the entire building into two sections, the Fruit Preparation and Quick Freeze section on the east and the Cold Storage Section on the west. The Fruit Preparation and Cold Storage section is 258 feet long and abuts the office building (Building 1) on its west side. The roofline of this section is broken on the east end by an extension from the peak to the north side for 25 feet that resembles a shed dormer with five large, north-facing windows and extends for 105 feet along the ridge of the building. The Cold Storage section is 300 feet long and has a monitor or air blinker deck that projects from the roof from the western edge. This projection is 50 feet wide and extends along the ridge of the roof for 80 feet. It has a low-pitched gable roof and a smaller monitor projecting along its entire length with ventilation openings along the sides. The entire monitor, both sides and roof, is covered with corrugated metal, and it is supported by concrete pilasters that extend above the brick pilasters in the building's walls.

The west wall of the building is brick construction until it reaches the eaves – the remaining part of the wall in the gable end is board-formed concrete to support the monitor. The north and south walls of the building are a combination of the same brick used in the office building and load bearing, hollow clay tiles stamped with "Cannon Load Bearing." The north and south sides have 24 feet wide concrete loading docks sheltered by metal shed roofs lower than building's roofline. Several doors penetrate the north and south walls, with some are roll-up metal doors as well as large metal refrigeration chamber doors. Many of these doors show evidence of being added after construction due to the concrete lintels and the disruption of the pattern of load-bearing hollow clay tiles and infill with smaller bricks.

The north side of building had windows above the loading dock's shed roof in each of the thirteen sections divided by the wall pier supports. The seven sections beginning from the eastern end have windows that were cut into the original hollow clay tile wall, while the remaining six sections had windows that have since been removed and filled with bricks. The remainder of the building's north side has no windows along this line of the wall, however, below the line of the loading dock's shed roof, two sections of wall have large windows, but there are no other windows on the loading dock level. On the south side, the building has one glass-block window in the section closest to the office building and six casement windows in the next six sections. There are also three windows along the wall below the loading dock roof between two wood sided buildings on the dock.

Building 3

Building 3 is another addition to the cannery operation from 1945. It served as the Fruit Salad Cannery and is now being used as a storage warehouse. It is a long, rectangular building 288 feet by 191 feet made of brick and hollow clay tile like that used in Buildings 1 and 2. The building has a 65 foot wide clerestory that extends for the entire length of the roof's peak. The clerestory roof is covered by corrugated metal, which extends to the line of the eave on the south end, and is supported by brick and concrete piers along the wall on each side. Its windows have been painted white.

The west and east walls of the building are broken into 15 sections by the brick and concrete pilasters similar to those used on Building 2. The west side has 10 windows and five metal roll-up doors in alternating sections. The east side has 12 windows and one large door filling two wall sections. The door has been altered to accommodate a wide loading ramp and has a larger concrete lintel than is over the window sections.

The east wing of the south end of the building has been modified to accommodate a sliding door. There are four large and four smaller windows in the end of the clerestory section. The smaller windows appear to have been added at different times and modified to accommodate a large metal platform with machinery elevated to the clerestory level. This platform is joined to the northwest corner of Building 2 by a catwalk and pipes that penetrate the roof of Building 2 at a small, gabled and metal covered extension of the roof.

The roof of Building 3 is supported by a wood truss system that attaches to the clerestory, which in turn is supported by concrete pillars. The massive wooden trusses help create an open floor plan with limited number of vertical supports. Skylights allow light to penetrate the roof above both the east and west wings of the building. There is also an original exterior light fixture hanging adjacent to the building's southwest corner.

Building 4

Building 4 is the oldest building on the site, built in 1928 and enlarged in 1935 and 1937 to house the canning operations. It is a large, irregularly shaped building with a sawtooth roof. The 19 sawtooth ridges are covered by asphalt shingles, have north facing openings and run the width of the building in approximately 20 foot sections. The southernmost portion of the building is the widest part at 321 feet, while the northern end of the building is 233 feet wide. The sawtooth roof section is 393 feet long from north to south. The walls are wood plank construction covered by corrugated metal.

In addition, the roof has a 121 feet by 40 feet section with five sawtooth ridges on the west side that stands higher than the rest of the roof line, as shown in Photograph 5. Along with much of the lower sawtooth cannery, this section dates from 1928. The roof and sides are covered by corrugated metal, with the sides painted yellow and openings that face north. The interior has wood plank walls and floors and a wood frame to support the roof. There are also some original light fixtures in this portion of the building along with scatter ephemera that may date to the property's period of significance. This section served as the can loft for the packing company, distributing cans to the cannery floor below. After 1946, this can loft was also the destination for a conveyor that brought cans from the Continental Can Company, on the east side of 7th Street, to the Bercut-Richards Packing Company. The conveyor system is still in place within Building 4, as is the narrow, gable roof building that covered it as it ran above the roof of the cannery. Like the can loft, the conveyor structure is covered with a corrugated metal roof. The conveyor structure is disconnected now and no longer crosses North 7th Street.

Building 4 has another section with three sawtooth ridges that rises above the main portion of the building on the east side. This portion of the building is covered by corrugated metal on the sides and roof. Based upon aerial photography, this portion of the building was constructed after 1964 and covers or replaced an extension of the main portion of Building 12 (discussed below).

Building 4 is connected to Building 3 by a gable roof warehouse that was constructed in 1955 and replaced a portion of the original cannery. It has a concrete foundation, a steel frame and corrugated metal covering the roof. The west wall is corrugated metal and has a metal roll-up door at the southern end. The east wall is concrete block to about 10 feet, topped by translucent panels that extend to the roof. The east side has a concrete loading ramp that leads to a large sliding door. There is another small sliding door to the north of the large door and a row of regularly spaced, sliding windows in the concrete block portion of the wall. For a number of years following its construction, this warehouse had an uncovered loading dock area directly adjacent to the north wall of Building 3, but this area was covered by a metal roof and siding after 1964 and now supports what appears to be a single-wide modular building. A metal catwalk leads from this modular building along the western edge of the roof.

Building 5

Building 5 is a warehouse that was constructed in 1928 with the original portion of the cannery. It is adjacent to the north end of Building 4. It is a low pitched, corrugated metal shed roof building with a wood frame and brick walls. Four doors in the west wall provide loading access. Three of these doors are large sliding doors, while the fourth, closest to the north end of the building, has been modified and is now a metal roll-up door. The east side of the building has a loading area and three doors that likely have been modified since 1928. A gable roof extension from the southeast corner of this building housed an office and was likely built in 1935. This office measures 41 feet by 38 feet and has a door and four windows on the east side.

Building 6

Building 6 is a loading shed and warehouse adjacent to the north end of Building 5. The current warehouse includes portions of a warehouse that was constructed at this location in 1937 that was labeled Shook Warehouse and Printing. That warehouse is now contained within a long, rectangular loading shed that connects Building 5 with Building 7. The loading shed was constructed in two phases beginning between 1938 and 1953. The first phase did not cover the 1937 warehouse, but instead filled a 160 feet by 80 feet portion of the loading dock to the east of Building 5 and the Shook Warehouse. The roof of portion of the building has three east-west gables covered by composite shingles. The walls are horizontal wood planking. The middle gable covers a large loading dock with three metal roll-up doors and a down ramp to accommodate large trucks. The northern gable has a large sliding door at ground level. After 1964, the roofline of the northern two gables was extended to the west an additional 204 feet, covering or replacing the 1937 warehouse. The western edge of this addition also has composite shingles, but has large pieces of particle board covering the wall. Two metal roll-up doors provide loading access on this side of the building, likely used to load or unload onto railroad cars on the spur track that once extended up the western side of the cannery.

Building 7

Building 7 was constructed in 1937 and completes the line of connected buildings along the western edge of the complex. It is a 260 feet by 480 feet warehouse with a flat roof and brick and hollow clay tile walls. Its flat roof is supported by wooden truss system with vertical steel tie rods that provide for open interior spaces with limited roof supports. The building is divided into two sections. Like other buildings constructed at the cannery in 1937, this warehouse has a decorative tile edge along the roofline. Large sliding metal doors are found on the west and north walls of this building. They are evenly spaced along the each wall, as are the steel framed

six-over-two casement windows above the doors. An 18 foot long concrete loading platform lines the west and north walls.

In 1938, a large fire destroyed the roof of most of this building along with 2.5 million cans of fruits and vegetables stored within. The fireproof brick and tile walls were intact, but the packing company had to rebuild the destroyed section of the roof. Other modifications to the original building include alterations to the doors and windows, evidenced by a disruption of the pattern of load-bearing hollow clay tiles and infill with smaller bricks. Large brackets and braces have been added to the west and north walls, possibly to support interior elements or, as is the case on the north side, to attach a large sheltering structure over the loading platform. Much of the brick and tile wall surface on the west and north sides has been painted in an effort to cover over graffiti.

Building 8

Building 8 is attached to the east side of Building 7 and continues the form and details of its neighbor. Building 8 was constructed in 1938. It measures 260 feet by 156 feet and is a large brick and hollow clay tile warehouse. One significant difference between this building and Building 7 is that it has three hipped gables that run north to south. The roof's wooden trusses help create an open floor plan with limited number of vertical supports. However, the window and door pattern are continued from one warehouse to the next, as is the clay tile accent at the roofline.

This building has been substantially modified since its construction. The brick and tile has been painted a putty color, probably to make removing graffiti easier. While several sliding metal doors and casement windows remain, many have been altered. Several modifications are visible in the east wall, including four bricked in doors and two others that have been added. There is also an extension with a concrete foundation wall and wood siding at the northeast corner. It should be noted that the wood rafters and ceiling planks retain their original appearance.

Building 9

Building 9 is a warehouse that the Bercut-Richards Packing Company added in 1936. Its style is distinctive from those buildings added later, such as Buildings 7, 8, 10 and 12. Building 9 has a flat roof supported by pilasters in the hollow clay tile walls and does not have decorative tile along the roofline. Its flat roof is supported by wooden truss system with vertical steel tie rods that provide for open interior spaces with limited roof supports. The north side of the building has a loading dock covered by a shed roof with a wood frame and corrugated metal covering. The west end of the building abuts Building 6 and the east end abuts Building 10.

The south end of the building is difficult to observe because of modifications since the building was constructed. A can conveyor system was constructed around 1946 to carry cans produced at the Continental Can Company factory (across North 7th Street) to the packing plant. This conveyor structure spanned North 7th Street and ran beside the roofline on the south side of Buildings 9 and 10 before cutting across the sawtooth roof of Building 4 and ending at the two story can loft. This conveyor system was contained in a gable roof structure with corrugated metal covering the roof and sides. The conveyor no longer spans North 7th Street, nor does this piece connect to the portion that runs above the cannery building (Building 4).

Subsequent construction filled in the area below the conveyor on the south side of Building 9. A flat roof building with horizontal wood siding was constructed between 1957 and 1964. It extends for 233 feet from the midpoint of Building 9 nearly to the southeast corner of Building 10. Corrugated metal covers the space between this building and the conveyor above it.

Building 10

Building 10 was constructed in 1937 to provide additional warehouse space for the cannery. Like Building 8, it has three hipped gables that run from north to south. Building 10 shares other characteristics of other buildings built at the cannery in the same year, including hollow clay tile walls, decorative tile along the roofline of the north and east sides and the spacing of windows. The covered loading dock mentioned with Building 9 also extends along the north side of Building 9. The conveyor building and the wood structure that sits below and cover Building 9 also cover the south side of Building 10.

The same six-over-two casement windows found on Buildings 7 and 8 are found on the north and east sides of Building 10. The north side of the building is accessed through sliding doors on the loading dock. There is also one tall, metal roll-up door that has been added to the east side. A window was removed and the top of its frame bricked in to allow for the installation of this door. Other than these modifications, it is difficult to observe the rest of the building because of the conveyor and flat roofed building that runs along the south side of Building 10.

Building 11

Building 11 is the scale house for the cannery and was constructed in 1951. This building measures 18 by 60 feet and has a hipped roof with a tile covering and closed eaves. The building has a central room with a concrete platform on both the east and west sides and covered by the roof. The platforms have pipe railings and original light fixtures hanging from their ceilings. The room has light orange brick sides similar to the bricks used in Building 1. The west platform has a small, wood sided modular building with sliding windows on each side. An addition to the brick room extends from the east wall onto the east platform. This addition has wood panel sides, sliding windows on the east and south sides and a door in the north side.

The brick portion of the scale house has large casement windows on the north and south sides. These windows are multi-paned with three sections. The south side also has a smaller, fixed window to the right of the large window. The brick room is accessed by doors on either the east or west side.

Building 12

Building 12 was constructed as part of the plant expansion in 1937, which added a new office building and cafeteria to the cannery. The office portion of this building is 85 by 60 feet and has a flat roof and the decorative tile at the roofline distinctive of the 1937 construction at the cannery. The east side has a central recessed entryway containing the front door and measuring approximately 12 feet by 10 feet. Building 12 has many, regularly spaced casement windows low on the walls. The hollow clay tile walls extend above the windows, perhaps indicating a second story. The rhythm of the windows and their placement low on the sides gives the impression that the building is taller than it really is.

At some point after 1957, a large awning was added, but only the aluminum frame remains. A shed roofed addition was added to the south side between 1937 and 1953. It begins in the

middle of this side of Building 12 and extends westward for 130 feet, overlapping a portion of the cannery (Building 4). The shed roof attaches to the building a few feet above the top of the windows and extends outward for 21 feet. The shed roof is covered by rolled metal. A portion of the space under the shed roof is enclosed with vertical wood paneling. The south wall of this enclosed portion has three sliding windows and one fixed pane window. The windows in Building 12 are visible under the western end of the shed roof addition.

The cafeteria portion of Building 12 extends to the north of the office building. It is a long, narrow building measuring 90 by 13 feet. A hollow clay tile wall the same height as the office building was added to the east side of the cannery building (Building 4), and a shed roof extension to the east formed the cafeteria. The tile wall above the cafeteria has the same decorative tile along the roofline as the other 1937 buildings on the site and at one time supported a large sign for the cannery. Based upon a photo taken soon after its construction, the cafeteria portion was open below the shed roof. It has since been enclosed with a brick wall topped by horizontal wood planks. This enclosed portion has a row of six fixed windows to the north of a sliding window and a glazed panel door.

To the north of the cafeteria portion of Building 12 is the large, sawtooth structure described with Building 4. This building, constructed after 1964, appears to cover another brick building very similar in appearance to the office included in Building 12.

Building 13

Building 13 is a concrete tilt up warehouse constructed between 1957 and 1963. It sits northeast of the main cannery site on the east side of North 7th Street and just south of the American River levee. This 300 feet by 505 feet warehouse is used for hay storage.

Building 14

Building 14 is also a concrete tilt up warehouse constructed in the same period as Building 13, 1957–1963. This building is located along Richards Boulevard at the corner of North 5th Street. This 296 feet by 379 feet warehouse currently houses West Coast Carriers, a trucking company.

Building 15

Building 15 is a small metal shed on the northwestern portion of the property. It sits approximately 60 feet west of Building 6. The shed measures 13 by 19 feet and was constructed after 1964.

Building 16

Building 16 is a small yard office building constructed between 1946 and 1953 and is located to the north of Building 2. When originally constructed, the building had a hipped roof, the northern and southern ends of which sheltered an open porch. The porch remains on the south end of the building, but its northern counterpart has been enclosed and the roof has been altered to a gable on hip on that end. An additional shed extension has been added to the west side to shelter two doors. The roof is covered by corrugated metal. The walls are clad in horizontal wood siding. There are two doors in the southern end of the building, as well as a tall casement window in a three-over-four pattern, as well as a smaller, single-hung window. The east and west sides have three matching ribbon windows. The west side also has two sliding windows and the two doors mentioned above, all to the north of the ribbon windows. The east side a

smaller sliding window, also to the north of the ribbon windows. Building 16 appears to have been extensively modified over time, including the enclosure of the north porch and the addition or removal of windows and doors.

REGULATORY SETTING

Federal, state, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions they undertake or regulate. The National Historic Preservation Act (NHPA) and CEQA are the basic federal and state laws governing the preservation of historic and archaeological resources of national, regional, state and/or local significance.

Federal Regulations

Federal regulations for cultural resources are primarily governed by Section 106 of the NHPA of 1966, which applies to actions taken by federal agencies. The goal of the Section 106 review process is to offer a measure of protection to sites that are determined eligible for listing on the National Register of Historic Places (NRHP). The criteria for determining NRHP eligibility are found in 36 Code of Federal Regulations (CFR) Part 60. Section 106 of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties and affords the federal Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties," are found in 36 CFR Part 800. The NRHP criteria (contained in 36 CFR 60.4) are used to evaluate resources when complying with NHPA Section 106. Those criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, association, and:

- 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 possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or
- d) have yielded or may be likely to yield, information important to history or prehistory.

Archaeological site evaluation assesses the potential of each site to meet one or more of the criteria for NRHP eligibility based upon visual surface and subsurface evidence (if available) at each site location, information gathered during the literature and records searches, and the researcher's knowledge of and familiarity with the historic or prehistoric context associated with each site.

The American Indian Religious Freedom Act, Title 42 United States Code, Section 1996, protects Native American religious practices, ethnic heritage sites, and land uses.

State Regulations

Under CEQA, public agencies must consider the effects of their actions on both "historical resources" and "unique archaeological resources." Pursuant to Public Resources Code, Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment."

“Historical resource” is a term with a defined statutory meaning (see Public Resources Code, Section 21084.1 and CEQA Guidelines Section 15064.5 (a) and (b)). The term embraces any resource listed in or determined to be eligible for listing in the California Register of Historical Resources (CRHR). The CRHR includes resources listed in or formally determined eligible for listing in the NRHP, as well as some California State Landmarks and Points of Historical Interest.

Properties of local significance that have been designated under a local preservation ordinance (local landmarks or landmark districts) or that have been identified in a local historical resources inventory may be eligible for listing in the CRHR and are presumed to be “historical resources” for the purposes of CEQA unless a preponderance of evidence indicates otherwise (Public Resources Code, Section 5024.1; California Code of Regulations, Title 14, Section 4850). Unless a resource listed in a survey has been demolished, lost substantial integrity, or there is a preponderance of evidence indicating that it is otherwise not eligible for listing, a lead agency should consider the resource to be potentially eligible for the CRHR.

In addition to assessing whether historical resources potentially impacted by a proposed project are listed or have been identified in a survey process, lead agencies have a responsibility to evaluate them against the CRHR criteria prior to making a finding as to a proposed project’s impacts on historical resources (Public Resources Code, Section 21084.1; CEQA Guidelines, Section 15064.5 (a)(3)). In general, an historical resource, under this approach, is defined as any object, building, structure, site, area, place, record, or manuscript that:

- a) is historically or archeologically significant; or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political or cultural annals of California; and
- b) meets any 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; or
 4. has yielded, or may be likely to yield, information important in prehistory or history.

For historic structures, CEQA Guidelines Section 15064.5 (b) (3) indicates that a project that follows the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings, or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), shall mitigate impacts to a level of less than significant. Potential eligibility also rests upon the integrity of the resource. Integrity is defined as the retention of the resource’s physical identity that existed during its period of significance. Integrity is determined through considering the setting, design, workmanship, materials, location, feeling, and association of the resource.

As noted above, CEQA also requires lead agencies to consider whether projects will impact “unique archaeological resources.” Public Resources Code, Section 21083.2 (g) states that “unique archaeological resource” means 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:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person" (Public Resources Code, Section 21083.2 (g)).

Treatment options under Section 21083.2 of the Public Resources Code include activities that preserve such resources in place in an undisturbed state. Other acceptable methods of mitigation under Section 21083.2 include excavation and curation or study in place without excavation and curation (if the study finds that the artifacts would not meet one or more of the criteria for defining a "unique archaeological resource").

Advice on procedures to identify cultural resources, evaluate their importance, and estimate potential effects is given in several agency publications, such as the series produced by the Governor's Office of Planning and Research (OPR). The technical advice series produced by OPR strongly recommends that Native American concerns and the concerns of other interested persons and corporate entities, including but not limited to, museums, historical commissions, associations and societies, be solicited as part of the process of cultural resources inventory. In addition, California law protects Native American burials, skeletal remains, and associated grave goods regardless of their antiquity and provides for the sensitive treatment and disposition of those remains.

Section 7050.5 (b) of the California Health and Safety code specifies protocol when human remains are discovered. The code states:

In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the Government Code, that the remains are not subject to the provisions of Section 27492 of the Government Code or any other related provisions of law concerning investigation of the circumstances, manner and cause of death, and the recommendations concerning treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code.

CEQA Guidelines Section 15064.5 (e) requires that excavation activities be stopped whenever human remains are uncovered and that the county coroner be called in to assess the remains. If the county coroner determines that the remains are those of Native Americans, the NAHC must be contacted within 24 hours. At that time, the lead agency is required to consult with the appropriate Native Americans as identified by the NAHC and directs the lead agency (or applicant), under certain circumstances, to develop an agreement with the Native Americans for the treatment and disposition of the remains.

Local Regulations

City of Sacramento

City of Sacramento General Plan

The City of Sacramento General Plan includes the following goal and policy that pertains to the protection and management of archeological resources. The City of Sacramento is currently in the process of updating the 1988 General Plan.

Goal D: Work with the County of Sacramento to identify, protect, and enhance physical features and settings that are unique to the area to the maximum extent feasible.

Policy

2.

Work with all interested parties to protect ancient burial grounds threatened by development activity and preserve their artifacts, either on-site or at a suitable relocation, to the extent feasible. Ancient Indian tribes used various locations within the City limits and influence area for burial grounds. These burial grounds are a unique heritage. When threatened by development, these sites should evaluate for their content and uniqueness. The sites should either be preserved or their contents removed and preserved at a new location depending upon an analysis of the site and the development factors involved.

Preservation Element

The City of Sacramento adopted a Preservation Element into its General Plan on April 25, 2000. The City's overall preservation objectives are to identify, protect, and encourage preservation of Sacramento's historic and cultural resources throughout the city. The Preservation Element establishes the policy framework to guide the City's achievement of its preservation objectives. The following goal of the Preservation Element applies to the proposed project:

Goal B: To protect and preserve important historic and cultural resources that serve as significant, visible reminders of the City's social and architectural history.

Historic Preservation Ordinance

The City of Sacramento's historic preservation program began in 1975 with the enactment of the City's first Historic Preservation Ordinance. The current Historic Preservation Ordinance (No. 2006-063) was enacted in October 2006. The purpose of the Historic Preservation Ordinance is to identify, protect, and encourage the preservation of significant resources; maintain an inventory and ensure the preservation of these resources; encourage maintenance and rehabilitation of the resources; encourage retention, preservation, and re-use of the resources; safeguard City resources; provide consistency with state and federal regulations; protect and enhance the City's attraction to tourists; foster civic pride in the City's resources; and encourage new development to be aesthetically compatible.

Preservation Commission

The Historic Preservation Ordinance establishes a Preservation Commission. The Preservation Commission's primary responsibility is to develop and recommend to the City Council preservation policies appropriate for inclusion in the General Plan and other regulatory plans and programs of the City and to provide oversight relative to the maintenance and integrity of the Sacramento Register of Historical and Cultural Resources. The Preservation Commission

reviews, nominates, and makes recommendations to the City Council on properties eligible for listing in the Sacramento Register as landmarks, historic districts, and contributing resources as set forth in City Code Chapter 17.134, Historic Preservation.

Sacramento Register

The City Code provides for the compilation of Landmarks, Contributing Resources, and Historic Districts into the Sacramento Register of Historic and Cultural Resources (Sacramento Register). The Sacramento Register includes all listed or surveyed historic resources in the City of Sacramento. This includes a listing of all individually designated City Landmarks and all of the City designated Historic Districts. The Sacramento Register also includes listings or maps of the properties within two of the City's Special Planning Districts that have been afforded preservation protection by ordinance. Also included are all the properties within the City that are currently listed in the NRHP and the CRHR and properties listed in the State of California's Historical Properties Directory.

There are five factors to be considered in determining whether to place a nominated resource on the Sacramento Register as a landmark. These factors, as stated in the Historic Preservation code (17.134.170 A.2), are:

- a) A structure removed from its original location is eligible if it is significant primarily for its architectural value or it is the most important surviving structure associated with a historic person or event.
- b) A birthplace or grave is eligible if it is that of a historical figure of outstanding importance and there is no other appropriate site or structure directly associated with his or her productive life.
- c) A reconstructed building is eligible if the reconstruction is historically accurate, if the structure is presented in a dignified manner as part of a restoration master plan; and if no other original structure survives that has the same association.
- d) Properties that are primarily commemorative in intent are eligible if design, age, tradition or symbolic value invests such properties with their own historical significance.
- e) Properties achieving significance within the past fifty (50) years are eligible if such properties are of exceptional importance.

Article VIII of the Historic Preservation Ordinance

The proposed project is subject to the following requirements under Article VIII of the Historic Preservation Ordinance.

17.134.430 Proposed demolition or relocation of buildings or structures that are at least fifty years old: review for nomination for placement on Sacramento register.

- A. If a permit is sought to demolish or relocate a building or structure that was constructed at least fifty (50) years prior to the date of application for demolition or relocation, and that building or structure is not currently on the official register, is not the subject of a pending nomination, has not been nominated for placement on the official register or reviewed pursuant to this section within the past three years, the permit application shall be referred to the preservation director to allow the director to make a preliminary determination whether the structure should be nominated for placement on the official register. For purposes of this Section, a building or structure for which a building permit issued and construction commenced not less than fifty (50) years prior to the date of application for a demolition or relocation permit shall be considered to have been constructed not less than fifty (50) years ago, regardless of when the construction was completed, and regardless of whether the building or structure was thereafter expanded, modified or otherwise altered.

Absent sufficient evidence to the contrary, the date of issuance of the building permit shall be considered to be the date on which construction commenced.

1. Exceptions:
 - a. Buildings and Structures within the Richards Boulevard Special Planning District. The requirements of this section shall apply only to applications to demolish or relocate buildings or structures within the Richards Boulevard special planning district which are identified in the "Richards Boulevard area architectural and historical property survey" (hereinafter "survey"), as either potential essential structures, priority structures, or contributing structures within the potential North 16th Street preservation area. Applications to demolish or relocate buildings or structures which are not so identified in the survey shall not be subject to the requirements of this section.

Central City Community Plan

The Central City Community Plan includes the following policy that pertains to the proposed project.

III. Goals

Environmental Goal

Improve the physical quality of the environment for Central City residents, shoppers, employees, and visitors.

Create an attractive urban setting through the preservation of existing amenities in the Central City and development of an urban design addendum to the Central City Plan.

Sub Goals

Support programs for the preservation of historically and architecturally significant structures which are important to the unique character of the Central City.

Richards Boulevard Area Plan

The Richards Boulevard Area Plan includes the following policies that pertain to the proposed project.

Land Use Objectives and Policies

- Objective 8** Strengthen the character and livability of the Richards Boulevard area by developing a strong system of public open space, and by preserving historic architectural resources.

Land Use Standards and Design Guidelines

Historic Structures

Alterations to historic structures in the Richards Boulevard area (i.e., buildings that are on the National, State, or City Registers) should be carefully considered in order to retain the character and historic value of the buildings. At a minimum, the proposed alterations should observe the following guidelines:

Street Facades

Preservation efforts should be focused on the street facades. Maintain openings and window casings as feasible. Historic moldings and architectural accents along street facades should be preserved. Additions to the facade can be considered if they reinforce the character and composition of the elevation (e.g., awnings, canopies, architectural accents and features).

Additional Floors

If additional floors are proposed, building mass should be stepped back from the street facades in order to maintain the facade as the prominent visual feature of the building. Building materials should be complimentary to the facade materials.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

The impact analysis for historical resources, specifically buildings and structures, is based on the findings and recommendations of the report titled *Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814*, prepared in December 2006 by JRP Historical Consulting. The JRP report includes an evaluation of the former Bercut-Richards cannery complex to assess whether the property in the study area should be considered a historical resource for the purposes of CEQA; an assessment of the proposed project's potential effects on the cannery complex; and suggested mitigation measures to reduce potentially adverse impacts on historical resources.

The impact analysis for prehistoric and historic-period archaeological resources is based on the findings and recommendations of the cultural resources records search conducted for the proposed project by the NCIC. The analysis is also informed by the provisions and requirements of federal, state, and local laws and regulations that apply to cultural resources.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project causes a substantial change in the significance of an historical resource or archaeological resource as defined in CEQA Guidelines Section 15064.5.

Project-Specific Impacts and Mitigation Measures

6.4-1 The proposed project could cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5.

Scenario A and B

The cultural resources records search prepared for the proposed project indicated that the levee along the south bank of the American River has been recorded as an historic resource. Portions of the Southern/Western Pacific and Sacramento Northern Railroads have also been recorded as historic resources; however, none of the recorded segments of the levee or the railroads are located within a ¼-mile radius of project site, and these resources would not be affected by construction or operation of the proposed project.

The City of Sacramento has conducted an inventory of the historic buildings within the Richards Boulevard Special Planning Area. The former Bercut-Richards cannery complex located on the project site is listed in the survey as a property that appears to meet criteria for listing in the National Register of Historic Places and the Sacramento Register. JRP Historical Consulting was retained to prepare an Historical Resource Inventory and Evaluation Report for the proposed project. JRP found that the former Bercut-Richards cannery complex is significant at

the local level and appears to meet the criteria for listing in the NRHP under Criterion A and in the CRHR under Criterion 1. The cannery complex also retains sufficient historic integrity to convey its significance. The property's period of significance is from the construction date of its earliest buildings, 1928 to 1953, when the cannery's main plant was completed. The cannery complex does not appear to meet the criteria for listing in the NRHP under Criterion B, C, or D, nor for listing in the CRHR under Criterion 2, 3, or 4.

Under Criterion A (1), the cannery complex appears to be significant because of its important association with events that have made a significant contribution to the broad patterns of local and regional history. The fruit and vegetable canning industry is an important part of Sacramento's history. As discussed in the Environmental Setting, the fruit and vegetable canning industry developed in the Sacramento Valley in the early twentieth century, processing the area's agricultural products for transport to the rest of the country and other parts of the world, taking advantage of the city's prominence as a river and railroad transportation hub. Canning helped make the Sacramento Valley one of the largest producers of important crops such as peaches and tomatoes. Canneries also provided employment to thousands of citizens in the Sacramento area, benefiting individuals and the city's economy. The Bercut-Richards Packing Company is associated with canning industry in the early to mid-twentieth century and was one of the largest independent canning operations in the area.

Specifically, the former cannery complex is significant at the local level for its association with Sacramento's canning industry because of its prominence within that industry from the 1930s through the mid 1950s. The almost continual expansion of the cannery complex from the mid-1930s to the mid-1950s, enlarging the former canning plant built at this location in 1928-1929, illustrates the success of this individual company, and, as such, it is representative of Sacramento's distinction in the California canning industry. This prominence is derived from the company's contrasting independence from large corporations, such as Libby and Cal-Pac, which also had a presence in Sacramento, and the company's participation in the community. The Bercut-Richards Packing Company also employed post-World War II innovations in the canning industry that helped it remain prosperous even as the economics of the canning industry were shifting. The period of significance for this property (1928 to 1953) encompasses both the earliest buildings on the property and the expansions and additions made on the property during the post-war period.

Under Criterion B (2), the Bercut-Richards cannery complex does not represent a property associated with the life of a person important to local, California or national history. Properties that meet this criterion are associated with specific individuals who made important contributions to a community, the state, or the nation in their field of endeavor or in some specific documented manner. The cannery is most directly associated with Thomas H. Richards, Sr., who successfully managed the cannery operation from 1931 until his retirement in 1968. As discussed in the Environmental Setting, Richards oversaw the cannery through the Great Depression, World War II, and the post-war period, regularly expanding the plant and increasing production while resisting the trend toward consolidation with larger, national canning companies. With the exception of the 1928 cannery and warehouse, the buildings at the Bercut-Richards cannery site were all constructed during Richards' tenure. Although Richards was a successful businessman and prominent citizen in Sacramento, the historic record does not indicate a level of significance to meet the eligibility standards under Criterion B (2).

Under Criterion C (3), the cannery complex does not appear to be significant because it does not represent an important example of a type, period or method of construction, nor does it

appear to be the work of a master artist or craftsman or possess high artistic values. While the office building constructed in 1945 (Building 1) does exhibit Moderne architectural details, including the streamlined door and light fixtures and terrazzo floor, and retains a great deal of integrity, this building's design does not represent an important example of this type. The design of the remaining utilitarian cannery buildings suggests their functions and some feature interesting details, such as the sawtooth roof on Building 4, the hollow clay tile used in several of the buildings, and roofline decorative tile. The property's individual buildings and its overall industrial complex do not represent technical innovations of the canning industry from the 1920s through the 1950s and their architectural design does not represent important examples of these types of buildings from this period.

The cannery does not appear to be significant under Criterion D (4) because this criterion is usually used to evaluate historic sites and archaeological resources. Although buildings and structures can occasionally be recognized for the important information they might yield regarding historic construction or technologies, the Bercut-Richards cannery buildings are building types that are well documented and are not a principal source of important information in this regard.

The former Bercut-Richards cannery complex not only has historical significance under NRHP Criterion A (CRHR Criterion1), but also retains many important aspects of its historic integrity. It is in its original location and retains many of its original features of design, materials and workmanship. As would be expected of a successful industrial operation, many of the buildings were altered during the period of significance to adjust to the evolving needs of the cannery. The two office buildings (Buildings 1 and 12) retain the largest degree of integrity to their original construction, having experienced minor modifications, such as covering some of the first floor casement windows with shutters on Building 1 and the construction of the shed roof extension to the south side of Building 12. The industrial buildings and warehouses, Buildings 2, 3, 5, 7, 8, 9 and 10, have all received minor alterations such as the addition or removal of windows or doors. Nevertheless, their rooflines, exterior walls and interior spaces have not been greatly altered and their massing and appearance still communicate their original design and historic use. The cannery building (Building 4) experienced the largest degree of modifications through its years of operation, including at least two major expansions and additions, such as the large sawtooth section on its east side, and the replacement of its southern portion with a large, modern warehouse. In spite of these changes, the cannery building still conveys its original purpose and a large degree of its original appearance.

The design elements described above, including the Moderne details of Building 1, the brick and hollow clay tile masonry used in Buildings 1, 2, 3, 5, 7, 8, 9 and 10, the decorative tile work at the roof edge of many buildings, and the saw tooth roof of Building 4 are all character defining elements for this property. All of these buildings contribute to the significance of this property, with the exception of two portions of the large cannery building (Building 4). Although the first phase of the warehouse on the southern end of Building 4 was constructed in 1955, it was modified in 1964 and does not convey the importance of the Bercut-Richards Packing Company during its period of significance. The large addition to the east side of Building 4 with three sawtooth ridges on the roof was constructed after 1964, putting it outside the period of significance as well. The other buildings within this project on were constructed after the period of significance. Therefore, these buildings are not considered contributing elements of this property.

The former Bercut-Richards cannery complex has been evaluated in accordance with Section 15064.5(a) (2)-(3) of the CEQA Guidelines using the criteria outlined in Section 5024.1 of the California Public Resources Code, and it appears to meet the criteria for listing in the NRHP and CRHR. It also appears to be eligible as a Priority Structure / city landmark under the City of Sacramento Municipal Code. Thus, this property appears to be a historical resource for the purposes of CEQA.

CEQA Guidelines Section 15064.5(b) states that “a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.” The proposed Township 9 project includes complete demolition of the existing buildings on the project site, and therefore the project would cause substantial adverse change in the significance of a historical resource, the former Bercut-Richards cannery complex. This change is considered to be a significant effect on the environment because the significance of the historical resource would be materially impaired as a result of this project. The historical resource would be materially impaired through the demolition of the historical resource’s physical characteristics that convey its historical significance and that justify its inclusion in the CRHR. Therefore, this impact is considered *significant*.

Mitigation Measures

The following mitigation measures would reduce the impact by requiring documentation of the cannery complex, dissemination of the resource documentation, inclusion of historical interpretative displays and information in the project, and incorporation of cannery features into the project design. These measures would reduce the impact by relaying information to interested members of the public, as well as Township 9 residents and visitors, regarding the historical significance of the Bercut-Richards cannery and the history of the canning industry in Sacramento. However, the impact would remain ***significant and unavoidable*** because the proposed demolition of the cannery complex would materially impair the historical resource’s physical characteristics that convey its historical significance and that justify the property’s inclusion in the CRHR.

6.4-1 (A & B)

a) Documentation / Recordation

Prior to any structural demolition and removal activities, the project applicant shall retain a professional who meets the Secretary of the Interior’s Standards for Architectural History to prepare written and photograph documentation of the Bercut-Richards cannery complex.

The documentation for the property shall be prepared based on the National Park Services’ (NPS) Historic American Building Survey (HABS) / Historic American Engineering Record (HAER) Historical Report Guidelines. The proposed documentation standards shall meet the intent of NPS – Advisory Council on Historic Preservation (ACHP) revised policy for developing alternate forms of documentation for properties meeting a criterion of less than nationally significant. The documentation prepared for former Bercut-Richards Packing Company property shall not be reviewed by NPS or transmitted to the Library of Congress and therefore, will not be a full-definition, HABS/HAER dataset. This type of documentation is based on a combination of both HABS/HAER standards

(Levels II and III) and NPS new policy for NR-NHL photographic documentation as outlined in the National Register of Historic Places and National Historic Landmarks Survey Photo Policy Expansion (March 2005).

The written historical data for this documentation shall follow HABS / HAER Level II standards and shall be derived from the reports titled Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814, prepared by JRP Historical Consulting LLC in 2006 and Historical Research Study of the Historic Bercut-Richards Packing Company Site and Surrounding Sacramento Area, prepared by Lisa C. Prince in 2006. Both reports are on file with the City of Sacramento Development Services Department. Additional information may come from oral histories that, as determined feasible by the City Preservation Director, could be conducted as part of this Mitigation Measure (see Oral History Project below).

The written data shall be accompanied by a sketch plan of the property. Efforts should also be made to locate original construction drawings or plans of the property during the period of significance. If located, these drawings should be photographed, reproduced, and included in the dataset.

Either HABS / HAER standard large format or digital photography shall be used. If digital photography is used, the ink and paper combinations for printing photographs must be in compliance with NR-NHL photo expansion policy and have a permanency rating of approximately 115 years. Photographs shall be labeled with text reading "Bercut-Richards Packing Company, 424 North 7th Street, Sacramento," and photograph number on the back of the photograph in pencil (2B or softer lead). Digital photographs will be taken as uncompressed .TIF file format. The size of each image will be 1600x1200 pixels at 300 ppi (pixels per inch) or larger, color format, and printed in black and white. The file name for each electronic image shall correspond with the index of photographs and photograph label.

Photograph views for the dataset shall include: a) contextual views; b) views of each side of each building and interior views, where possible; c) oblique views of buildings; and d) detail views of character-defining features, including features on the interiors of some buildings. The size of this property would require up to five contextual views, 20 exterior and interior building views, 10 oblique views, and 15 detail views. All views shall be referenced on a photographic key. This photograph key shall be on a map of the property and shall show the photograph number with an arrow indicate the direction of the view. Historic photographs shall also be collected, reproduced, and included in the dataset.

All written and photograph documentation of the Bercut-Richards cannery complex shall be approved by the City Preservation Director prior to any demolition and removal activities.

b) Oral History Project

Prior to any structural demolition and removal activities, the project applicant shall retain a professional who meets the Secretary of the of the Interior's Standards for History to determine if an appropriate number of individuals who worked at the Bercut-Richards Packing Company during the period of

significance (1928 to 1953) are available and willing to participate in an oral history project. Written findings of the search for individuals shall be submitted to the City Preservation Director, who shall determine if an oral history project is feasible and would be required by the City to further reduce the impact of the proposed project on historical resources. Five individuals is a recommended minimum, but the City may determine that fewer individuals would be adequate.

If an oral history project is conducted, a Draft Research Design for the project shall be submitted to the City Preservation Director for review and approval of the Final Research Design. The Research Design shall identify anticipated informants, research goals, and protocols. The oral history research shall be conducted in conformance with the Principles and Standards of the Oral History Association revised September 2000. The oral history project could be conducted by a historical consultant or be offered as a project to students at the graduate Capitol Campus Public History program at California State University, Sacramento. If the project is given to public history students, it shall be supervised by a faculty member with experience conducting oral history projects.

The oral history project shall consist of interviews conducted in the Sacramento region with persons knowledgeable about the Bercut-Richards Packing Company and its operations in the buildings on this site during the property's period of significance (1928 to 1953). The aim of these interviews shall be to record information about company operations as they were carried out in these buildings. In general, the goal will be to synthesize information gathered from individuals who worked at the cannery, including personal insights and recollections of the company, its management, innovations, and the day-to-day operation of the plant. The preparer of the oral history project shall conduct the following tasks.

Planning / Preparation for Interviews

- Review the available historical research and reports, including the reports titled *Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814*, prepared by JRP Historical Consulting LLC in 2006 and *Historical Research Study of the Historic Bercut-Richards Packing Company Site and Surrounding Sacramento Area*, prepared by Lisa C. Prince in 2006.
- Prepare a list of questions prior to the interviews.
- Conduct a tour of the former cannery with the interviewees prior to demolition of buildings, if possible.
- Prepare and have signed release forms for each interviewee, giving permission for any tapes or photographs made during the project to be used for by researchers and the public for educational purposes.

Interviews

- The oral interviews shall be no longer than 1-2 hours in length and could be conducted in a group setting, if feasible or practical.

- *Each interview (with permission of the interviewee) shall be recorded with a digital voice recorder and use Digital Speech Standard (DSS) Player Software to create a topic index for the interviews linked to a time counter so that the topic index would be searchable on the CD ROM (or DVD) containing the recording of the interview. Use of this software would eliminate the need for full written transcript of the interviews.*

Post-Interviews

- *Archive quality CDs shall be prepared containing a recording of the interview, topic index, biographical data sheet, and a read.me file explaining the contents of the CD and how to use the DSS Player Software.*
- *Short biographical data sheets with a photograph of each interviewee shall be prepared for each interviewee and put in a file on the CD.*
- *Interviewers shall synthesize relevant information from the oral histories into a thematic narrative presenting understandings and insights. This narrative shall be included on the CDs.*
- *Typed transcripts of interviews would not be required.*
- *CDs shall be disseminated to appropriate repositories identified in the Documentation Dissemination portion of this Mitigation Measure.*

If required, the oral history project shall be monitored and enforced by the City Preservation Director to the extent determined by the City Preservation Director. All costs associated with the oral history project shall be borne by the project applicant.

c) Documentation Dissemination

The HABS/HAER–like documentation of the Bercut-Richards cannery complex shall be disseminated on archival quality paper to appropriate repositories and interested parties. The distribution of the documentation shall include the California Historical Resources Information System Northeast Information Center at California State University Sacramento; the California State Library in Sacramento; the Sacramento Archives and Museum Collection Center (SAMCC); the Sacramento County Historical Society; the Sacramento Public Library’s Sacramento Room; the Sacramento Discovery Museum; and other local repositories determined by the City Preservation Director.

If the oral history project is conducted, CDs prepared during the oral history project shall be on archive-quality discs, such as archival gold CD-Rs, and disseminated to the same repositories as the HABS/HAER–like documentation.

d) Interpretation of the Property

Under the direction and enforcement of the City Preservation Director, measures shall be implemented to interpret the property’s historic significance for the public and for residents that will inhabit the property. All costs associated with interpretation of the property shall be borne by the project applicant. Interpretive

and/or educational exhibits shall include but are not necessarily limited to the following items:

Permanent Interpretive Displays/Signage/Plaques

The applicant shall install a minimum of three interpretive displays on the project that will provide information to visitors and residents regarding the history of the Bercut-Richards Packing Company, the Sacramento canning industry, and the former Bercut-Richards cannery. These displays shall be integrated into the design of the public areas of the new housing and retail and shall be installed in highly visible public areas such as the property's parks, the North 7th Street portion of the project, or in public areas on the interiors of buildings. The displays shall include historical data taken from the HABS/HAER-like documentation or other cited archival source and shall also include photographs. Displayed photographs shall include information about the subject, the date of the photograph, and photo credit / photo collection credit. At least one display shall include physical remnants of architectural elements that will be salvaged from the Bercut-Richards Packing Company buildings (see De-Construction, Salvage, and Reuse below) One of the displays shall be the traveling exhibit (described below) which shall be permanently installed in a highly visible location in a publicly accessible lobby following completion of its tour.

The applicant shall install at least one sign or plaque near the corner of Richards Boulevard and North 7th Street to indicate that the Bercut-Richards Packing Company plant once stood on the property. Additional signage / plaques may be installed to provide interpretive information about any historical photographs or architectural salvage used or installed on the property.

Interpretive displays and the signage/plaques installed on the property shall follow the Township 9 Design Guidelines and be sufficiently durable to withstand typical Sacramento weather conditions for at least five years. Displays and signage/plaques shall be lighted, installed at pedestrian-friendly locations, and be of adequate size to attract the interested pedestrian. Maintenance of displays and signage/plaques shall be included in the management of the common area maintenance program on the property.

Exhibits and Written Documentation for Publication on a Web Site

The applicant shall publish exhibits and written documentation on a Web site regarding the history of the Sacramento canning industry and the Bercut-Richards Cannery complex. This information shall be derived from the HABS/HAER-like documentation, and the reports titled Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814, prepared by JRP Historical Consulting LLC in 2006 and Historical Research Study of the Historic Bercut-Richards Packing Company Site and Surrounding Sacramento Area, prepared by Lisa C. Prince in 2006. The publication shall include text and photographs. The text shall be written for popular consumption, but also be properly cited following historical documentation standards.

Publication of these materials shall be either on an independent Web site maintained by the project applicant (or its successor property management company) or be donated for posting on a local history website, such as www.sacramentohistory.org (owned by SAMCC). The materials shall be available on the Web site for at least two years following demolition of the former Bercut-Richards cannery complex.

Traveling Exhibit

The applicant shall have a traveling exhibit prepared that will be loaned to local museums (such as the Sacramento Discovery Museum) and, if possible, at public libraries and/or public buildings in the Sacramento region. The small exhibit shall include panels or boards that provide information and photographs regarding Sacramento's canning industry history, the Bercut-Richards Packing Company, and the Bercut-Richards cannery complex. The exhibit shall include three or more 2x2 foot boards that can be either wall mounted or displayed on easels. The exhibit shall be supplemented in museum settings with small artifacts or architectural features salvaged from the former cannery site. Following installation of the exhibit in local museums and other locations, the exhibit shall be permanently displayed in a highly visible location in a publicly accessible lobby on the property and will fulfill a portion of the on-site interpretation mitigations discussed above.

e) De-Construction, Salvage, and Reuse

The project applicant shall preserve the scale house (Building 11) and relocate the preserved building to one of the project park settings. The applicant shall consult with the City of Sacramento regarding the potential de-construction, salvage, and/or reuse of other architectural features from the existing Bercut-Richards Packing cannery complex that would serve as important artifacts and physical reminders of the cannery's material existence and importance. Examples of the property's character-defining features that could be potentially salvaged are illustrated in Appendix B of the report titled *Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814*, prepared by JRP Historical Consulting LLC. To the extent that is reasonable and feasible as determined by the City, the project applicant shall use some architectural features in the property's new design. Such features shall be displayed in highly visible public areas of the development, such as in building lobbies or on the exterior of buildings in the parks or along the proposed North 7th Street portion of the project. Salvaged and reused features shall be accompanied by interpretive information on signage/plaques to indicate their origins as part of the Bercut Richards cannery complex. Potentially salvageable features are identified in Section 6.3., *Impacts Analysis and Suggested Mitigation* of the report titled *Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814*, prepared by JRP Historical Consulting LLC and on file with the City of Sacramento Development Services.

The applicant shall also offer architectural features and materials to museums and other local repositories for curation and display. SAMCC and the Sacramento Discovery Museum, for example, would be repositories that may be interested in the salvaged materials, as they have archival storage facilities for artifacts and some ability to display them. Other interested parties may be those interested in the history of industrial buildings or materials such as masonry and bricks (such as Dan Mosier, who maintains a collection of historic bricks and provides the public information about the companies that manufactured them on his website, <http://calbricks.netfirms.com/>).

f) Design Guidelines

The final Design Guidelines for the proposed project shall take into account that the project is removing a historically significant cannery and industrial site. The final Design Guidelines shall encourage the use of design features of the historic buildings of the cannery in the new buildings to be constructed on the property. The City Preservation Director shall be given the opportunity to help review and refine the Design Guidelines to ensure that the architecture of the new buildings help convey the history and significance of the property. Character-defining features that could be included in the Design Guidelines are identified in the report titled *Historical Resource Inventory and Evaluation Report, Bercut-Richards Packing Company Property, 427 North 7th Street, Sacramento, California 95814*, prepared by JRP Historical Consulting LLC and on file with the City of Sacramento Development Services.

6.4-2 The proposed project could cause a substantial change in the significance of an as yet undiscovered archaeological resource as defined in CEQA Guidelines Section 15064.5.

Scenario A and B

The cultural resources records search prepared for the proposed project revealed no recorded prehistoric or historic-period archaeological sites on the project site. Three prehistoric archaeological sites have been recorded within a ¼-mile radius of the project site and 12 records of archaeological studies have been conducted within a ¼ mile of the project site. The records search results conclude that, given the environmental setting of the project site (developed, urbanized), there is a low potential for locating additional prehistoric or ethnohistoric-period resources within the project site or within a ¼-mile radius. However, there is a possibility that subsurface historical resources or unique archaeological resources exist on the project site that could be uncovered during grading, excavation, and other earth-moving activities during construction. If encountered during construction such resources could be damaged or destroyed. This would be considered a *potentially significant impact*.

Mitigation Measures

The following mitigation measure provides discovery and evaluation procedures for any previously unknown archaeological resources on the project site and requires that a professional archaeologist employ data recovery or other methods that meet the Secretary of the Interior's Standards for Archaeological Documentation to reduce impacts on unique archaeological resources. Therefore, implementation of the following mitigation measure would reduce this impact to a ***less-than-significant level***.

6.4-2 (A & B)

- a) *In the event that any prehistoric or historic-period subsurface archaeological features or deposits, including locally darkened soil (“midden”), that could conceal cultural deposits, animal bone, obsidian, and/or mortar are discovered during demolition/construction-related earth-moving activities, all ground-disturbing activity within 100 feet of the resources shall be halted immediately, and the City of Sacramento Development Services Department and the City Preservation Director shall be notified within 24 hours. The project applicant shall retain an archaeologist who meets the Secretary of the Interior’s professional qualifications for Archaeology. The City Preservation Director shall consult with the archeologist to assess the significance of the find. Impacts to any significant resources shall be mitigated to a less-than-significant level through data recovery or other methods determined adequate by the City Preservation Director and that are consistent with the Secretary of the Interior’s Standards for Archaeological Documentation.*

If a Native American archaeological, ethnographic, or spiritual resources are discovered, all identification and treatment of the resources shall be conducted by a qualified archaeologist and Native American representatives who are approved by the local Native American community as scholars of the cultural traditions. In the event that no such Native American is available, persons who represent tribal governments and/or organizations in the locale in which resources could be affected shall be consulted. When historic archaeological sites or historic architectural features are involved, all identification and treatment is to be carried out by historical archaeologists or architectural historians who meet the Secretary of the Interior’s professional qualifications for Archaeology and/or Architectural History.

- b) *If human remains are discovered during any demolition/construction activities, all ground-disturbing activity within 50 feet of the remains shall be halted immediately, and the Sacramento County coroner shall be notified immediately, according to Section 5097.98 of the State Public Resources Code and Section 7050.5 of California’s Health and Safety Code. If the remains are determined by the County coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. The project applicant shall also retain a professional archaeologist with Native American burial experience to conduct a field investigation of the specific site and consult with the Most Likely Descendant, if any, identified by the NAHC. As necessary, the archaeologist may provide professional assistance to the Most Likely Descendant, including the excavation and removal of the human remains. The City of Sacramento Development Services Department shall be responsible for approval of recommended mitigation as it deems appropriate, taking account of the provisions of state law, as set forth in CEQA Guidelines section 15064.5(e) and Public Resources Code section 5097.98. The project applicant shall implement approved mitigation, to be verified by the City of Sacramento Development Services Department, before the resumption of ground-disturbing activities within 50 feet of where the remains were discovered.*

Cumulative Impacts and Mitigation Measures

The cumulative context for the cultural resources analysis for the proposed project is the buildout of the City of Sacramento General Plan.

6.4-3 The proposed project, in combination with other development in the City of Sacramento, could cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5.

Scenario A and B

Because all historical resources are unique and non-renewable members of finite classes, all adverse effects or negative impacts erode a dwindling resource base. Federal, state, and local laws protect historical resources in most instances. Even so, it is not always feasible to protect historical resources, particularly when preservation in place would frustrate implementation of projects. For this reason, the cumulative effects of development in the City of Sacramento are considered significant. The proposed Township 9 project includes demolition of all existing buildings on the 65-acre project site, and therefore the project would cause a substantial adverse change in the significance of an historical resource, the former Bercut-Richards cannery complex. Because the proposed project would adversely affect an historical resource that is a unique and non-renewable member of a finite class of resources, the project's incremental contribution to these cumulative effects would be cumulatively considerable; therefore, this would be a *significant cumulative impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce the project's contribution to cumulative loss of historic resources in the City of Sacramento; however, not to a less than considerable level. Therefore, the cumulative impact would remain ***significant and unavoidable***.

6.4-3 (A & B) *Implement Mitigation Measure 6.4-1.*

Implementation of Mitigation Measure 6.4-1 reduce the project's contribution to the cumulative loss of historic resources in the City of Sacramento by requiring documentation of the resource, dissemination of the resource documentation, inclusion of historical interpretative displays and information in the project, and incorporation of resource features into the project design. These measures would relay information to interested members of the public, as well as Township 9 residents and visitors, regarding the historical significance of the Bercut-Richards cannery and the history of the canning industry in Sacramento. However, because the Bercut-Richards cannery complex would be demolished to accommodate project construction which would materially impair the historical resource's physical characteristics that convey its historical significance and that justify the property's inclusion in the CRHR, the project's contribution would remain considerable and the cumulative impact would remain significant and unavoidable.

6.4-4 The proposed project, in combination with other development in the City of Sacramento, could cause a substantial change in the significance of a change in the significance of an as yet undiscovered archaeological resource as defined in CEQA Guidelines Section 15064.5.

Scenario A and B

Based upon previous cultural resource surveys and research, the area that comprises the City of Sacramento has been inhabited by prehistoric and historic peoples for thousands of years. The proposed project, in combination with other development in the City of Sacramento could contribute to the loss of significant archaeological resources. Because all significant archaeological resources are unique and non-renewable members of finite classes, all adverse effects or negative impacts erode a dwindling resource base. The loss of any one archaeological site affects all others in a region because these resources are best understood in the context of the entirety of the cultural system of which they are a part. The boundaries of an archaeologically important site extend beyond the site boundaries. As a result, a meaningful approach to preserving and managing cultural resources must focus on the likely distribution of cultural resources, rather than on project or parcel boundaries. The cultural system is represented archaeologically by the total inventory of all sites and other cultural remains in the region. Proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing our understanding of the past environmental conditions and cultures by recording data about sites discovered and preserving artifacts found. Federal, state, and local laws are also in place, as discussed above, that protect these resources in most instances. Even so, it is not always feasible to protect these resources, particularly when preservation in place would frustrate implementation of projects, and for this reason the cumulative effects of the Township 9 project and other projects in the City of Sacramento would be significant. Moreover, because the proposed project has the potential to adversely affect significant archaeological resources that are unique and non-renewable members of finite classes, the project's incremental contribution to these cumulative effects would itself be potentially cumulatively considerable; therefore, this is a *potentially significant cumulative impact*.

Mitigation Measures

Implementation of the following mitigation measure would reduce the project's contribution to this cumulative impact to a less than considerable level and this cumulative impact would be ***less than significant***.

6.4-4 (A & B) *Implement Mitigation Measure 6.4-2.*

Mitigation Measure 6.4-2 provides discovery and evaluation procedures for any previously unknown archaeological resources on the project site and requires that a professional archaeologist employ data recovery or other methods that meet the Secretary of the Interior's Standards for Archaeological Documentation to reduce impacts on unique archaeological resources. Implementation of this measure would reduce the project's contribution to the cumulative loss of previously unknown archeological resources to less than considerable.

6.5 Geology and Soils

6.5 GEOLOGY AND SOILS

INTRODUCTION

This section describes the regional geologic and soils characteristics influencing the area of the proposed Township 9 project (proposed project) and addresses the effects of geologic hazards and soil constraints on development on the project site. Regulatory and physical settings are described, followed by an analysis of the potential for soil and geologic impacts based on specified impact-significance criteria. Geologic hazards and soil constraints evaluated include unstable soils, erosion, subsidence, and depth to groundwater. The geotechnical report prepared for the proposed project determined that issues related to seismic hazards, including both primary and secondary impacts resulting from groundshaking and liquefaction, would not cause significant constraints on development of the project site. For this reason, these issues were focused out in the Initial Study and will not be further addressed in this EIR.

Unless otherwise noted, the information in this section is based on the *Preliminary Geotechnical Engineering Report, Capitol Station 65*, included as Appendix I,¹ which refers to the former title of the proposed project. Sources cited in the geotechnical report include observations at the project site and studies published by federal, state, or local agencies (such as the United States Geological Survey and the California Geological Survey).

No comment letters associated with geology or soils were received during the Notice of Preparation (NOP) review period.

ENVIRONMENTAL SETTING

Regional Geology

The project site is located in the City of Sacramento, which is centrally located in the Sacramento Valley in northern California. The Sacramento area is in the Great Valley geomorphic province, a relatively flat alluvial plain composed of a deep sequence of sediments in a bedrock trough. The Great Valley is bounded on the west by the Coast Ranges and on the east by the Sierra Nevada mountains. Erosion of the Coast Ranges and the Sierra Nevada has produced the sediments deposited in the Great Valley. Deposition in the Great Valley was mainly marine sediments until the beginning of the Pliocene epoch (approximately 5.3 million years ago), when the seas that occupied the Great Valley were drained through the Carquinez Strait and were replaced by freshwater rivers and lakes. Today, the valley is drained by the Sacramento River from the north and the San Joaquin River from the south. Geographically and topographically, the valley has been shaped by the Sacramento River and its tributaries (including the American River). The Sacramento and San Joaquin rivers meet approximately 35 miles south of Sacramento and discharge through the Sacramento – San Joaquin Delta into San Francisco Bay and the Pacific Ocean.

General Stratigraphy

The basement rock underlying the Great Valley is a complex of metamorphosed Paleozoic (at least 245 million years old) and Mesozoic (at least 66 million years old) sedimentary, volcanic,

1 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13 2006.

and granitic rocks extending west from the Sierra Nevada. Overlying the basement rock is a sequence of siltstone, claystone, and sandstone about 60,000 feet thick and predominantly of marine origin. Overlying the sedimentary rock layer is approximately 3,000 feet of fluvial-deposited sediments eroded from the mountains to the north and east. In the City of Sacramento, the two uppermost sequences of these fluvial sediments are named the Victor and Laguna formations.²

The Victor Formation forms the natural ground surface and consists of channel sands and gravels, and overbank deposits of silt and clay extending as much as 100 feet below the ground surface. The Victor Formation overlies the Laguna Formation, which is about 200 to 300 feet thick and consists of silt, clay, and sand with lenses (layers) of gravel. The gravel lenses slope and thicken toward the west. The mixture of particle size in both formations varies widely.³

Site Conditions

Topography

The project site is relatively flat with a surface elevation of approximately 25 feet above mean sea level (msl) across the site. A stockpile containing fill soils with scattered demolition debris approximately three to four feet high is located on the western side of the site.⁴ The American River's southern levee is located in the northern portion of the project site. The levee rises out of the relatively flat topography approximately 10 to 12 feet from the toe to the top of the levee. Other topography onsite includes the river bank slope within the 12 acres located north of the levee along the American River.

Site Geology

Surface and Subsurface Soils

Surface and near-surface soils at the project site consist of soft silts and clayey silts to approximately 15 to 20 feet below site grade. From there, silty and clean sands over a layer of sandy gravels are present between 42 and 56 feet below site grade. A six-inch layer of peach pit refuse from peach processing operations that previously occupied the site was discovered on the surface along the western portion of the project site.⁵

Soil Types

The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS, formerly Soil Conservation Service) mapped Sacramento County's soils in 1993.⁶ The soil behavior characteristics identified by the NRCS include permeability, available water capacity, runoff, erosion, and shrink-swell potential. With the exception of urbanized areas where soils typically consist of engineered fill, the NRCS soil characteristics describe native, undisturbed soils.

2 California Geological Survey, 1966, *Geology of Northern California*, Bulletin 190, pp. 217-219.

3 Harding Lawson Associates, *Draft Preliminary Geotechnical Evaluation Richards Boulevard Redevelopment Area Sacramento, California*, HLA Job No. 20169,00.04, San Francisco, California, October 17, 1990, pp. 4-5.

4 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, p. 3.

5 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, p. 4.

6 US Department of Agriculture, Soil Conservation Service, in cooperation with Regents of the University of California (Agricultural Experiment Station), *Soil Survey of Sacramento County California*, April 1993.

- **Permeability** - the ability of a soil to transmit water or air. Permeability is considered in the design and construction of soil drainage systems, where the rate of water movement under saturated conditions affects behavior.
- **Available water capacity** - the quantity of water that the soil is capable of storing for use by plants.
- **Runoff** - the amount of water that runs off the surface of the land.
- **Erosion** - the susceptibility of a soil to water and/or wind erosion.
- **Shrink-swell potential** - the potential for volume change in a soil with a loss or gain in moisture. If the shrink-swell potential is rated moderate to high, damage to buildings, roads, and other structures can occur.

Soil characteristics affect suitability for accommodating uses such as shallow excavations, dwellings with basements, small buildings, roads and streets, and lawns and landscaping. Soil limitations can include slow or very slow permeability, limited ability to support a load, high shrink-swell potential, moderate depth to hardpan, low depth to rock, and frequent flooding. The level of limitation is classified as slight, moderate, or severe.

- **Slight** if soil properties and site features generally are favorable for the indicated use and limitations are minor and easily overcome.
- **Moderate** if soil properties or site features are not favorable for the indicated use and special planning, design, or maintenance is needed to overcome or reduce the limitations.
- **Severe** if soil properties or site features are so unfavorable or so difficult to overcome that special design, significant increases in construction costs, and possibly increased maintenance are necessary.

The NRCS mapped three soil units within the project site: Columbia sandy loam, drained, 0 to 2 percent slopes, occasionally flooded, Columbia-Urban Land Complex, drained, 0 to 2 percent slopes; and Urban Land.⁷

- **Columbia sandy loam, drained, 0 to 2 percent slopes, occasionally flooded** is a very deep, artificially drained soil located on narrow, low flood plains along rivers and streams. This soil unit is found in the northern portion of the project site, north of the levee and extending down to the river's edge. There are small areas within this soil unit that may contain a clayey substratum and Cosumnes, Hicksville, and Sailboat soils. Unprotected areas containing this soil unit are subject to frequent flooding. The soil has a surface layer of light yellowish brown sandy loam, underlain by stratified, yellowish brown sandy loam, silt loam, and loam and pale brown sand. The surface layer in some areas can be variable and made up of loamy sand, loam, or silt loam, and in some areas, can be thicker and darker. Permeability is moderately rapid. Available water capacity is moderate. Runoff is slow or very slow. Water erosion is a slight hazard or not a hazard at all. Soil blowing is light. This soil area is well-suited to support irrigated crops, but limited by flooding and the moderate available water capacity.

⁷ US Department of Agriculture, Soil Conservation Service, in cooperation with Regents of the University of California (Agricultural Experiment Station), *Soil Survey of Sacramento County, California*, April 1993.

- Columbia-Urban land complex, drained, 0 to 2 percent slopes** is a soil unit found on natural levees on low flood plains along rivers. It makes up the majority of the project site. The unit consists of about 60 percent Columbia soil and 30 percent Urban land. The remaining 10 percent found within this unit includes small areas of Cosumnes, Rossmoor, and Sailboat soils, and areas that do not have a buried surface layer of clay loam or clay. The Columbia soil found within the unit is deep and artificially drained. Colors within the unit include a light yellowish sandy brown sandy loam layer at the top, pale brown sand, and dark gray clay. Permeability is moderately rapid in the upper layers and slow within the clay layer. Available water capacity is moderate, and the water table is high. Runoff is very slow to slow, and shrink-swell potential is high. The soil is not susceptible to soil blowing and is not subject to flooding. Urban land consists of areas covered by impervious surfaces such as roads, driveways, sidewalks, buildings, and parking lots. The soils beneath the impervious surfaces are similar to that in the Columbia soil, although it may have been truncated or altered. The primary limitations to development within this unit are slow permeability in the clayey layer, the depth to a seasonally high water table, and the hazard of sloughing. The seasonally high water table can limit shallow excavations, such as trenches and holes. Sloughing, slow permeability, and the water table create the potential hazard that septic systems may fail. Offsite sewage systems are recommended. Irrigation is necessary during the summer for lawns, shrubs, vines, and shade and ornamental trees. The Urban land component of this soil unit may be covered by impervious surfaces or structures, with this unit's limitations including slow permeability, depth to a seasonally high water table, and a hazard of sloughing. The soil material beneath the impervious surfaces may be similar to that of the Columbia soils, but may be truncated or altered.⁸
- Urban Land.** This unit consists of areas covered up to 90 percent by impervious surfaces. The soil material under these impervious surfaces may have been altered during construction, and generally are similar to nearby soil units.

Because the project site has been developed, soils characteristics identified through a site-specific geotechnical study provide more accurate information about potential hazards and/or constraints to redevelopment.

Groundwater

According to the most recent Sacramento County, California groundwater map (Spring 2003), groundwater levels in the project area are located at approximately +0 msl, which is 25 feet below the ground surface at the project site.

Groundwater flow in the shallow zones generally is east-southeast, but is controlled by the American and Sacramento rivers. As the surface water elevation of the Sacramento and American rivers rise and fall, groundwater levels near the banks fluctuate.⁹ Groundwater levels at the project site are generally estimated to be between and +0 and +5 feet msl during periods of low rainfall, although levels have been recorded as high as +20 feet msl during periods of

8 US Department of Agriculture, Soil Conservation Service, in cooperation with Regents of the University of California (Agricultural Experiment Station), *Soil Survey of Sacramento County, California*, April 1993, pp. 39-40.

9 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, p. 12.

high rainfall. For this reason, a groundwater level of +15 feet msl (10 feet below the ground surface) is assumed for design of the proposed project.¹⁰

REGULATORY SETTING

Regulations and standards related to geology and soils in the City of Sacramento are included in state regulations, city ordinances, and plans adopted to protect public health and safety. The following is a brief summary of the regulatory context under which geology and soils hazards are managed. Agencies with responsibility for protecting people and property on the project site from damage associated with soil conditions and geologic hazards are described below.

Federal Regulations

There are no federal regulations directly applicable to geotechnical conditions on the project site. Nonetheless, installation of underground utility lines must comply with industry standards specific to the type of utility (e.g., National Clay Pipe Institute for sewers; American Water Works Association for water lines) and the discharge of contaminants must be controlled through the National Pollutant Discharge Elimination System (NPDES) permitting program for management of construction and municipal stormwater runoff. These standards contain specifications for installation, design, and maintenance to reflect site-specific geologic and soils conditions.

State Regulations

Building Construction

The State of California provides minimum standards for structural design and site development through the California Building Standards Code (California Code of Regulations [CCR], Title 24). The California Building Code (CBC) is based on the Uniform Building Code, which is used widely throughout United States, and adopted on a state-by-state or district-by-district basis, and has been modified for California conditions with numerous more detailed and/or more stringent regulations.

Chapter 18 of the CBC reduces such impacts by requiring that all development intended for human occupancy adhere to standards for excavation of foundations and retaining walls. Chapter 33 specifies the requirements to be fulfilled for site work, demolition, and construction, including the protection of adjacent properties from damage caused by such work. The appendix to Chapter 33 reduces such impacts by requiring that all development intended for human occupancy adhere to regulations pertaining to grading activities, including drainage and erosion control, and construction on expansive soils.

Erosion

State regulations pertaining to the management of erosion/sedimentation include, but are not limited to, the NPDES program for management of construction and municipal stormwater runoff, which is part of the federal Clean Water Act and is implemented at the state and local level through permits and preparation of site-specific pollution protection plans (see Section 6.7, Hydrology and Water Quality). Among other measures included in these regulations and standards are the requirements to reduce the potential for sedimentation caused by erosion.

10 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, p. 12.

The primary purpose of these regulations and standards is to protect surface waters from the effects of land development. However, many of the measures also help protect against the effects of soil erosion, in general.

Local Regulations

The Sacramento General Plan contains policies regarding seismic and geological issues as they relate to public health and safety and natural resources. The City's Building Division of the Development Services Department (Public Works) regulates construction at the local level.

City of Sacramento General Plan

The City of Sacramento General Plan contains a policy to protect people and structures from geologic and soils hazards that would apply to the proposed project as indicated below.

HEALTH AND SAFETY ELEMENT

Goals and Policies for Seismic Safety

Policies

2.

Continue to require soils reports and geological investigations for determining liquefaction, expansive soils and subsidence problems on sites for new subdivision and/or multiple-story buildings in the City of Sacramento.

Sacramento Central City Community Plan

The Central City Community Plan does not contain any goals, policies, or measures on geology or soils that are relevant to the proposed project.

Richards Area Boulevard Plan

Although the Richards Area Boulevard Plan does not contain any specific goals or policies pertaining to geologic conditions or soils in the region, the plan does state that levee and riverwall stability is a concern in portions of the plan area and that development near such features may require special designs for building foundations. Geotechnical investigations should be performed to determine levee stability in areas where development could occur adjacent to levees or riverwalls.

Department of Public Works

The City of Sacramento Building Division of the Development Services Department (Department of Public Works) maintains policies and guidelines regarding grading, erosion control, stormwater drainage design, inspection, and permitting with responsibility for several types of permits, including:

- Grading permits;
- Construction permits;
- U.S. Army Corps of Engineers Nationwide Permit 12 for utility line backfill and bedding; and
- California State Water Resources Control Board general Construction Activity Discharge of Stormwater Permits (NPDES).

Site-Specific Geotechnical Investigation

Prior to the commencement of any earthwork at a construction site in the project site, a complete geotechnical investigation must be prepared for that site. The geotechnical investigation must include soil borings to collect samples and laboratory testing to determine the appropriate design parameters for use for structural fill, roadbed fill, and landscaping fill, along with the fill placement requirements. The various soils may be tested for corrosivity to allow for proper infrastructure and foundation design.

The geotechnical evaluation must provide grading and design recommendations to address slope, channel-wall, and foundation instability; groundwater level and need for dewatering; erosion control; expansive soils; and differential settlement. The investigation must evaluate the soil types, test for shrink-swell potential, and determine preliminary load-bearing and strength characteristics. The geotechnical evaluation must be provided to the City as part of the City's building permit process. The City must review the geotechnical report along with project design to confirm that the recommendations in the geotechnical report are reflected in project design.

The City requires design of engineered fills to be addressed in the geotechnical investigation by assessing the structural properties of any soils in the project site proposed for use as backfill. Such investigations would address specific portions of the project site to be developed. The designs would be required to account for various structures and roadway proposals. In addition to evaluation for engineered fills, specific geotechnical evaluation of engineered slopes (for foundation drainage, landscaping, channel walls, etc.) must be included in the geotechnical evaluation. All proposed cut and/or fill slopes, including temporary slopes and excavations, must be evaluated for proper design to reduce the hazard of over-steeping and/or removal of lateral support, both of which could lead to slope instability, soil creep, and/or structural failure. If necessary, slopes must be designed with additional lateral support, such as buttressing or shoring, and fill slopes must be keyed properly into competent formation-support materials. Slopes along the proposed channel must be designed with proper protection to prevent soil erosion and channel-bank undercutting. Excavation, grading, and fill placement must be monitored and compaction testing performed to ensure proper placement of all fill types (structural, non-structural, and roadbed). Soils with low strength and/or high shrink-swell potential must be controlled using such techniques as over-excavation and replacement, wet compaction, or by covering with a sufficient amount of granular soils (as determined by the geotechnical investigation). Untreated expansive soils must not be used for structural fill.

The City requires that applicants for new development in the project site submit a geotechnical engineering report produced by a California Registered Civil Engineer (Geotechnical) or Engineering Geologist to the Department of Public Works for review prior to any improvement plan approval. The report must address and make recommendations on the following topics:

- Road, pavement, and parking area design;
- Structural foundations, including retaining wall design (if applicable);
- Grading practices;
- Erosion control;
- Special problems discovered on-site, (i.e., shallow groundwater, expansive/unstable soils, corrosive characteristics, etc.); and

- Slope stability, including excavation walls.

A preliminary geotechnical evaluation has been prepared for the proposed project.¹¹ The results of that evaluation, which are summarized in this section, are used to identify specific design and construction methods for the proposed project.

In addition to the geotechnical study, a grading permit must be prepared prior to grading activities. The applicant must submit, for review and approval, Improvement and/or Grading Plans along with a site-specific erosion and sedimentation control plan.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

The geotechnical characteristics of a project site determine its potential for structural and safety hazards that could occur during construction and/or operation of a proposed project. A geotechnical investigation was prepared for the project site in July 2006. This report was used to determine whether geological impacts would occur from development of the proposed project.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if the proposed project would:

- Introduce either geologic or seismic hazards by allowing the construction of the project on a site without protection against those hazards.

Project-Specific Impacts and Mitigation Measures

6.5-1 Construction of the proposed project would include earth disturbing activities that could increase the rate or amount of soil erosion.

Scenario A and B

Natural forces, both chemical and physical, are continually at work breaking down soils. Erosion poses two hazards: (1) it removes soils, thereby undermining roads and buildings and producing unstable slopes, and (2) it deposits eroded soil in reservoirs, lakes, drainage structures, and on roads as mudslides. Natural erosion is frequently accelerated by human activities such as site preparation for construction and alteration of topographic features. The following analysis focuses on the potential geotechnical effects of erosion related to project development. For a discussion of potential effects on water quality due to erosion and sedimentation caused by construction activities or urban runoff, please see Impact 6.7-2 on pages 6.7-12 to 6.7-14 in Section 6.7, Hydrology and Water Quality.

Proposed development on the project site would require some site grading and addition of buttress fill material on the landward side of the levee to create a gentle slope up to its top. In addition to development on the southern side of the levee, the proposed project would also develop an overlook that would extend from the levee north toward the river. The overlook

11 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006.

would be supported either by a cantilever constructed at the top of the levee or a retaining wall at its northern edge. Both options could potentially increase the rate or amount of soil erosion on the water side of the levee during construction of the overlook.

The alteration of topographic features could lead to increased erosion by creating unstable rock or soil surfaces, by changing the permeability or runoff characteristics of the soil, or by modifying or creating new pathways for drainage. However, because the project site is relatively flat on the landward side of the levee and is underlain by soils that exhibit minimal erosion hazard, there would be minimal geotechnical effects related to erosion in that portion of the project site. Upon completion of the project, structures, roadways, and landscaping or revegetated areas would eventually cover any soils exposed during construction; thus, no long term new erodible soils would be created as a result of the proposed project. However, because some erosion is anticipated to occur in disturbed soil areas during construction on both sides of the levee, this impact is considered *potentially significant*.

Mitigation Measures

Implementation of the following mitigation measures would reduce this impact to a ***less-than-significant level***.

6.5-1 (A & B) *Prior to the commencement of any grading activities, the applicant shall retain an erosion control professional, landscape architect, or civil engineer specializing in sediment control to prepare an Erosion and Sediment Transport Control Plan consistent with Chapter 15.88.250 of the City of Sacramento Municipal Code. The Erosion and Sediment Control Plan shall include a statement of purpose, proposed best management practices, and the required information from the Manual of Standards, Chapter 2, Section 3. The Plan shall be submitted with the final grading plan. The Erosion and Sediment Transport Control Plan shall be implemented by the applicant, and enforced by the City of Sacramento Department of Public Works, prior to pre-construction activities and shall continue through the completion of all final improvements and permanent structures.*

This mitigation measure would reduce the potential risk for soil erosion by ensuring that City requirements for the preparation of an Erosion and Sediment Transport Control Plan are met. This plan would be prepared by a professional specializing in erosion control, who would recommend the most effective measures to prevent erosion at the project site. These erosion control practices would begin prior to the first groundbreaking activities at the site and continue through construction until the completion of site landscaping, ensuring that exposed soils are protected throughout site development.

6.5-2 The proposed project would introduce a change in topography through the use of fill material which could expose proposed project uses to geologic hazards associated with unstable soil conditions.

Scenario A and B

The levee located in the northern portion of the project site is the only feature with topographic relief on-site. The northern portion of the project site slopes down from the top of the levee to the river, which makes up the site's northern boundary. The remainder of the site is flat. The proposed project includes levee improvements that would place earthen fill, extracted from other

parts of the project site, against the landward side of the existing levee and slope gently away from the levee south toward Richards Boulevard. The proposed project would not change the topography of the river side of the levee. No other topographical changes would occur as part of the proposed project. The improvements would require approximately 133,000 cubic yards of fill that would be obtained from on-site excavations, most likely from lots 13, 14, and 17, which are located along Richards Boulevard. This would include excavations for below-grade parking structures.

Artificial fill areas that have not been properly engineered can lead to unstable soil conditions such as slumping, settling, and liquefaction, which can result in structural instability. The City requires design of engineered fills to be addressed in the geotechnical investigation by assessing the structural properties of any soils in the project site proposed for use as backfill. The geotechnical investigation must include soil borings to collect samples and laboratory testing to determine the appropriate design parameters for use for structural fill, roadbed fill, and landscaping fill, along with the fill placement requirements. Excavation, grading, and fill placement must be monitored and compaction testing performed to ensure proper placement of all fill types (structural, non-structural, and roadbed).

The geotechnical report for the proposed project concluded that the existing on-site materials from Lots 13, 14, and 17 would be suitable for use as engineered fill, as long as they are found to be free of significant quantities of organics, rubble, and deleterious materials.¹² The geotechnical report did not encounter heavy concentrations of organic materials in its subsurface investigation, but indicated that due to past uses, concentrations of organic materials could be present within the project site.¹³ If this fill material is determined to be unsuitable to use on-site, soils from other sources from construction sites in downtown Sacramento have been identified. Haul routes would be identified after the tentative map is approved and prior to construction. This filling of the site would change the topography along the southern side of the levee, but would act as a buttress to the levee and improve its stability. Fill materials would be tested to ensure their stability for use on the project site, and placement of fill would be monitored to ensure compliance with all state and local requirements. Although this modification to the levee would change the topography of the project site, it would not expose people to adverse impacts, making this impact *less than significant*.

Mitigation Measures

None required.

6.5-3 The proposed project is located on a site containing unstable soil which if developed could expose structures to geologic hazards associated with settlement.

Scenario A and B

Although the NRCS identified one of the soil units located beneath the project site to have high shrink-swell potential, the geotechnical investigation prepared for the proposed project by

12 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006.

13 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, p. 4.

Wallace-Kuhl & Associates, Inc. concluded that soils underlying the project site have low potential for soil expansion, so no significant hazards are expected related to expansive soils.

However, signs of building distress due to settlement were observed during the site visit conducted as part of the geotechnical investigation, including doors out of plumb, wavering rooflines, and warped asphalt pavements.¹⁴ The geotechnical investigation indicated that the upper 40 to 60 feet of soils on-site were variable in densities and would not be suitable for supporting mid-rise (three to five stories) or high-rise (six stories and higher) structures without experiencing differential settlements.¹⁵ Variable soil densities could result in sloughing or caving during excavation activities.

The investigation also encountered a six-inch layer of peach pit refuse along the western portion of the project site. The report noted there may be heavy organic refuse located around the site, due to the project site's previous use as a peach cannery, although the subsurface investigation did not encounter high concentrations of such refuse. These organic deposits could contribute to variable soil densities and instability, which could result in settlement if located beneath buildings or pavement.¹⁶

Without mitigation, the project could introduce geologic hazards from settlement by allowing the construction of the project on a site without protection against such hazards. This is considered a *potentially significant impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce this impact to a ***less-than-significant level***.

6.5-3 (A & B)

- a) *Prior to issuance of the building permit, the project applicant shall ensure that all designs for mid- and high-rise structures within the proposed project minimize differential settlement impacts enabling the soils underlying the project site to support such structures. The most appropriate methods to mitigate the effects of differential settlement within the proposed project shall be determined by the project applicant in consultation with a qualified geotechnical engineer based on recommendations set forth in the Preliminary Geotechnical Engineering Report, Capitol Station 65 (July 13, 2006) prepared by Wallace-Kuhl & Associates, Inc..*

Recommendations identified in the Preliminary Geotechnical Engineering Report to mitigate the effects of differential settlement on high-rise structures (six stories or higher) include the use of a deep foundation system, such as driven piles or auger-cast piles, that extends into dense sands and gravels underlying the project site, and overexcavation and recompaction of the upper three to five feet

14 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, p. 5.

15 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, p. 10.

16 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006.

of soil within the building footprints to support interior floor slabs and in areas of pavement and flatwork.

- b) *During excavation activities, the project contractor shall comply with the recommendations set forth in the Preliminary Geotechnical Engineering Report, Capitol Station 65 (July 13, 2006) prepared by Wallace-Kuhl & Associates, Inc. regarding trenching activities. Implementation of the recommendations shall be monitored by the City of Sacramento.*
- c) *Although the presence of high concentrations of organic refuse has not been confirmed throughout the site, any such material, such as the peach pit refuse discovered in the western portion of the project site, shall be removed prior to the commencement of site preparation activities. The project applicant shall retain a geotechnical engineer to ensure that the proper removal of organic refuse be completed to ensure structural safety.*

The geotechnical report offered a range of options to mitigate the damaging effects of differential settlement on mid-rise and high-rise structures to be constructed on the project site. Options suggested for the construction of mid-rise structures (three to five stories) included: overexcavation and recompaction and the use of a deep foundation system, and shallow soil modification systems such as overexcavation and recompaction using a Geogrid reinforcement system or the use of a Geopier soil reinforcement system (rammed aggregate piers). Both the overexcavation and recompaction using a deep foundation system and the overexcavation and recompaction using a Geogrid reinforcement system options would be capable of achieving bearing capacities of 3,000 pounds per square feet (psf), while the use of a Geopier soil reinforcement system could provide for a bearing capacity between 5,000 and 6,000 psf. These mitigation measures would require the applicant to ensure that all structures within the proposed project are designed to withstand settlement impacts resulting from unstable soil conditions onsite. Proper building and foundation design would minimize potential settlement resulting variable soil densities beneath the site. In the event that organic material is discovered beneath the project site, it shall be removed to the satisfaction of a geotechnical engineer to ensure that the site is safe for the development of structures.

6.5-4 The proposed project could result in geologic hazards associated with subsidence or settlement of land attributed to dewatering activities.

Scenario A and B

The project site is located near the confluence of the American and Sacramento rivers. As discussed on pages 6.5-4 and 6.5-5 of the Environmental Setting, groundwater levels are heavily influenced by the rivers. As river levels rise and fall, groundwater elevations do the same, making dewatering activities for most projects in the downtown Sacramento area necessary.

Due to the fluctuations in groundwater levels in the project area, the geotechnical analysis assumes a groundwater level of +15 feet msl for the structural design of floor slabs and below-grade walls.¹⁷ Site elevation is approximately +25 feet msl, making groundwater levels approximately 10 feet below the ground surface in the project area. Lots 13, 14, and 17,

17 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, p. 12.

adjacent to Richards Boulevard at the southern end of the project site are expected to require a total of 14 feet of excavation (see Figure 2-11) for structures and subgrade parking areas, meaning that the excavations are likely to encounter groundwater and require dewatering.

Dewatering activities have the potential to increase internal stresses within dewatered soil, which can result in subsidence or settlement within the project site and in adjacent areas.¹⁸ As discussed in Impact 6.5-3 on pages 6.5-10 and 6.5-11, subsidence or settlement can increase stresses on buildings and jeopardize structural integrity. Therefore, this is a *potentially significant impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce this impact to a ***less-than-significant level***.

6.5-4 (A & B)

- a) *Prior to approval of the final grading plan, the project applicant shall retain a qualified dewatering contractor to design, install, and operate a project-specific construction dewatering system. Excavation work shall be scheduled during the dry season (summer to early winter) when river levels are low and excavation is less likely to encounter groundwater, making dewatering activities as minimal as possible. A groundwater depth of at least three feet below the lowest anticipated excavation depth shall be maintained to provide a stable surface for construction equipment. When necessary, alternative methods such as sheet piles or soil cement columns may be used to allow localized dewatering and help prevent dewatering effects on adjacent sites. Implementation of the plan during dewatering activities shall be monitored by the City of Sacramento Department of Engineering and/or Department of Public Works, as appropriate.*
- b) *Prior to approval of the final grading plan, the City shall ensure that all walls, foundations, and floor slabs constructed below an assumed groundwater level of +15 feet msl are sealed, waterproofed, and designed to withstand hydrostatic uplift and lateral stresses exerted by groundwater. This measure shall be implemented to the satisfaction of the Department of Engineering and/or Department of Public Works as appropriate.*

These mitigation measures would ensure that recommendations by the geotechnical engineer regarding dewatering and below grade slab and wall design minimize potential settlement and hydrostatic uplift impacts caused by shallow groundwater at the project site. The recommendations set forth by the geotechnical engineer for construction dewatering would prevent settlement to nearby structures onsite. Because permanent dewatering is not permitted by the City, waterproof design of slab-on-grade floors and basement walls would prevent damage to structures due to hydrostatic uplift and lateral stresses, ensuring that structures onsite do not create geologic hazards to occupants of the proposed project.

18 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, p. 13.

Cumulative Impacts and Mitigation Measures

The geographic context for the analysis of impacts resulting from geologic and soils hazards generally is site-specific, rather than cumulative in nature, because each development site has unique geologic and soils characteristics that would be subject to uniform site development and construction standards imposed by the City of Sacramento. Restrictions on development would be applied in the event that geologic or soil conditions posed a risk to safety exceeding the standards required by the Building Code or similarly applicable guidelines.

6.5-5 Earth disturbing activities associated with the construction of the proposed project, in combination with other construction projects in the City of Sacramento, could increase the rate or amount of soil erosion.

Scenario A and B

Cumulative development in the City of Sacramento, including the proposed project, would involve grading activities that would remove surface vegetation, alter topography, and potentially expose soils to greater erosion potential. The magnitude of this impact would typically be greatest during construction, particularly if development were to occur simultaneously with development immediately adjacent. However, because Sacramento is dominated by flat topography, erosion impacts would be site-specific and generally would not combine with similar effects elsewhere. Further, the area surrounding the project site is primarily already developed with urban uses so there would be a minimum potential for a combined effect. Upon development of the proposed project and other projects any existing undeveloped land would be converted to urban uses. Exposed soil would be covered with impervious surfaces that would reduce erosion potential over the long-term. Therefore, the project's contribution to cumulative increases in soil erosion during construction activities would be less than considerable and this would be a ***less-than-significant cumulative impact***.

From a water quality perspective, potential impacts from erosion caused by site development and operation can be cumulative in effect within a watershed. The reader is referred to Impact 6.7-5 on pages 6.7-15 and 6.7-16 in Section 6.7, Hydrology and Water Quality, for an analysis of such effects.

Mitigation Measures

None required.

6.5-6 The proposed project, in combination with other development in the City of Sacramento, could expose an increased number of people and structures to geologic hazards resulting from changes in topography, and settlement and subsidence due to unstable soil conditions or dewatering activities.

Scenario A and B

The proposed project would increase the number of people and structures in the City of Sacramento that could be exposed to potential effects related to unstable soil conditions, such as changes in topography, variable soil densities, settlement and subsidence caused by dewatering activities, or other soil constraints that could affect structural integrity. However, potentially adverse environmental effects associated with these effects are usually site-specific, based on individual site characteristics and generally would not combine with similar effects that could occur with other projects in the City. The City of Sacramento requires that prior to any

earthwork at a construction site that a complete site-specific geotechnical evaluation be prepared. The investigation must evaluate the soil types, test for shrink-swell potential, and determine preliminary load-bearing and strength characteristics. The geotechnical investigation must be provided to the City as part of the City's building permit process. The City must review the geotechnical report along with project design. Therefore, projects are analyzed on an individual basis to determine potential impacts resulting from unstable soil conditions at each site.

Due to the low incidence of adverse impacts resulting from geologic and soil hazards in the area and the individual nature of such impacts, the cumulative impact resulting from unstable soil conditions in the City would be ***less than significant***.

Mitigation Measures

None required.

6.6 Hazardous Materials and Public Safety

6.6 HAZARDOUS MATERIALS AND PUBLIC SAFETY

INTRODUCTION

This Hazardous Materials and Public Safety section describes the types of environmental hazards that would be associated with the construction and operation of the Township 9 project (proposed project). Hazards evaluated are those associated with existing identified or suspected contaminated sites, potential exposure to hazardous materials used, generated, stored, or transported during project construction and operation, and effects on emergency response or evacuation routes due to roadway modifications. Included in this section is a summary of applicable hazardous materials and public safety laws and regulations and agencies responsible for implementation. Potential hazards and associated impacts related to toxic air contaminant (TAC) emissions are discussed in Section 6.2, Air Quality, in this EIR.

No specific comments pertaining to hazards or hazardous materials were received in response to the NOP. The Initial Study (see Appendix A) prepared for the proposed project determined that it would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. This issue will not be discussed further in this EIR.

Information referenced to prepare this section includes the *Phase 1 Environmental Site Assessment, Capitol Station 65* (Ground Zero Analysis, Inc., May 2006) and the *Drilling Investigation Report, Former Cannery Site, 424 N. 7th Street, Sacramento, CA* (Ground Zero Analysis, Inc., July 2006), both included as Appendix J, and published technical information available through various websites and documents, which are referenced within this section.

Definitions

The term “hazardous materials” is defined in different ways for different regulatory programs. For purposes of this EIR, the definition of “hazardous materials” is that from the California Health and Safety Code, Section 25501, where “...because of their quantity, concentration, or physical or chemical characteristics, (they) pose a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment.”

“Hazardous waste” is a subset of hazardous materials. For the purposes of this EIR, the definition of “hazardous waste” is that from the California Health and Safety Code, Section 25517, and the California Code of Regulations (CCR), Title 22, Section 66261.2, where “...because of their quantity, concentration, or physical, chemical, or infectious characteristics, (they) may either cause, or significantly contribute to, an increase in mortality or serious illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.”

ENVIRONMENTAL SETTING

Existing Conditions

The proposed project site currently contains four main buildings and associated structures housing warehouse space, commercial office space, a cold storage facility, and former food processing facilities.

Current active businesses on the property include offices of the project applicant, cold storage, concrete storage and delivery, a livestock feed supplier, hay-bail compression and delivery, and a warehouse occupied by the Sacramento Habitat for Humanity building supply storage facility.

Adjacent uses include commercial office space and warehouses to the east, more commercial space and warehouses, including a FedEx shipping terminal and Sacramento County Sheriff facility to the west, and a trucking facility and the State Printing Plant to the south.

Historic Uses

Historically, the project site was used as a fruit and vegetable cannery. The existing buildings were constructed between the early 1930s and 1970s. The cannery ceased operations in the late 1990s. During that time, wastes used during cannery operations included solid waste and wastewater from fruit and vegetable production, waste oil, solvents, paints, adhesives, aerosols, inks, lubricants, degreasers, metal cuttings, laboratory chemicals, hypochlorites, chlorine, petroleum hydrocarbons, CFCs, ammonia, and propane.¹

Results of Phase 1 Environmental Site Assessment for Hazardous Materials Contamination

Site studies in the form of Phase I Environmental Site Assessments (ESA) or other specialized studies are used to identify the presence or likelihood of soil and groundwater contamination at a specific site. The American Society for Testing and Materials (ASTM) has developed standards for Phase I ESAs (ASTM 1527-00). The ASTM standards are used routinely in preparation of Phase I ESAs to determine the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products, onto the surface or into the ground, groundwater, or surface water of the property. If a Phase I ESA finds that hazardous materials found on the property may have been released, then a Phase II ESA is usually recommended. A Phase II investigation typically includes collection and analysis of soil and water samples. Based on the result, the Phase II ESA may recommend additional testing, remediation, or other controls to address contamination.

Ground Zero Analysis, Inc. (Ground Zero) prepared a Phase I ESA in May 2006 for the project site. The Phase I ESA consisted of a database review, site investigation, review of a previous Phase I ESA prepared for the site in 1999, and interviews of employees working at the site.

The project site has been listed on several hazardous waste databases as a site that may use, store, or dispose of hazardous waste. The project site is listed on the Leaking Underground Storage Tanks (LUST) database as the site of an unauthorized release of gasoline in March 1990, contaminating soil and groundwater. After an investigation and remediation program by the Sacramento County Environmental Hazardous Materials Division, the site was closed in December 1997.² The 1999 Phase I ESA, also by Ground Zero, identified several potential sources of liability, including a hazardous waste storage area at the north of the site, lines associated with refrigeration units, product lines used during the operation of the cannery, sumps and drains, containers of hazardous materials, and stained concrete areas. These issues were addressed when the cannery was decommissioned. No evidence of these previous

1 Ground Zero Analysis, Inc., *Phase I Environmental Site Assessment, Capitol Station 65*, May 2006, p. 1.

2 Ground Zero Analysis, Inc., *Phase I Environmental Site Assessment, Capitol Station 65*, May 2006, p.10.

issues was observed during the site inspection for the most recent Phase I ESA.³ No evidence of additional soil or groundwater contamination was discovered during the most recent site inspection.⁴ The Phase I ESA identified several sites as off-site areas of concern, including the State Printing Plant, one-quarter mile south of the project site, the Yellow Cab Company, located approximately 800 feet southeast of the project site, and the SP-Purity Oil site, located approximately two-thirds of a mile southeast of the project site (see Figure 6.6-1). These sites have been identified as sites of soil and groundwater contamination. However, the Phase I ESA indicated that because these sites are located south of the project site and groundwater in the area flows south away from the project site, it is unlikely that soil and/or groundwater contamination at these sites could affect the development at the project site.⁵

The project site is also located approximately one-half mile north of the Railyards Specific Plan Area, an approximately 240-acre proposed redevelopment site which formerly served as a major railroad facility for the Southern Pacific Railroad (now Union Pacific Railroad). Due to previous industrial activities, releases of hazardous chemicals have occurred, contaminating soil and groundwater, causing the site to be listed as a state superfund site. The site is undergoing remediation to remove all contaminants from both the soil and groundwater underlying the property. Like the contaminated sites closer to the project site, soil and/or groundwater contamination at this property would be unlikely to affect the proposed project due to its location south of the project site and direction of groundwater flow in the area.

Phase II Environmental Site Assessment

In response to recommendations made by ADR Environmental Group, Inc. in a letter dated June 21, 2006, Ground Zero was retained by the project applicant to investigate concerns regarding possible contamination based on the site's history as a former underground storage tank (UST) cleanup site. Soil samples were collected from 10 areas within the project site and analyzed for the presence of hazardous materials. Groundwater samples were collected from eight of the soil borings. Three test borings showed levels of constituents above average. The sample collected from the location of the known UST contamination described above was the only one of the borings to emit a gasoline odor. Soil and groundwater from this boring detected various volatile components of gasoline. Although gasoline constituents were detected in this sample, it is considered a low-risk contamination case because the site was remediated and the case closed in 1997. Elevated constituent levels were anticipated in this location, but levels were not high enough to be considered a major concern. The Phase II ESA did not recommend further action.

Asbestos and Lead Hazards in Buildings

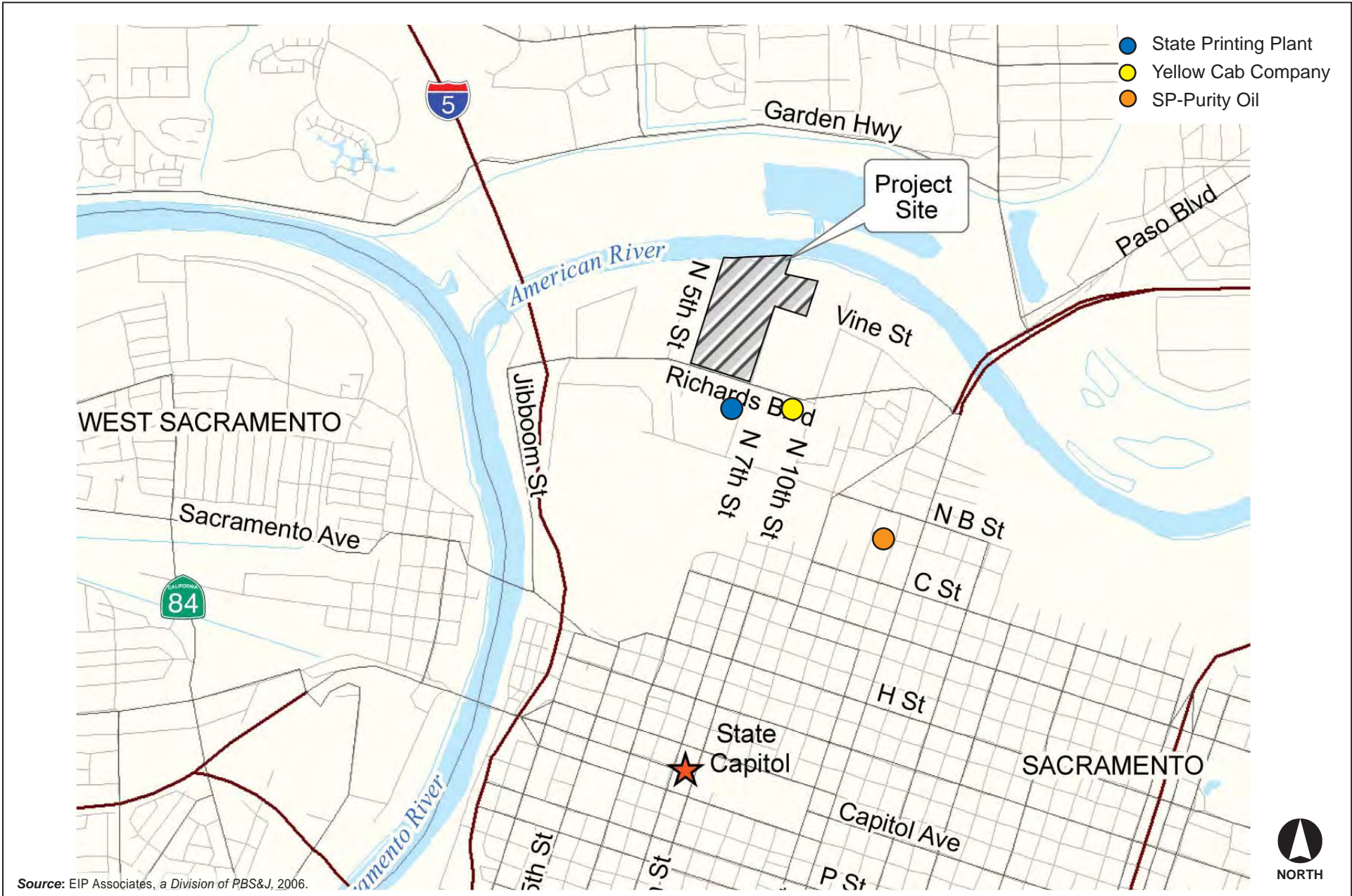
The Phase I ESA stated that a representative of the applicant indicated that all friable asbestos-containing materials (ACM) were removed from the property.⁶ An investigation for lead-based paint within the buildings on the site was not conducted, although the age(s) of the buildings could suggest that they could contain such materials.

3 Ground Zero Analysis, Inc., *Phase I Environmental Site Assessment, Capitol Station 65*, May 2006, p.4.

4 Ground Zero Analysis, Inc., *Phase I Environmental Site Assessment, Capitol Station 65*, May 2006, p.13.

5 Ground Zero Analysis, Inc., *Phase I Environmental Site Assessment, Capitol Station 65*, May 2006, p.6.

6 Ground Zero Analysis, Inc., *Phase 1 Environmental Site Assessment, Capitol Station 65*, May 2006, p.12.



Source: EIP Associates, a Division of PBS&J, 2006.



FIGURE 6.6-1
Off-Site Areas of Concern

A Division of **PBS&J**

D51214.01

Township 9

Emergency Response/Evacuation Routes

Records of emergency response routes, including evacuation routes, are maintained by the Sacramento Fire Department. Major roads in the area that could be used as evacuation routes in the event of a hazardous materials emergency include Interstate 5, Richards Boulevard, North 7th Street, North 12th Street, 16th Street, and North B Street.

REGULATORY SETTING

A number of federal, state and local laws have been enacted to regulate the management of hazardous materials and wastes. Implementation of these laws and the management of hazardous materials are regulated independently of the CEQA process through programs administered by various agencies at the federal, state, and local levels. Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, state, and local hazardous materials laws and regulations. At any time during construction or occupancy, the project applicant and contractors are responsible for knowledge of and complying with applicable hazardous materials management regulations.

Federal Regulations

Several federal agencies regulate hazardous materials. These include the U.S. Environmental Protection Agency (EPA), the Occupational Safety and Health Administration (OSHA), and the Department of Transportation (DOT). Applicable federal regulations and guidelines are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR), and lead exposure guidelines provided by the U.S. Department of Housing and Urban Development (HUD). The U.S. EPA has authorized the California Department of Toxic Substances Control (DTSC) to enforce hazardous waste laws and regulations in California.

State Regulations

The California Environmental Protection Agency (Cal EPA) has overall authority governing the use of hazardous materials in the State. Within Cal EPA, the DTSC has primary regulatory responsibility for hazardous waste management and cleanup.

State regulations applicable to hazardous materials are contained in the California Code of Regulations (CCR). Title 22 and 26 of the CCR pertain to hazardous materials and the management of hazardous materials. Title 8 contains Construction Safety Orders pertaining to hazardous materials, including, but not limited to, lead.

Lead-Based Paint

Several regulations and guidelines pertain to abatement of and protection from exposure to lead-based paint. These include Construction Safety Order 1532.1 from Title 8 of the CCR and lead-based paint exposure guidelines provided by HUD. In California, lead-based paint abatement must be performed and monitored by contractors with appropriate certification from the California Department of Health Services.

Local Regulations

City of Sacramento General Plan

The following are relevant City of Sacramento General Plan goals and policies related to hazardous materials.

Policies

8.

Ensure that areas where hazardous materials have been found are remediated, before development of new areas, to the extent necessary to protect the health and safety of all possible users and adjacent properties, consistent with applicable laws and regulations.

Sacramento Central City Community Plan

There are no hazardous materials or public safety measures applicable to the proposed project.

Richards Boulevard Area Plan

The Richards Boulevard Area Plan was adopted by the City of Sacramento in 1994 to provide guidelines and policies for redevelopment in the Richards Boulevard area. The following objectives and policies from the plan pertain to hazardous materials within the area:

LAND USE

Policy

9.1.

Ensure that all sites proposed for residential, office, retail, community facilities, or other similar development complete hazardous substances investigation, characterization and remediation, if necessary, prior to the issuance of development approvals.

IMPLEMENTATION

Policy

1.4.

Require hazardous materials evaluation and remediation prior to issuing development approvals.

Sacramento City Fire Department

The Sacramento City Fire Department, a first-responder to emergency calls, maintains a Hazardous Materials Response Team (HMRT). Through contractual agreement, the HRMT provides emergency response to hazardous materials incidents within the City of Sacramento. The Sacramento City Fire Department also maintains updated records of the emergency response or evacuation routes for the City.

Sacramento County Environmental Management Department (SCEMD)

The SCEMD is responsible for promoting a safe and healthy environment in the County. As the Certified Unified Program Agency (CUPA), the SCEMD monitors the proper use, storage and clean up of hazardous materials, monitoring wells, removal of leaky underground storage tanks, and permits for the collection, transport, use, or disposal of refuse.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

The qualitative analysis of the potential hazardous materials impacts is based on information from the 2006 and 1999 Phase I ESAs and other existing documentation to establish existing conditions and to identify potential environmental effects, based on the standards of significance presented in this section. In determining the level of significance, the analysis assumes that the proposed project would comply with all applicable ordinances and regulations (summarized above).

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project exposes people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;
- The project exposes people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials; or
- The project exposes people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during construction or dewatering activities.

In addition to the City of Sacramento standards of significance and consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if the proposed project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; or
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

Project-Specific Impacts and Mitigation Measures

6.6-1 Construction and/or occupancy of the proposed project would involve the routine use of hazardous materials, which could create a health hazard or potential health hazard.

Scenario A and B

Construction of the proposed project would involve the use of various products that could contain materials classified as hazardous (e.g., solvents, adhesives and cements, certain paints, cleaning agents and degreasers). Operation of the proposed project would involve the use of household and commercial hazardous materials, such as cleaning agents, paints, etc. However, based on the uses within the proposed project, these materials would not be used, stored, or transported in large enough quantities to cause a substantial impact, either during construction or operation of the proposed project. Furthermore, the use, storage, and transportation of hazardous materials are subject to applicable local, state, and federal regulations the intent of which is to minimize the risk of upset. Therefore, the risk of accidental explosion or release of hazardous materials that could create a health hazard is highly unlikely,

and the impact of construction and operation-related hazardous chemical use and storage would be ***less than significant***.

Mitigation Measures

None required.

6.6-2 The proposed project could interfere with an emergency evacuation plan as a result of temporary lane closures, roadway narrowing, or detours during construction.

Scenario A and B

During construction of the proposed project, it may be necessary to restrict travel on certain roadways within the project area to facilitate construction activities such as demolition, material hauling, construction, staging, and modifications to existing infrastructure. Such restrictions could include lane closures, lane narrowing, and detours, which would be temporary but could continue for extended periods of time. Lane restrictions, closures, and/or detours could cause an increase in traffic volumes on adjacent roadways. In the event of an emergency, emergency response access or response times could be adversely affected. Although these impacts would be temporary, this would be considered a *potentially significant impact*.

The following mitigation measure would reduce potential interference with emergency response and evacuation routes in the project area to a ***less-than-significant level***.

Mitigation Measures

6.6-2 (A & B)

Prior to the commencement of demolition/construction, the project applicant shall retain a transportation planner to prepare a Traffic Management Plan (TMP) for construction activities, in accordance with Sections 12.20.020 and 12.20.030 of the Sacramento Municipal Code. Elements of the TMP shall include:

- *The name and business address of the applicant;*
- *A diagram showing the location of the proposed work area;*
- *A diagram showing the locations of areas where public right-of-way may be closed or obstructed;*
- *A diagram showing the placement of traffic control devices;*
- *The proposed phasing of traffic control;*
- *Times when traffic control would be in effect;*
- *Times when demolition/construction activities would prohibit access to private property from a public right-of-way;*
- *A statement that the applicant shall comply with the City's noise ordinance during the performance of all work; and*

- *A statement that the applicant understands that the plan may be modified by the director at any time in order to eliminate or avoid traffic conditions that are hazardous to the safety of the public.*

The project applicant shall submit the TMP to the City for review and approval. The City shall approve, approve with modifications to the plan, or disapprove the plan. In the event that the demolition/construction work to be performed under the TMP is not performed and completed within the times specified within the application for the proposed plan, the plan shall be considered expired and void. A new plan shall be required prior to the commencement or continuation of work.

The TMP would clearly define the location, timing, and types of interferences that could potentially block public right-of-way and emergency access. The TMP also allows the City to modify, suspend, or stop the plan if a potential public safety hazard would result. This would ensure that potential impacts to emergency access and evacuation routes would be properly mitigated.

6.6-3 Construction and/or occupancy of the proposed project could expose people to previously unidentified sources of potential health hazards, such as soil or groundwater contamination, from past uses on- or off-site.

Scenario A and B

A Phase I ESA was prepared for the project site in May 2006 by Ground Zero. As discussed earlier, a previous Phase I ESA, performed in 1999, identified several potential sources of liability, including a hazardous waste storage area at the north of the site, lines associated with refrigeration units, product lines used during the operation of the cannery, sumps and drains, containers of hazardous materials, and stained concrete areas. According to the 2006 Phase I ESA, these issues have since been addressed and were not observed during the most recent site investigation.⁷ The 2006 Phase I ESA did not observe further evidence of soil contamination.

The 2006 Phase I ESA also found no evidence of groundwater contamination on-site. However, the investigation identified three off-site areas of concern (see Figure 6.6-1) that have had documented soil contamination, which could affect groundwater in the vicinity. The three sites are located one-quarter mile south, 800 feet southeast, and two-thirds of a mile southeast of the project site. Because the project site is located near the confluence of the American and Sacramento rivers, groundwater depth and flow is variable. In this area, groundwater predominantly travels in a southward direction, away from the American River located adjacent to the project site's northern boundary. Therefore, due to direction of groundwater flow it is highly unlikely that soil contamination in areas south of the project site could contaminate groundwater that would migrate onto the site.

Although the project site has successfully undergone remediation for known soil contamination, and the most recent Phase I ESA did not find evidence of soil or groundwater contamination, there is still a possibility that previously unidentified contamination could exist on the site. A subsequent Phase II ESA identified gasoline constituents and odors at one location within the

⁷ Ground Zero Analysis, Inc., *Phase I Environmental Site Assessment, Volume I, Capitol Station 65*, May 2006, p. 14.

project site. As discussed previously, this site underwent remediation and the site was closed in 1997. Although the Phase II ESA found evidence of the contamination, the levels of constituents observed were not considered to be a major concern.⁸ Due to the nature of soil-disturbing construction activities that would occur during site preparation of the proposed project (e.g., deep excavations for building foundations or shallow underground utility installations), there is a possibility that previously unidentified soil or groundwater contamination could be discovered, which could expose people to potential health hazards. For this reason, this is a *potentially significant impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce impacts related to exposure to hazardous materials associated with previously unidentified soil or groundwater contamination to a ***less-than-significant level***.

6.6-3 (A & B)

- a) *In the event that previously unidentified soil or groundwater contamination, USTs, or other features or materials that could present a threat to human health or the environment are discovered during excavation and grading or construction activities, all construction within the project site shall cease immediately, and the applicant shall retain a qualified professional to evaluate the type and extent of the hazardous materials contamination and make appropriate recommendations, including, if necessary, the preparation of a site remediation plan. Pursuant to Section 25401.05 (a)(1) of the California Health and Safety Code, the plan shall include: a proposal in compliance with application law, regulations, and standards for conducting a site investigation and remedial action, a schedule for the completion of the site investigation and remedial action, and a proposal for any other remedial actions proposed to respond to the release or threatened release of hazardous materials at the property. Work within the project site shall not proceed until all identified hazards are managed to the satisfaction of the City and the SCEMD.*
- b) *In the event site investigation and/or remediation is required, the applicant shall ensure preparation of a site-specific health and safety plan that meets the intent of OSHA hazardous materials worker requirements (CCR Title 8). The plan shall be prepared by a qualified professional prior to the commencement of site-disturbing activities associated with the investigation and/or remediation. The plan shall provide for the identification, evaluation, control of safety and health hazards, and emergency response to hazardous waste operations. Pursuant to the requirements of state and federal law, the site-specific health and safety plan may require, but would not be limited to: the use of personal protective equipment, onsite controls (e.g., continuous air quality monitoring) during construction, and other precautions as determined to be necessary by the plan preparer.*
- c) *In the event contaminated groundwater is identified, any discharges to the sewer, if determined to the appropriate method of disposal, shall be in accordance with*

8 Ground Zero Analysis, Inc., *Drilling Investigation Report, Former Cannery Site, 424 N. 7th Street, Sacramento, CA, July 19, 2006*, p. 4.

the City Department of Utilities Engineering Services Policy No. 0001, adopted as Resolution No. 92-439 by the Sacramento City Council.

These mitigation measures would ensure that in the event that previously unknown contamination is discovered on-site during construction activities, appropriate plans for the clean-up and removal of the contaminated materials are drafted by qualified professionals. The plans would be implemented and monitored by appropriate agencies (i.e., SCEMD, the City Department of Utilities) to ensure that all contamination is properly treated, managed, and/or removed before work may continue. This would ensure that people, namely those involved in site preparation and construction activities would not be at risk due to exposure to hazardous materials located on-site.

6.6-4 The proposed project could expose people to potential health hazards by demolishing buildings on the project site that could contain lead-based paint.

Scenario A and B

Construction of the proposed project would involve the demolition of buildings currently located on the site. As noted in the Environmental Setting, the buildings were tested for ACM but not lead-based paint. According to the applicant, all ACM has been removed. However, lead-based paint could be present.⁹ If lead-based paint is present, fugitive dust containing lead or paint fragments could be released into the environment during demolition activities, which could present a health hazard to construction workers or result in soil contamination if not properly managed. This would be a *potentially significant impact*.

Mitigation Measures

Implementation of the following mitigation measure would reduce this impact to ***less than significant***.

6.6-4 (A & B)

Prior to demolition of any structures located on the project site, the project applicant shall retain a state-certified risk assessor to conduct a risk assessment or paint inspection of all structures on-site constructed prior to 1978 for the presence of lead-based paint. If lead-based paint is determined to exist on site, the risk assessor shall prepare a site-specific lead hazard control plan. Paint removal methods may include, but are not limited to: use of a heat gun, tools equipped with HEPA exhaust capability, wet scraping, and chemical removers. The plan shall also provide specific instructions for providing protective clothing and gear for abatement personnel.

The project applicant shall then retain a state-certified lead-based paint removal contractor independent of the risk assessor to conduct the appropriate abatement measures as required by the plan. Wastes from abatement and demolition activities shall be managed and disposed of at a landfill(s) licensed to accept lead-based waste. Once all abatement measures have been implemented, a state-certified risk assessor shall conduct a clearance examination and provide written documentation to the City that lead-based paint testing and abatement, if necessary, has been completed in

9 Ground Zero Analysis, Inc., *Phase I Environmental Site Assessment, Capitol Station 65*, May 2006, p. 1.

accordance with all federal, state, and local laws and regulations, including: lead-based paint exposure guidelines provided in "Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing" by the U.S. Department of Housing and Urban Development (HUD), Construction Safety Order 1532.1 from Title 8 of the California Code of Regulations (CCR), and the California Department of Health Services.

Mitigation Measure 6.6-4 would require that an investigation of all buildings to be demolished or be performed to detect the presence of lead based paint. In the event that lead based paint is discovered, the mitigation would prevent the exposure of individuals and the environment to the hazard by ensuring that all regulations pertaining to the removal and disposal of lead based paint are carried out prior to demolition. This would prevent the release of lead based paint into the surrounding environment, and therefore, exposure to this hazard would be less than significant.

Cumulative Impacts and Mitigation Measures

The cumulative context for the analysis of potential hazardous materials impacts is generally site specific, and not cumulative in nature. This analysis addresses potential cumulative impacts resulting from construction and/or implementation of the proposed project and similar development projects within the City of Sacramento.

6.6-5 The proposed project, in combination with other development in the City, could expose people to existing contaminated soil, groundwater and/or hazardous building materials during demolition and site preparation activities.

Scenario A and B

For all projects in the City of Sacramento that would develop or redevelop an existing site where hazardous building materials such as lead-based paint could be present, the potential exists for release of hazardous materials during demolition/renovation of those sites. Previously unidentified soil or groundwater contamination or buried items containing hazardous substances (e.g., USTs) could also be encountered during excavation and other site preparation activities. Exposure to hazardous materials would be the most likely to affect construction personnel through direct contact. Direct contact with contaminated materials would not pose as great a risk to the public because such exposure scenarios would typically be confined to the demolition/construction zones.

For individuals not involved in demolition/construction activities, the greatest potential source of exposure to contaminants would be airborne emissions, primarily through construction-generated dust from demolition or grading. The range that contaminated airborne emissions could travel would be limited to the project site and immediate area. To create a cumulative impact, these activities would have to occur on several sites located adjacent to one another at the exact same time. Although unlikely, in the event that site-specific controls are not implemented at the project site to prevent the airborne release of previously unknown hazardous materials in conjunction with similar activities nearby, the proposed project would have a cumulatively considerable contribution to a *significant cumulative impact*.

Mitigation Measures

Implementation of the following mitigation measure would reduce the project's contribution to cumulative release of hazardous materials a less than considerable level and this would be a ***less-than-significant cumulative impact***.

6.5-5 *Implement Mitigation Measures 6.6-3 and 6.6-4.*

Mitigation Measures 6.6-3 and 6.6-4 would provide for assessment and removal procedures to be followed in the event that any previously undiscovered hazardous materials, including soil and/or groundwater contamination and lead-based paint, are encountered on the project site. By implementing these mitigation measures at the project site, individual releases of hazardous materials at the project site from demolition and site preparation activities would not combine with similar releases at nearby sites, making any contribution to a cumulative impact less than considerable.

6.6-6 The proposed project, in combination with other development within the City, could interfere with an emergency evacuation plan as a result of temporary lane closures, roadway narrowing, or detours during demolition and construction activities.

Scenario A and B

Demolition and construction activities and developments within the City of Sacramento that alter, close, or in other ways affect traffic in the area could interfere with emergency and evacuation routes, potentially affecting emergency response times. If traffic restrictions resulting from the proposed project occurred simultaneously with similar traffic restrictions resulting from other projects occurring within the City, specifically within the immediate area, emergency response access, response times, and evacuation routes could be adversely affected throughout the area. If not properly managed, this could result in a *significant cumulative impact*. Due to the nature and size of the proposed project, demolition and construction activities at the project site could substantially interfere with emergency and evacuation routes, especially when combined with other similar projects in the area. Therefore, the proposed project's contribution would be *cumulatively considerable*.

Mitigation Measures

The following mitigation measure would reduce the project's contribution to cumulative impacts resulting from potential interference with emergency response and evacuation routes in the project area to a less than considerable level and this would be a ***less-than-significant cumulative impact***.

6.6-6 *Implement Mitigation Measure 6.6-2.*

Implementation of this mitigation measure would require the project applicant to prepare a Traffic Management Plan (TMP), which would mitigate traffic impacts that could obstruct emergency and/or evacuation routes in the project area. This would reduce the proposed project's contribution to the cumulative impact to a less than considerable level. Other projects in the area would be required to implement TMPs as well, which could help to reduce cumulative impacts on traffic obstructions during demolition and construction activities throughout the City.

6.7 Hydrology and Water Quality

6.7 HYDROLOGY AND WATER QUALITY

INTRODUCTION

This Hydrology and Water Quality section evaluates impacts related to on-site drainage, stormwater runoff, groundwater, and water quality. Primary sources used in this analysis include the *Storm Drainage Study for Capitol Station 65 LLC* prepared by Nolte Associates, Inc. (September 2006) (Appendix K), the *Preliminary Geotechnical Engineering Report, Capitol Station 65*, prepared by Wallace-Kuhl, and Associates, Inc. (July 2006) (Appendix I), and the *Phase I Environmental Site Assessment, Capitol Station 65* prepared by Ground Zero Analysis, Inc. (May 2006) (Appendix J), addition to published information by a variety of agencies, which is referenced within this chapter.

As discussed in the Initial Study (Appendix A), the proposed project would not change currents or the course or direction of water movements. Also addressed in the Initial Study, the project site's Zone X designation on the City of Sacramento's updated Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) determined that the proposed project would not place people or property at risk from 100-year flood hazard. Therefore, these issues will not be addressed in this EIR.

One comment concerning hydrology and water quality was received in response to the NOP. The Floodway Protection Section of the Department of Water Resources stated that the document must include within its project description and environmental assessment the activities that are being considered under the (encroachment) permit. This issue is addressed in Chapter 2, Project Description.

ENVIRONMENTAL SETTING

Regional Surface Water Hydrology

The City of Sacramento is located at the confluence of two major rivers, the Sacramento River and American River. The project site is located near the confluence; the Sacramento River is located approximately $\frac{3}{4}$ mile west of the project site, while the American River makes up the site's northern boundary. The total length of the Sacramento River is approximately 327 miles. Its drainage area encompasses 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 Delta-Central Sierra area to the south. Average annual runoff from the Sacramento River drainage area is estimated to be 21.3 million acre-feet. Major tributaries to the Sacramento River are the Pit and McCloud rivers, which join the Sacramento River from the north, and the Feather and American rivers, which are tributaries from the east. Numerous tributary creeks flow from the east and west. The melting snow pack in the Sierra Nevada maintains stream flow during most of the summer.

The Sacramento River, beginning at the "I" Street Bridge (located approximately one mile southwest of the project site) and including all portions downstream, is considered part of the Sacramento-San Joaquin Delta (Delta).¹

1 California Water Code Section 1220.

Flooding has historically been a problem for Sacramento, prompting the City to build levees beginning the 1860s. The Sacramento River system experiences variations in water levels during different parts of the year and during different parts of the month. Two factors affecting water levels 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. Most notably of these in the project area is the Yolo Bypass, which is located north and west of the confluence with the American River.

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 2.7 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 with the Sacramento River.

Flooding

Although the project site is not located in an area considered to be at risk from flooding during 100-year storm events, it should be noted that FEMA's flood designation could be updated as new information regarding flood control facilities, including levees, becomes available. The Sacramento Area Flood Control Agency (SAFCA) has recently determined that some flood control facilities could be at risk to flooding hazard during a 100-year storm event due to erosion and underseepage along Sacramento River levees. SAFCA has since initiated studies and activities to further improve flood protection in the Natomas Basin to provide flood protection at the 200-year storm event level. At this time, SAFCA has not initiated similar studies for American River levees protecting the project area because they are not considered to be at risk from erosion and underseepage. Therefore, the project site is not considered to be an area at risk during flood events.

Drainage

The project site is primarily covered with impervious surfaces such as buildings and pavement, except for the northwest corner. The site is flat, with the exception of the American River levee located along the northern portion of the site, which is the only feature with topographic relief. Drainage from the site flows south from the levee toward Richards Boulevard and then is directed west toward North 5th Street, where it then flows north to Sump Pump 111, located immediately west of the project site at the northern terminus of North 5th Street. Stormwater flows from Sump Pump 111 are pumped to the American River, which ultimately flows to the Sacramento River. There are no natural drainages or surface waters occurring within site boundaries.

Storm Drainage Infrastructure

Currently there are storm drainage pipelines surrounding the project site. The existing lines are located in the Richards Boulevard, North 5th Street, and North 7th Street right-of-ways. Immediately east of the project site in North 7th Street are 21-inch and 24-inch lines that flow south towards Richards Boulevard and collect in 60-inch lines. The drainage flows west along Richards Boulevard and connects to a larger 72-inch line that travels north in the North 5th Street right-of-way to the pump station which dumps into the Sacramento River.

Surface Water Quality

The Sacramento and American rivers have been classified by the Central Valley Regional Water Quality Control Board (CVRWQCB) as having numerous beneficial uses, including providing municipal, agricultural, and recreational water supply. Other beneficial uses include freshwater habitat, spawning grounds, wildlife habitat, navigation on the Sacramento River, and industrial uses on the American River.² Ambient water quality in the Sacramento and American rivers is influenced by agricultural drainage, mine drainage, urban runoff, and industrial, municipal, and construction discharges.

The reaches of the Sacramento and American rivers that flow through the Sacramento urban area are listed on the U.S. Environmental Protection Agency (EPA)-approved Section 303(d) list of impaired and threatened waters for California, updated October 25, 2006 (see Clean Water Act, Section 303, below). Both rivers are listed for unknown toxicity and mercury. Mercury is primarily a legacy of gold mining, and diazinon is a pesticide from agricultural return flows and urban application, although urban use of diazinon is expected to be on the decline as the nonagricultural unrestricted use of diazinon has been phased out by the EPA.

Urban Runoff Water Quality

Constituents found in urban runoff vary as a result of differences in rainfall intensity and occurrence, geographic features, the land use of a site, vehicle traffic, and percentage of impervious surface. In the Sacramento area, there is a natural weather pattern of a long dry period from May to October. During this dry period, pollutants contributed by vehicle exhaust, vehicle and tire wear, crankcase drippings, spills, and atmospheric fallout accumulate within the urban watershed. Precipitation during the early portion of the annual wet season (November to April) washes these pollutants into the stormwater, which can elevate 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 has been collected from Sacramento urban area monitoring stations since 1990. From this monitoring data, the following six pollutants have been identified as "target pollutants": mercury, diazinon, chlorpyrifos, lead, copper, and fecal coliform.³ These pollutants were determined based on their toxicity, potential of exceeding water quality criteria, and ability to accumulate in humans and animals, or if they were listed as impairing water bodies by the State Water Resources Control Board.

Regional Groundwater Hydrology

The Central City portion of the City of Sacramento is located within the South American Groundwater Sub-basin, part of the larger Sacramento Valley Groundwater Basin (SVG Basin). The South American Groundwater Sub-basin covers approximately 248,000 acres (388 square miles) and is bound by the Sierra Nevada to the east, the American River to the north, the Sacramento River to the west, and the Cosumnes and Mokelumne rivers to the south.

Various geologic formations comprise the water-bearing deposits in the SVG Basin. Groundwater occurs in unconfined to semi-confined states throughout sub-basins. The degree of confinement typically increases with depth below the ground surface; groundwater in the

2 California Regional Water Quality Control Board, Central Valley Region, *The Water Quality Control Plan (Basin Plan)*, Fourth Edition – 1998, revised 2004.

3 City of Sacramento, *City of Sacramento Stormwater Quality Improvement Plan*, July 2004.

upper aquifer formations is typically unconfined. In general, groundwater levels in the vicinity of the City of Sacramento have been reported to be stable, fluctuating less than 10 feet since the 1970s.⁴

According to the most recent Sacramento County, California groundwater map (Spring 2003), groundwater levels in the project area are located at approximately +0 feet mean sea level (msl), which is 25 feet below the ground surface at the project site.

Groundwater flow in the shallow zones generally is east-southeast, but is controlled by the American and Sacramento rivers. As the surface water elevation of the Sacramento and American rivers rise and fall, groundwater levels near the banks fluctuate.⁵ Groundwater levels at the project site are generally estimated to be between and +0 and +5 feet msl during periods of low rainfall, although levels have been recorded as high as +20 feet msl during periods of high rainfall. For this reason, a groundwater level of +15 feet msl (10 feet below the ground surface) is assumed for design of the proposed project.⁶

Groundwater quality in the South American Groundwater Sub-basin is generally within the secondary drinking water standards for municipal use, including standard levels of iron, manganese, arsenic, chromium, and nitrates. The groundwater is characterized as having calcium magnesium bicarbonate, with minor fractions of sodium magnesium bicarbonate. The water quality in the upper aquifer system is regarded as superior to that of the lower aquifer system. Water from the upper aquifer generally does not require treatment (other than disinfection). The lower aquifer system also has higher concentrations of total dissolved solids (TDS, a measure of salinity) than the upper aquifer, although it typically meets standards as a potable water supply.⁷

Groundwater in the project area is currently not in use; however, the current CVRWQCB Basin Plan identifies potential uses for this groundwater, including future municipal and domestic supplies, agricultural supply, industrial service supply, and industrial process supply, in the event that surface water supplies are compromised. Issues relating to the groundwater quality in the project area are discussed in Section 6.6, Hazards and Hazardous Materials.

REGULATORY SETTING

Federal Regulations

Clean Water Act

Originally implemented as the Federal Water Pollution Control Act Amendments of 1972, the Clean Water Act (CWA) was designed to restore and maintain the chemical, physical, and biological integrity of the Nation's waters. The CWA also directs states to establish water quality standards for all "waters of the United States" and to review and update such standards on a triennial basis.

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- 4 California Department of Water Resources, *California's Groundwater Bulletin 118, Sacramento Valley Groundwater Basin, South American Subbasin*, February 27, 2004.
 - 5 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13 2006, p. 12.
 - 6 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, p. 12.
 - 7 California Department of Water Resources, *California's Groundwater Bulletin 118, Sacramento Valley Groundwater Basin, North American Subbasin*, February 27, 2004.
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Section 402 - National Pollutant Discharge Elimination System

The 1972 amendments to the Federal Water Pollution Control Act established the National Pollutant Discharge Elimination System (NPDES) permit program to control discharges of pollutants from point sources. The 1987 amendments to the CWA created a new section of the CWA devoted to stormwater permitting (Section 402p). EPA has granted the State of California primacy in administering and enforcing the provisions of CWA and NPDES. NPDES is the primary federal program that regulates point-source and non-point-source discharges to waters of the United States.

Each NPDES permit identifies limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. "Nonpoint source" pollution originates over a wide area rather than from a definable point. Nonpoint source pollution often enters receiving water in the form of surface runoff and is not conveyed by way of pipelines or discrete conveyances. Two types of nonpoint source discharges are controlled by the NPDES program: discharges associated with industrial activities including construction activities and the general quality of stormwater in municipal stormwater systems. The goal of the NPDES nonpoint source regulations is to improve the quality of stormwater discharged to receiving waters to the maximum extent practicable.

The State Water Resources Control Board (SWRCB) issues both general and individual permits for discharges to surface waters, including for both point-source and non-point-source discharges. In response to the 1987 amendments, the EPA developed the Phase I NPDES Storm Water Program for cities with populations larger than 100,000, and Phase II for smaller cities.

Section 303 – Total Maximum Daily Loads

Under Section 303(d) of the CWA, states are required to develop lists of water bodies that would not attain water quality objectives after implementation of required levels of treatment by point source dischargers (municipalities and industries). Section 303(d) requires that the state develop a total maximum daily load (TMDL) for each of the listed pollutants. The TMDL is the amount of the pollutant that the water body can receive and still be in compliance with water quality objectives. The TMDL is also a plan to reduce loading of a specific pollutant from various sources to achieve compliance with water quality objectives. EPA must either approve a TMDL prepared by the state or disapprove the state's TMDL and issue its own. NPDES permit limits for listed pollutants must be consistent with the waste load allocation prescribed in the TMDL. After implementation of the TMDL, it is anticipated that the problems that led to placement of a given pollutant on the Section 303(d) list would be remediated.

Federal Anti-degradation Policy

The federal anti-degradation policy is included in the water quality standards of the CWA and requires states to individually adopt anti-degradation policies that are consistent with federal standards to provide a three-tiered approach to water quality protection. The three tiers include: protect existing uses, maintain high quality water, and to protect "outstanding" (e.g., ecologically sensitive, cleanest, and recreationally popular waters) with strict protection standards.

Safe Drinking Water Act (SDWA)

The SDWA was originally passed in 1974 to regulate the nation's public drinking water supply to protect public health. Standards for 81 individual constituents have been established under the SDWA, as amended in 1986. The SDWA also protects sources of public drinking water, including rivers, lakes, reservoirs, springs, and groundwater wells.

United States Army Corps of Engineers (Corps)

The Corps is responsible for a variety of activities related to hydrology and water quality, including: environmental resources, floodplain management, navigation of waterways, recreation, engineering, water resources management, and regulatory support.

Federal Emergency Management Agency (FEMA)

FEMA is responsible for determining flood elevations and floodplain boundaries based on Corps studies. FEMA is also responsible for distributing the Flood Insurance Rate Maps (FIRMS), which are used in the National Flood Insurance Program (NFIP). These maps identify the locations of special flood hazard areas, including the 100-year floodplain.

FEMA allows non-residential development in the floodplain. However, construction activities are restricted within the flood hazard areas depending upon the potential for flooding within each area. Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the Code of Federal Regulations (CFR).

State Regulations

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 is California's statutory authority for the protection of water quality. The act sets forth the obligations of the SWRCB and regional water quality control boards (RWQCBs) under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California including the Sacramento-San Joaquin River Basin (see below). The SWQCB 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 RWQCBs, which are responsible for implementing CWA Sections 402 and 303(d).

The Porter-Cologne Act also requires waste dischargers to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, NPDES permits, Section 401 water quality certifications, or other approvals.

California Toxics Rule

The California Toxics Rule was created by the EPA to address water quality standards specific to the State of California based on the 1994 state court overturning the state's water quality control plans containing water quality criteria. It was determined that numeric criteria are necessary in the state to protect public health and the environment.

Water Quality Control Plan for the Sacramento River Basin

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).⁸ The Basin Plan contains water quality numerical and narrative standards and objectives for rivers and their tributaries within its jurisdiction. 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.

The CVRWQCB is responsible for preparing a water quality control plan that identifies beneficial uses of the Sacramento River and its tributaries, and also for preparing water quality objectives for the protection of beneficial uses. Numerical and narrative criteria are contained in the basin plan for key water quality constituents, including: dissolved oxygen (DO), water temperature, trace metals, turbidity, suspended material, pesticides, salinity, radioactivity, and other related constituents.

General Permit for Stormwater Discharges Associated with Construction Activity

Construction activities are regulated under the NPDES General Permit for Discharges of Storm Water Runoff associated with Construction Activity (General Construction Permit), provided that the total amount of ground disturbance during construction is one acre or more. These activities include clearing, grading, and disturbances to the ground such as stockpiling, or excavation that results in soil disturbances. Coverage under a General Construction Permit requires the preparation 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 best management practices (BMP) monitoring and maintenance schedule to determine the amount of pollutants leaving the site. The SWPPP does not have to be submitted to the RWQCB but must be available at each facility. The NOI includes site-specific information and the certification of compliance with the terms of the General Construction Permit.

Dewatering

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 wastewater that poses little or no threat to water quality may be discharged directly to surface water under certain conditions. The CVRWQCB has adopted a general NPDES permit, the General Order for Dewatering, for short-term discharges of small volumes of wastewater from certain construction-related activities. Discharges may be covered by the General Order for Dewatering provided either that they are four months or less in duration or that the average dry-weather discharge does not exceed 0.25 million gallons per day (mgd). Construction dewatering, and miscellaneous dewatering/low-threat discharges are among the types of discharges that may be covered by the permit.

To obtain coverage, the applicant must submit an NOI and pollution prevention and monitoring and reporting plan (PPMRP). The PPMRP must include a description of the discharge location,

8 California Regional Water Quality Control Board, Central Valley Region, *The Water Quality Control Plan* (Basin Plan), Fourth Edition – 1998, revised 2004.

discharge characteristics, primary pollutants, receiving water, treatment systems, spill prevention plans, and other measures necessary to comply with discharge limits. A representative sampling and analysis program must be prepared as part of the PPMP and implemented by the permittee, along with recordkeeping and quarterly reporting requirements during dewatering activities.

For dewatering activities that are not covered by the General Dewatering Permit, an individual NPDES permit and waste discharge requirements (WDRs) must be obtained from the RWQCB. This is intended to ensure that the developer/contractor take all reasonable steps necessary to avoid adverse impacts on existing property caused by dewatering.

State Reclamation Board

The State Reclamation Board (SRB) permit is needed for any project that may have an effect on the flood control functions of levees. Through the permitting process, the SRB ensures that there are no residences built within the local adopted plan of flood control (a flood control plan and/or reclamation strategy for a specific area that has been adopted by the SRB or the Legislature). An adopted plan of flood control includes the natural stream channel and overbank area at design flood levels or a 100-year flood elevation, areas between and including the project levees, areas where there are flowage easements, and up to 10 feet landward from the landside toe of a federal flood control project levee.

Local Regulations

City of Sacramento Stormwater Quality Improvement Program (SQIP)

The SQIP was established in 1990 to reduce the pollution carried by stormwater into local creeks and rivers. The program is based on the NPDES municipal stormwater discharge permit, and 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 outlines stormwater management priorities, key elements, strategies, and evaluation methods of the City's Stormwater Management program for 2003-2008.

City of Sacramento Stormwater Management and Control Code

The City Stormwater Management and Control Code (Chapter 13.16 of the City Code) is intended to control nonstormwater discharges to the stormwater conveyance system; eliminate discharges to the stormwater conveyance system from spills, dumping, or disposal of materials other than stormwater; and reduce pollutants in urban stormwater discharges to the maximum extent practicable. Nonstormwater discharges are prohibited except where the discharge is regulated under a NPDES permit (see the descriptions of the NPDES in the discussions of federal and state water quality regulations above). Discharges from specified activities that do not cause or contribute to the violation of any plan standard, such as landscape irrigation and lawn watering and flows from fire suppression activities, are also exempt from this prohibition. Discharges of pumped groundwater not subject to a NPDES permit may be permitted to discharge to the stormwater conveyance system upon written approval from the City and in compliance with the City's conditions of approval.

Post-construction nonstormwater and pollutant discharges resulting from new development are minimized and controlled using source and/or treatment control measures to remove and

prevent pollution in stormwater as determined appropriate by the City. These measures may include, but are not limited to, specific control measures for: storage and handling of commercial/industrial materials, vehicle and equipment maintenance, repair, and washing, waste handling, and permanent “no dumping-drains to river” storm drain markings. Other measures may be implemented as deemed appropriate by an enforcement official for the City.

City of Sacramento Grading, Erosion, and Sediment Control Ordinance

The City Grading, Erosion, and Sediment Control Ordinance (Title 15, Chapter 15.88 of the City Code) sets forth rules and regulations to control land disturbances, landfill, soil storage, pollution, and erosion and sedimentation resulting from construction activities. With limited exceptions, grading approval must be received from the City Department of Utilities before construction. All project applicants, regardless of project location, are required to prepare and submit separate erosion and sediment control plans (ESC plans) applicable to the construction and post-construction periods. The ESC plans shall include erosion controls such as straw mulch and tackifiers, sediment controls such as fiber rolls, stabilized entrances and inlet protection and housekeeping practices such as concrete management and spill prevention. The ordinance also specifies other requirements, such as written approval from the City for grading work within the right-of-way of a public road or street, or within a public easement.

Groundwater Discharges (Dewatering)

The City requires that any short-term discharge be permitted, or an approved MOU for temporary long-term discharges be established, between the discharger and the City. Short-term limited discharges of seven days duration or less must be approved through the City Department of Utilities by acceptance letter, and a permit must be obtained from the SRCSD. Long-term discharges of greater duration than seven days must be approved through the City Department of Utilities, City attorney, and City clerk 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 and SRCSD- and CVRWQCB-approved levels. All groundwater discharges to the sewer must be granted a SRCSD discharge permit. If the discharge is part of a groundwater cleanup or contains excessive contaminants, CVRWQCB or other appropriate agency approval is also required.

Because of the shallow water table, dewatering would likely be necessary at excavation sites in the project site. Often, the 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 and excavation-wall support need to be appropriate to the soil conditions. The required site-specific evaluation of soil conditions must contain recommendations for these systems specific to the site, and be incorporated into the construction design.

City of Sacramento General Plan

The City's current General Plan policy related to hydrology and water quality that is applicable to the proposed project is provided below, and is found in the General Plan's Health and Safety Element. The City is presently updating its General Plan, which is anticipated to be completed

in 2008. The City of Sacramento General Plan adopted the following policy that pertains to the impacts evaluated in this section.

PUBLIC FACILITIES AND SERVICES ELEMENT

Drainage

Goal A: Provide adequate drainage facilities and services to accommodate desired growth levels.

Policy

1.

Ensure that all drainage facilities are adequately sized and constructed to accommodate the projected increase in stormwater runoff from urbanization.

Policy

4.

Require private sector to form assessment districts and/or utilize other funding mechanisms to cover the cost of providing drainage facilities.

Policy

5.

Design visible drainage facilities to be visually attractive.

CONSERVATION AND OPEN SPACE ELEMENT

Outdoor Recreation

Goal A: Conserve and protect the Sacramento and American Rivers, their shorelines and parkways.

PRESERVATION OF NATURAL RESOURCES

Policy

1.

Explore ways to reverse degradation and pollution, and enhance the beauty and wildlife habitats of creeks and drainage canals.

Richards Boulevard Area Plan

There are no goals or policies in the Richards Boulevard Area Plan related to hydrology or water quality that pertain to the proposed project.

Central City Community Plan

There are no goals or policies in the Central City Community Plan related to hydrology or water quality that pertain to the proposed project.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

Impacts to hydrology and water quality were analyzed qualitatively based on review of the project design and intended uses and information provided in the drainage study, geotechnical report, and Phase 1 Environmental Site Assessment provided by the applicant to establish existing conditions and to identify potential environmental effects.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project substantially degrades water quality and violates any water quality objectives set by the SWRCB, due to increases in sediments and other contaminants generated by consumptions and/or operational activities.

In addition to the City of Sacramento standards of significance and consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if the proposed project would

- 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
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

Project-Specific Impacts and Mitigation Measures

6.7-1 Implementation of the proposed project would result in an increase in the rate and amount of stormwater runoff, which could exceed the capacity of the stormwater collection infrastructure and result in an increase in on- or off-site flooding.

Scenario A and B

The proposed project site currently is served by Drainage Basin 111 and the Sump Pump 111 station located immediately west of the project site. The proposed project would be developed on land that currently contains approximately 51.5 acres of impervious surfaces. Development of the proposed project, under either Scenario, is expected to increase the amount of impervious surfaces by approximately 5.3 acres, leaving approximately 8.2 acres of pervious surfaces. Therefore, the project would result in an increase in stormwater runoff when compared to current conditions.

The proposed project would comply with City Design Standards, which may require the project applicant to provide storage for stormwater runoff for the 65 acre site, which could include on-site detention in landscape areas, parking lots, pipes, or underground vaults. The detention facility is considered a part of the proposed project.

In addition, the proposed project includes the construction of storm drainage collection infrastructure. Stormwater pipelines would be constructed in road right-of-ways to accommodate stormwater flows generated from the proposed project. The stormwater from the project flows south through North 7th Street, then travels west through Richards Boulevard, and connects to a large existing storm drainage line in North 5th Street. These flows are directed to Sump Pump 111 and are pumped into the Sacramento River. The proposed drainage system can be seen in Figure 2-9 in the Project Description.

Due to the small change in the increase in impervious area on-site and design features that would provide for on-site detention for the 65 acre site, development of the proposed project is

not expected to substantially increase the amount of stormwater runoff, exceed infrastructure capacity or increase the potential for on- or off-site flooding above existing conditions. Therefore, this impact is considered ***less than significant***.

Mitigation Measure

None required.

6.7-2 Site runoff containing urban pollutants and sediment caused by dewatering activities and erosion within the project site could be discharged to the Sacramento River, which could affect surface water quality.

Scenario A and B

Construction

Earth-disturbing activities such as trenching, excavating, grading, and placement of fill at the site would expose soils to wind and water erosion. Spills or leaks from heavy equipment and machinery (petroleum products and/or heavy metal), staging areas, or building sites (paints, solvents, and cleaning agents) could also occur. Construction site runoff, including stormwater runoff and dewatering discharges, could contain soil and sediment, hazardous constituents, or elevated levels of contaminants, which, if not properly managed, could be discharged to the American and Sacramento Rivers through the storm drainage system and potentially degrade water quality. These potential impacts would be short-term and limited to the duration of construction.

Operation

The proposed project would increase the amount of impervious surface at the 65-acre site from 51.5 acres (approximately 79 percent of the site) to 56.8 acres (approximately 87 percent of the site). The increase in impervious surfaces, although relatively small, combined with increased intensity of land use over existing conditions, would increase urban pollutants discharged to the on-site drainage system. Pollutants in runoff typically associated with urban uses include oil and grease, petroleum hydrocarbons (gasoline and diesel fuel), heavy metals such as lead, copper and zinc, suspended solids, and pesticides and herbicides used for landscaping.

Construction and occupancy of the proposed project would result in an increase in site runoff, which could contain both sediment from erosion and contaminants from urban pollutants present at the project site. The presence of increased sediment and contaminants in construction site runoff (including dewatering) and stormwater runoff associated with project operation that could be discharged to the American and Sacramento Rivers could degrade surface water quality, making this a *potentially significant impact*.

Mitigation Measures

Implementation of the following mitigation measures, including standard water quality BMPs used within the City, would reduce impacts related to impacts to surface water quality to a ***less-than-significant level***.

6.7-2 (A & B) *Prior to the issuance of a grading permit, the project applicant shall:*

- a) *Provide proof that a NOI for coverage under the State NPDES General Permit for Discharges of Storm Water Runoff associated with Construction Activity has been submitted to the State Water Resources Control Board.*
- b) *Prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to the State Water Resources Control Board that includes the following items:*
 - o *A vicinity map showing the construction site, nearby roadways, topography, and geographic features surrounding the site;*
 - o *A site map showing the proposed project in detail, including the existing and planned paved areas, buildings, topography, drainage patterns across the project site, and the proposed stormwater discharge locations;*
 - o *A detailed, site-specific listing of the potential sources of stormwater pollution;*
 - o *A description of the type and location of erosion and sediment control BMPs to be implemented at the project site;*
 - o *The name and phone number of the person responsible for implementing the SWPPP; and*
 - o *Certification by the landowner or an authorized representative of the landowner.*
- c) *Obtain, if necessary, a dewatering permit or MOU from the City.*
- d) *Prepare an Erosion and Sediment Control Plan (ESC plan) in compliance with the Section 15.88.250 of the City's Municipal Code, Grading Ordinance, and Stormwater Management and Discharge Ordinance, with guidance from the Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control. The ESC plan shall include erosion control BMPs, sediment control BMPs, and good housekeeping practices to be implemented during construction.*
- e) *Prepare a post construction erosion and sediment control plan (PC) plan to control surface runoff and erosion after construction of the proposed project has been completed. The plan shall contain a statement of the purpose of the proposed BMPs and all the information required and contained in the Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control.*
- f) *Incorporate specific source control measures for: 1) commercial/industrial material storage, 2) commercial/industrial outdoor materials handling, 3) commercial/industrial vehicle and equipment fueling, 4) commercial/industrial vehicle and equipment maintenance, repair, and washing, 5) commercial/industrial/multi-family residential waste handling, 6) multi-family residential vehicle wash areas, and 7) permanent "no dumping-drains to river" storm drain markings. Since this project is not served by a regional water quality control facility and is greater than one acre, the project shall be required to incorporate regional and/or on-site stormwater quality control measures such as water quality basins, vegetated swales, stormwater planters, and/or sand filters. The project applicant shall be required to provide a mechanism to fund the maintenance of*

the treatment control measures including entering into a maintenance agreement.

Compliance with these mitigation measures would reduce stormwater pollutant discharges to Sump Pump 111, the American River, and ultimately the Sacramento River. The design of the stormwater drainage system and treatment controls would ensure that operational impacts on water quality resulting from erosion and urban pollutants in stormwater runoff from the proposed project would be less than significant.

6.7-3 Implementation of the proposed project could adversely affect groundwater quality, the rate and direction of groundwater flow, or interfere with groundwater recharge.

Scenario A and B

Dewatering

Shallow groundwater conditions at the project site would require construction dewatering, which could cause temporary changes to groundwater supply, rate and direction of flow, and groundwater quality over extended periods of time if not properly controlled. Permanent dewatering activities that would pump groundwater are not permitted by the City of Sacramento. Therefore, groundwater pumping at the project site, which would only occur during construction, would not permanently change the quantity of groundwater, alter the direction or the rate of flow of groundwater, or affect groundwater quality. However, temporary changes could occur during construction.

Groundwater Recharge

The majority of the project site is currently covered by impervious surfaces, limiting groundwater recharge potential. Implementation of the proposed project would reduce the amount of pervious surfaces within the project site by approximately 5.3 acres, bringing the total acreage of pervious surfaces to 8.2 acres. Groundwater recharge in the City primarily occurs within the rivers and open space areas. Therefore, the removal of 5.3 acres of pervious surface within an area that does not substantially contribute to groundwater recharge would not adversely impact groundwater recharge.

Although groundwater recharge would not likely be adversely affected either during construction or operation of the proposed project, construction dewatering could deplete groundwater supplies in the project area, potentially causing changes in the rate and direction of groundwater flow and degraded groundwater quality if not properly controlled. For this reason, this is considered a *potentially significant impact*.

Mitigation Measure

Implementation of the following mitigation measures would reduce impacts related to impacts to groundwater supplies, flow, and quality to a ***less-than-significant level***.

6.7-3 (A & B)

Prior to the issuance of grading permits, the project applicant shall implement the Waste Discharge Requirements General Order for Dewatering and Other Low Threat

Discharges to Surface Waters, as established by the CVRWQCB, which shall be enforced by the City. The permit states that construction dewatering activities may occur provided that discharges do not contain significant quantities of pollutants and are either four months or less in duration or the average dry weather discharge does not exceed 0.25 mgd.

Implementation of this mitigation measure would place a limit on the amount of groundwater pumped during dewatering activities, ensuring that groundwater supplies are not adversely affected. Without substantial groundwater depletion, changes to flow and movement of degraded groundwater to areas where groundwater has been depleted would be unlikely. Moreover, enforcement by the City would ensure that dewatering is consistent with the restrictions, standards, and requirements of the CVRWQCB.

Cumulative Impacts and Mitigation Measures

Potential impacts on hydrology and water quality can be contributed to by development not only within the City limits, but also in the watershed area that exists outside of the City limits. The cumulative setting for hydrology and water quality considers development within the Sacramento River watershed, of which the project site is a part of. The cumulative impact to the drainage infrastructure focuses on City drainage systems.

6.7-4 Implementation of the proposed project, in combination with other development within the City, could result in an increase in the rate and amount of surface and/or stormwater runoff discharged to the City's drainage system, and ultimately, the Sacramento River, which could result in localized flooding.

Scenario A and B

The proposed project, in addition to other development within the Sacramento area, would increase the amount of impervious surfaces throughout the area, which could increase the rate of volume of stormwater runoff into the City's drainage system. If not properly controlled, this could result in an adverse cumulative increase in localized flooding. However, project design includes adequate on-site detention facilities as required by City development standards. Therefore, surface and/or stormwater runoff from the project site would be properly contained on-site, making the proposed project's contribution to the cumulative flooding impacts in the area less-than-cumulatively considerable. Therefore, this would be a ***less-than-significant cumulative impact***.

Mitigation Measures

None required.

6.7-5 The proposed project, in combination with other development within the region, would result in the discharge of stormwater runoff containing urban pollutants and sediment to local waterways, which could affect surface water quality in the lower Sacramento River watershed.

Scenario A and B

The proposed project, in combination with other development within the region, would increase urban runoff into the Sacramento River, and increase the concentration of urban pollutants in

stormwater. As development occurs, there will be an increase in the amount of ground disturbing activities and an increase in impervious surfaces, which could contribute to increased sedimentation and pollutants in runoff, potentially affecting water quality throughout the watershed. The proposed project would result in discharges of site and/or stormwater runoff during both construction and operation of the proposed project; therefore, the proposed project's contribution to the cumulative impact would be considerable, and; therefore, this would be a *potentially significant cumulative impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce the proposed project's contribution to the cumulative surface water quality impact in the Sacramento River watershed to a less than considerable and this would be a ***less-than-significant cumulative impact***.

6.7-5 *Implement Mitigation Measures 6.7-2 (a) through (f) and 6.7-3.*

By implementing these mitigation measures, including preparing a NOI to prove coverage under the General Permit for Discharges of Storm Water Runoff associated within Construction Activity, General Order for Dewatering, City dewatering permit or MOU, SWPPP, ESC plan, PC plan, and incorporating source and treatment control measures, site and stormwater discharges from the project site would not contain substantial amounts of sediment or urban pollutants, reducing the project's contribution to the cumulative impacts to surface water quality in the Sacramento River watershed to a less than considerable level.

6.7-6 Dewatering activities and construction of the proposed project, in combination with other development within the Sacramento River watershed, could affect groundwater by depleting supplies, changing rate and/or direction of flow, and facilitate contaminants entering groundwater, affecting groundwater quality.

Scenario A and B

Excavation activities and subsurface features of new buildings planned for development in the region are expected to require some level of dewatering due to shallow groundwater conditions in the area. Dewatering occurring at several sites in close proximity to one another simultaneously could adversely affect groundwater supplies and quality in the area if not properly controlled. With the increase in impervious surfaces at project sites throughout the region, groundwater recharge could also be adversely affected in the area, which, in combination with dewatering activities in the region, could affect groundwater supplies. The impact to groundwater supplies from lack of recharge potential could then cause localized shifts in groundwater flow patterns that could cause nearby areas of degraded groundwater quality to shift.

The project site and most of the Central City area are currently covered with impervious surfaces. Also, as discussed under Impact 6.7-3, groundwater recharge in the City of Sacramento primarily occurs within the rivers and open space areas, so the slight increases in impervious surfaces throughout the City resulting from development projects would not significantly affect groundwater recharge within the area.

Although groundwater recharge would not be adversely affected by cumulative development within the area, the potential exists for simultaneous construction dewatering activities to

substantially deplete groundwater supplies, which could then cause changes in groundwater flow and the shifting of areas of degraded groundwater quality. This would be a *potentially significant cumulative impact*.

Mitigation Measures

Implementation of the following mitigation measure would reduce the proposed project's contribution to the cumulative impact to groundwater supplies, flow, movement, and quality to a less than considerable and this would be a ***less-than-significant cumulative impact***.

6.7-6 *Implement Mitigation Measure 6.7-3.*

By implementing this mitigation measure, which would require a General Permit for limiting pollutants and the duration or quantity of groundwater discharges, the proposed project would substantially reduce its contribution to any potential cumulative impact to groundwater supplies, flow, movement, or quality in the area to less than considerable.

6.8 Noise and Vibration

INTRODUCTION

This section describes the existing noise environment in the area of the proposed project site and the potential of the proposed project to significantly increase noise levels due to project construction and operation. The analysis included in this section was developed based on a field investigation to measure existing noise levels, noise standards in the City of Sacramento General Plan, and noise assessment methodologies including the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction model and others contained in the Federal Transit Administration's *Transit Noise and Impact Assessment* document. Traffic inputs for the noise prediction model were provided by the transportation consultant.

No comments pertaining to noise issues were received during circulation of the NOP.

ENVIRONMENTAL SETTING

Characteristics of Sound, Noise and Vibration

Sound

Sound is created when vibrating objects produce pressure variations that move rapidly outward into the surrounding air. The main characteristics of these air pressure waves are amplitude, which we experience as a sound's loudness, and frequency, which we experience as a sound's pitch. The standard unit of sound amplitude is the decibel (dB); it is a measure of the physical magnitude of the pressure variations relative to the human threshold of perception. The human ear's sensitivity to sound amplitude is frequency-dependent; it is more sensitive to sound with a frequency at or near 1000 cycles per second than to sound with much lower or higher frequencies.

Most "real world" sounds (e.g., a dog barking, a car passing, etc.) are complex mixtures of many different frequency components. When the average amplitude of such sounds is measured with a sound level meter, it is common for the instrument to apply different adjustment factors to each of the measured sound's frequency components. These factors account for the differences in perceived loudness of each of the sound's frequency components relative to those that the human ear is most sensitive to (i.e., those at or near 1000 cycles per second). This practice is called "A-weighting." The unit of A-weighted sound amplitude is also the decibel. But in reporting measurements to which A-weighting has been applied, an "A" is appended to dB (i.e., dBA) to make this clear. Table 6.8-1 lists representative environmental sound levels.

Noise

Noise is the term generally given to the "unwanted" aspects of intrusive sound. Many factors influence how a sound is perceived and whether or not it is considered annoying to a listener. These include the physical characteristics of a sound (e.g., amplitude, frequency, duration, etc.), but also non-acoustic factors (e.g., the acuity of a listener's hearing ability, the activity of the listener during exposure, etc.) that can influence the judgment of listeners regarding the degree of "unwantedness" of a sound.

TABLE 6.8-1		
REPRESENTATIVE ENVIRONMENTAL SOUND LEVELS		
Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	—110—	Rock Band
Jet Fly-over at 100 feet		
	—100—	
Gas Lawnmower at 3 feet		
	—90—	
		Food Blender at 3 feet
Diesel Truck going 50 mph at 50 feet	—80—	Garbage Disposal at 3 feet
Noisy Urban Area during Daytime		
Gas Lawnmower at 100 feet	—70—	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	—60—	
		Large Business Office
Quiet Urban Area during Daytime	—50—	Dishwasher in Next Room
Quiet Urban Area during Nighttime	—40—	Theater, Large Conference Room (background)
Quiet Suburban Area during Nighttime		
	—30—	Library
Quiet Rural Area during Nighttime		Bedroom at Night, Concert Hall (background)
	—20—	
		Broadcast/Recording Studio
	—10—	
Lowest Threshold of Human Hearing	—0—	Lowest Threshold of Human Hearing

Source: California Department of Transportation, *Technical Noise Supplement*, October 1998.

All quantitative descriptors used to measure environmental noise exposure recognize the strong correlation between the high acoustical energy content of a sound (i.e., its loudness and duration) and the disruptive effect it is likely to have as noise. Because environmental noise fluctuates over time, most such descriptors average the sound level over the time of exposure, and some add “penalties” during the times of day when intrusive sounds would be more disruptive to listeners. The most commonly used descriptors are:

Equivalent Energy Noise Level (L_{eq}) is the constant noise level that would deliver the same acoustic energy to the ear of a listener as the actual time-varying noise over the same exposure time. No “penalties” are added to any noise levels during the exposure time; L_{eq} would be the same regardless of the time of day during which the noise occurs.

Day-Night Average Noise Level (L_{dn}) is a 24-hour average L_{eq} with a 10 dBA “penalty” added to noise levels during the hours of 10:00 p.m. to 7:00 a.m. to account for increased sensitivity that people tend to have to nighttime noise. Because of this penalty, the L_{dn} would always be higher than its corresponding 24-hour L_{eq} (e.g., a constant 60 dBA noise over 24 hours would have a 60 dBA L_{eq} , but a 66.4 dBA L_{dn}).

Community Noise Equivalent Level (CNEL) is an L_{dn} with an additional 5 dBA “penalty” for the evening hours between 7:00 p.m. and 10:00 p.m.

Community noise exposures are typically represented by 24-hour descriptors, such as a 24-hour L_{eq} or L_{dn} . One-hour and shorter-period descriptors are useful for characterizing noise caused by short-term activities, such as the operation of construction equipment.

Ground-borne Vibration

Vibrating objects in contact with the ground radiate energy through that medium. If a vibrating object is massive enough and/or close enough to an observer, its vibrations are perceptible. Vibration magnitude is measured in vibration decibels (VdB) relative to a reference level of 1 micro-inch per second, the human threshold of perception. The background vibration level in residential areas is usually 50 VdB or lower, well below the threshold of perception for humans, which is around 65 VdB. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, the vibration from traffic is rarely perceptible. Common vibration sources and the human and structural response to ground-borne vibration are illustrated in Figure 6.8-1.

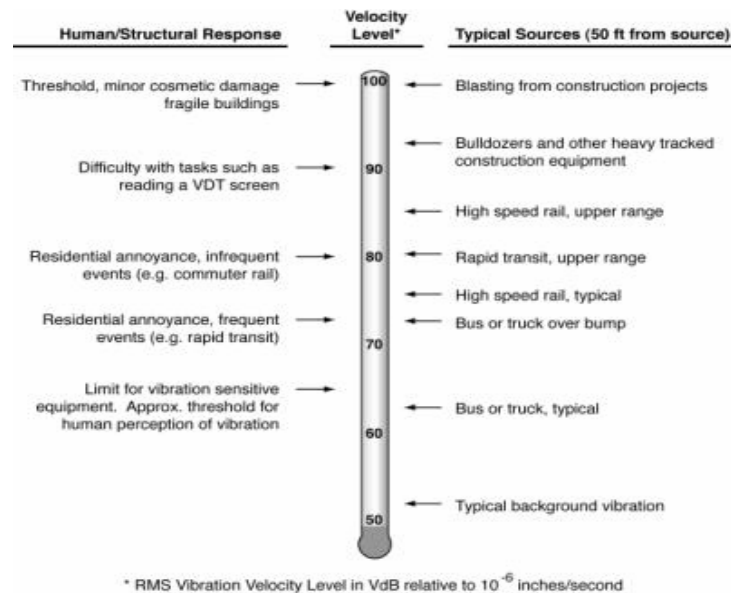


Figure 6.8-1 Typical Levels of Ground-Borne Vibration¹

Accurate estimates of ground-borne vibration are complicated due to the many factors that influence vibration levels at potential receivers. Ground-borne vibration problems occur almost exclusively inside buildings. Therefore, the characteristics of the receiving building are a key component in the evaluation of ground-borne vibration. Vibration may be perceptible to people who are outdoors, but it is very rare for outdoor vibration to cause complaints. The vibration levels inside a building depend on the vibration energy that reaches the building foundation, the coupling of the building foundation to the soil, and the propagation of the vibration through the building structure. The general guideline is that the more massive a building is, the lower its response to incident vibration energy in the ground.¹

1 U.S. Department of Transportation Federal Railroad Administration, *High-Speed Ground Transportation Noise and Vibration Impact Assessment*. October 2005. pp. 6-7.

Existing Conditions

Existing Noise-Sensitive Receptors

Some land uses are more sensitive to noise than others. These sensitive uses are commonly referred to as sensitive receptors and normally include residences, hospitals, churches, libraries, schools, and retirement homes. Noise sensitive land uses are typically given special attention because activities at these uses require relatively quiet environments.

The proposed project would be developed on land currently used for cold storage, concrete storage and delivery, livestock feed supply, hay-bail compression and delivery, and Sacramento Habitat for Humanity warehouse operations. The project area is located within the Richards Redevelopment Area and is surrounded by dense urban uses. Surrounding land uses consist of the American River to the north, industrial uses to the south, industrial and office uses to the east, and industrial uses to the west. Regional access to the project site is provided by Interstate 5 and State Route 160. Local access is provided by Richards Boulevard. Dos Rios Elementary School is located approximately 2,000 feet east of the proposed project on Richards Boulevard. The nearest residential uses are located along Dos Rios Street, immediately south of the school across Richards Boulevard.

Existing Noise and Vibration Levels

The project site is surrounded by dense urban development. Consequently, a fairly heavy volume of traffic operates on the surrounding local streets and freeways throughout the day. Trucking facilities, such as the neighboring FedEx facility, are present throughout the Richards Boulevard area. While there is heavy traffic on State Route 160 and Interstate 5, localized truck and automobile traffic has the greatest effect on project site noise exposure. The average, minimum and maximum traffic noise levels, and the distances to nearest road centerlines at three measurement locations are summarized in Table 6.8-2. Noise measurement locations are shown on Figure 6.8-2.

The most common sources of ground-borne vibration in urban environments are railroad trains, buses on rough roads, and construction activities such as blasting, pile driving, and operation of heavy earth-moving equipment. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Current existing ground-borne vibration stems from heavy truck traffic and onsite heavy equipment operations.

REGULATORY SETTING

Federal Regulations

Federal Transit Administration

The Federal Transit Administration (FTA) has developed extensive methodologies and significance criteria for the evaluation of vibration impacts from construction activities from and surface transportation modes. Table 6.8-3 shows the FTA screening distances for potential vibration impacts in the vicinity of mass transit facilities.

TABLE 6.8-2

EXISTING DAYTIME NOISE LEVELS AT SELECTED LOCATIONS

Measurement Location	Distance to Centerline	Primary Noise Sources	Measured Noise Levels		
			15-minute L_{eq}	L_{max}	L_{min}
1 – 7 th Street	32 feet	Transportation	65.3 dBA	88.6 dBA	49.9 dBA
2 – Richards Boulevard in front of project site	30 feet	Transportation – Major influence from heavy and light duty trucks	77.5 dBA	95.2 dBA	59.4 dBA
3 – Dos Rios Elementary School located at 700 Dos Rios Street	69 feet	Transportation – Major influence from heavy and light duty trucks	71.2 dBA	90.3 dBA	54.5 dBA

Notes:
 L_{min} is the minimum instantaneous noise level during the measurement period, while L_{max} is the maximum instantaneous noise level during the measurement period.
Source: EIP Associates, a division of PBS&J, 2006.

TABLE 6.8-3

SCREENING DISTANCES FOR VIBRATION ASSESSMENT

Type of Project	Critical distances for Land Use Categories		
	Distance from Right-of-Way or Property Line (feet)		
	Land Use Category 1 ¹	Land Use Category 2 ²	Land Use Category 3 ³
Conventional Commuter Railroad	600	200	120
Rail Rapid Transit	600	200	120
Light Rail Transit	450	150	100
Intermediate Capacity Transit	200	100	50
Bus Projects	100	50	----

Notes:

1. Tracts of land where quiet is an essential element in their intended purposes. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor uses. Also included are recording studios and concert halls.
2. Residences and buildings where people normally sleep. This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.
3. Institutional land uses with primarily daytime and evening uses. 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. Places for meditation or study associated with cemeteries, monuments, museums, campgrounds, and recreational facilities can also be considered in this category. Certain historical sites and parks are also included.

Source: Federal Transit Administration, *Transit Noise Impact and Vibration Assessment*, May 2006.



Source: EIP Associates, a Division of PBS&J, 2007.



FIGURE 6.8-2
Noise Measurement Locations

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State Regulations

General Plan Guidelines

The *State of California General Plan Guidelines 2003* promotes use of the L_{dn} or CNEL descriptors for evaluating land use - noise compatibility. Denotation of a land use as “normally acceptable” implies that the highest noise level in that band is the maximum desirable to assure an acceptable indoor noise level in buildings that do not incorporate any special acoustic insulation features. The *Guidelines* also provide an interpretation as to the suitability of various types of construction with respect to the range of outdoor noise exposure. The objective of the *Guidelines* is to provide local communities with a means of judging the noise environment it deems to be generally acceptable while recognizing the variability in perceptions of environmental noise that exist between communities and within a given community.

Title 24

Title 24 of the California Code of Regulations codifies Sound Transmission Control requirements, which establishes uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings. Specifically, Title 24 states that interior noise levels attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room of new dwellings. Dwellings are required to be designed so that interior noise levels will meet this standard for at least ten years from the time of building permit application.

Local Regulations

City of Sacramento

City of Sacramento General Plan

The California Government Code requires that a noise element be included in the general plan of each county and city in the state. The purpose of the noise element is to ensure that noise control is incorporated into the planning process. The noise element can help city planners achieve and maintain consistent noise levels for existing and proposed land uses. The City of Sacramento General Plan does not have a stand-alone Noise Element. Instead, goals, policies, and information related to noise are included in the Health and Safety element of the General Plan. This element establishes maximum acceptable interior and exterior noise level criteria for new single-family development, multi-family development, schools, and libraries. These City standards are shown in Figures 6.8-3a and 6.8-3b. The land use compatibility standards presented in Figure 6.8-3a are very similar to those in the *State General Plan Guidelines*, the only difference being the lack of overlap in the compatibility categories.

The General Plan specifies a maximum interior noise level in residential uses of 45 dB L_{dn} and a maximum exterior noise level of 60 dB L_{dn} ; the exterior standard also applies to rear yards for single-family development and in common outdoor use areas in multi-family development. In addition, the General Plan stipulates maximum interior instantaneous noise levels of 50 dBA in bedrooms and 55 dBA in other habitable rooms. There are no standards in the General Plan specifically for commercial and retail uses; however there is a 65 dBA L_{dn} exterior standard for commercial office buildings.

LAND USE CATEGORY	COMMUNITY NOISE EXPOSURE L_{dn} OR CNEL db					
	55	60	65	70	75	80
Residential	////			////		
))))))		+++++
Transient Lodging – Motels, Hotels	////			////		
))))))	+++++
Schools, Libraries, Churches, Hospitals, Nursing Homes	////			////		
))))))		+++++
Auditoriums, Concert Halls, amphitheatres	////			////		
					+++++	
Sports Arena, Outdoor Spectator Sports	////			////		
					+++++	
Playgrounds, Neighborhood Parks	////			////		
))))))		+++++
Golf Courses, Riding Stables, Water Recreation, Cemeteries	////			////		
))))))		+++++
Office Buildings, business Commercial and Professional	////			////		
))))))	
Industrial Manufacturing, Utilities Agriculture	////			////		
))))))	

INTERPRETATION

////	NORMALLY ACCEPTABLE))))))	NORMALLY UNACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise requirements		New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirement must be made and needed noise insulation features included in the design.	
\\\\\\\\\\\\\\\\	CONDITIONALLY ACCEPTABLE	+++++	CLEARLY UNACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design.		New construction or development clearly should not be undertaken.	

Source: Sacramento General Plan, 1988.



FIGURE 6.8-3a
Land Use Compatibility for Community Noise Environments

Applicable Area

Noise Source	Land Use	Interior	Exterior	Statement Requirements	Noise Element Requirmenets
Traffic or fixed source (Industrial, plants, etc.)	Single Family	X	X	None	$L_{dn} < 45 \text{ db}^2$
	Single Family		X	None	$L_{dn} \leq 60 \text{ dB}$ in backyards
	Multi-Family ¹	X		$L_{dn} < 45 \text{ dB}$	$L_{dn} < 45 \text{ dB}$
	Multi-Family		X	None	$L_{dn} \leq 60 \text{ dB}$ in common outdoor use areas
	Schools	X		None	Noisiest hourly $L_{ea} \leq 40 \text{ dB}$ during school day
	Schools		X	None	$L_{dn} \leq 60 \text{ dB}$
	Libraries	X		None	Noisiest hour $L_{eq} \leq 45 \text{ dB}$
	Libraries		X	None	None
Aircraft	Single-Family	X		None	$L_{dn} \leq 45 \text{ dB}$ and maximum instantaneous levels of $\leq 50 \text{ dBA}$ in bedrooms and $\leq 55 \text{ dBA}$ in other habitable rooms ²
	Single-Family		X	CNEL $\leq 65 \text{ dB}$ (State Aeronautics Noise Standards) requirement does not apply to Mather and McClellan's AFB's	CNEL $\leq 60 \text{ dB}$ for Metro Airport CNEL $\leq 65 \text{ dB}$ for all others
	Multi-Family	X		$L_{dn} \leq 45 \text{ dB}$	$L_{dn} \leq 45 \text{ dB}$ and maximum instantaneous levels of $\leq 50 \text{ dBA}$ in bedrooms and $\leq 55 \text{ dBA}$ in other habitable rooms ²
	Multi-Family		X	CNEL $\leq 65 \text{ dB}$ (State Aeronautics Noise Standards) requirement does not apply to Mather and McClellan's AFB's	CNEL $\leq 60 \text{ dB}$ for Metro Airport CNEL $\leq 65 \text{ dB}$ for all others
	Schools	X		None	Noisiest hourly $L_{eq} \leq 40 \text{ dB}$ during school day
	Schools		X	CNEL $\leq 65 \text{ dB}$ (State Aeronautics Noise Standards) requirement does not apply to Mather and McClellan's AFB's	CNEL $\leq 60 \text{ dB}$ for Metro Airport CNEL $\leq 65 \text{ dB}$ for all others
	Libraries	X		None	Noisiest hour $L_{eq} \leq 45 \text{ dB}$
	Libraries		X	None	None
Rail Traffic	Single-Family	X		None	$L_{dn} \leq 45 \text{ dB}$ and maximum instantaneous levels of $\leq 50 \text{ dBA}$ in bedrooms and $\leq 55 \text{ dBA}$ in other habitable rooms ²
	Single-Family		X	None	$L_{dn} \leq 60 \text{ dB}$
	Multi-Family	X		$L_{dn} \leq 45 \text{ dB}$ unless there are less than 4 trains per day between 7:00 a.m. and 10:00 p.m. and there are no trains between 10:00 p.m. and 7:00 a.m.	$L_{dn} \leq 45 \text{ dB}$ and maximum instantaneous levels of $\leq 50 \text{ dBA}$ in bedrooms and $\leq 55 \text{ dBA}$ in other habitable rooms ²
	Multi-Family		X	None	$L_{dn} \leq 60 \text{ dB}$
	Schools	X		None	Noisiest hourly $L_{eq} \leq 40 \text{ dB}$ during school day
	Schools		X	None	Maximum instantaneous levels $\leq 85 \text{ dBA}$
	Libraries	X		None	Noisiest hour $L_{eq} \leq 45 \text{ dB}$
	Libraries		X	None	None

1 Multi-family includes hotel, motel, apartment houses, and dwellings other than detached single-family dwellings as defined by title 24, Part 2, California Administrative Code.
 2 The requirement for interior noise exposure is triggered when the exterior L_{dn} exceeds 60 dB.
 3 Projects for which U.S. Department of HUD financing is requested are subject to HUD noise requirements. The noise element requirements listed in this table are at least as stringent as the HUD requirements.

Source: Sacramento General Plan, 1988.



FIGURE 6.8-3b
Maximum Acceptance Interior and Exterior Noise Levels for New Development without Mitigation

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Township 9

Each goal in the existing General Plan is implemented by a number of corresponding policies. The applicable goals and policies are listed below:

Goal A **Future development should be compatible with the projected year 2016 noise environment.**

Policies

1. Require an acoustical report for any project which would be exposed to noise levels in excess of those shown as normally acceptable in Figure 3. The contents of the acoustical report shall be as described in the Noise Assessment Report Guidelines. No acoustical report shall be required where City staff has an existing acoustical report on file which is applicable.
2. Require mitigation measures to reduce noise exposure to the "Normally Acceptable Levels" (Figure 3) except where such measures are not feasible. It is recognized that there are many areas within the City for which it is not feasible to provide further noise mitigation. It is also recognized that some projects, because of their location, design, or size may not be able to incorporate mitigation measures that are feasible for larger projects or for projects in different locations. Specifically, around McClellan Air Force Base, there are areas where the noise contours indicate that it may be clearly infeasible to achieve the "Normally acceptable" noise level. Projects in these areas may be allowed to exceed the maximum acceptable noise level. However, each project shall be subject to mitigation measures to the maximum extent feasible.
3. Land uses proposed where the exterior noise level would be below the "normally acceptable" limit may be approved without any requirement for interior or exterior mitigation measures.

Where the exterior noise is below the "normally acceptable" limit, it is assumed that any buildings involved are of normal conventional construction without any special interior noise provisions. This will, under normal circumstances, provide an acceptable interior noise level.

"Maximum acceptable" interior noise levels have not been established for land use categories in Figure 3. The types of interior use in these categories vary substantially. As a general rule, acceptable noise mitigation will be that which provides for interior noise levels comparable to the noise levels that would exist in buildings where the exterior noise is below the "normally acceptable" standard.

Goal C **Eliminate or minimize the noise impacts of future development on existing land uses in Sacramento.**

Policies

1. Review projects that may have noise generation potential to determine what impact they may have on existing uses. Additional acoustical analysis may be necessary to mitigate identified impacts.

There are areas of the City which are considered relatively quiet (ambient levels below "normally acceptable" noise levels). While new development in these areas might not cause the "normally acceptable" noise level for existing development to be exceeded, it is recognized that such new development might cause an increase in ambient noise considered significant in terms of impacts on existing uses.

Enforce the Sacramento Noise Ordinance as the method to control noise from sources other than transportation sources.

Goal D **Reduce noise levels in areas where noise exposure presently exceeds the standards established in Figure 3.**

Policies

2. Encourage the incorporation of the latest noise control technologies in all projects.

Sacramento Central City Community Plan

In addition to the General Plan, the City of Sacramento has also developed plans that are more specific to the various communities in the City. The City's "Central City Community Plan" contains the following sub goal under its environmental goal:

Sub-goal **Provide an environment which is free of annoying noise and continue to reduce air pollution.**

Sacramento Municipal Code

The Sacramento Municipal Code also contains regulations concerning noise. These noise regulations are found in Title 8 – Health and Safety, Chapter 8.68 – Noise Control. Of the regulations in Chapter 8.68, not all are applicable to the proposed project. Of the applicable regulations, Section 8.68.060 sets standards for cumulative exterior noise levels at residential and agricultural properties. Section 8.68.060 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 a.m. and 6 p.m. Monday through Saturday, and between the hours of 9 a.m. and 6 p.m. on Sunday. Section 8.68.060 also requires the use of exhaust and intake silencers for internal combustion engines, and provides for construction work to 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 three days.

Richards Boulevard Area Plan

The Richards Boulevard Area Plan includes the following development standards that pertain to the proposed project.

Development Standards for Residential Use

Noise Levels

Residential projects shall be evaluated in the context of surrounding existing and allowed industrial uses pending the transition from industrial to residential. Residential development will be designed to adhere, given such surrounding industrial noise levels, to acceptable CNEL and dB level of the General Plan and Noise Control Ordinance of the City for interior residential areas for purposes of permissible residential sound generation and for residential interior courtyards and rear yard areas as defined in the Richards Boulevard Special Planning District Ordinance.

A noise study which documents the ability of new development to achieve acceptable interior levels as specified in the noise control laws and regulations, through design or building features such as sound-rated windows and noise insulation, will be required.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

Analyses of existing and future noise environments were based on noise level monitoring and noise prediction modeling. Traffic noise levels were modeled using the Federal Highway Administration (FHWA) Traffic Noise Model Version 2.5 (TNM) and a simplified spreadsheet based on the FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels. Traffic volumes utilized as data inputs in the TNM model were provided by the project traffic engineer. Noise levels from future light rail operations along Richards Boulevard were estimated using best estimates of the number of trains per day, number of cars per train, train whistle blasts and average speeds.

Construction noise and vibration levels at nearby sensitive land uses were estimated using FTA methodologies. Modeling results were compared to appropriate standards of significance, as specified below. Noise modeling results are included as Appendix L.

Vibration impacts attributed to the future light rail tracks are not evaluated in this EIR. There are no design plans for the construction of the rails; therefore, the distance of the rails from the proposed buildings, the type of track bedding, and other factors that play a role in the amount of vibration generated from the light rail line are not known. Furthermore, the City of Sacramento has no authority to mitigate for vibration because the facilities belong to another agency (RT). RT will need to develop mitigation for the potential effect of vibration on the existing structures on the Township 9 site. The future light rail facilities will be evaluated in a separate EIR as part of the separate project.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project results in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;
- The project results in residential interior noise levels of L_{dn} 45 dB or greater caused by noise level increases due to the project;
- Construction noise levels exceed the standards in the City of Sacramento Noise Ordinance;
- Existing and/or planned residential and commercial areas are exposed to vibration peak particle velocities greater than 0.5 inches per second due to project construction;
- Adjacent residential and commercial areas are exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or
- Historic buildings and archeological site are exposed to vibration peak particle velocities greater than 0.25 inches per second due to construction, highway traffic and rail operations.

Project-Specific Impacts and Mitigation Measures

6.8-1 Construction of the proposed project would temporarily expose existing sensitive receptors to increased noise levels.

Scenario A and B

During construction of the proposed project, noise would be produced by the operation of heavy-duty equipment and various other demolition and construction activities, including activities associated with operation of a proposed temporary recycling facility, which would recycle the structural materials of the existing buildings to be demolished on the project site. Similar to other projects in the Sacramento Central City area, pile driving could be used in conjunction with drilling for founding the buildings. A possible program for founding buildings could employ drilling to a certain depth, followed by pile driving. Construction noise levels were estimated using FTA methodology, with the results shown in Table 6.8-4. California building standards generally provide a reduction of exterior-to-interior noise levels of about 20 dB with

TABLE 6.8-4			
ESTIMATED CONSTRUCTION NOISE LEVELS (IN DBA)			
Construction Equipment	8-hour L_{eq}		
	25 feet	50 feet	75 feet
Demolition			
Track Hoe	96	90	86.5
Crane	94	88	84.5
Excavator / Loader	91	85	81.5
Water Truck	94	88	84.5
Site Work			
Crawler Tractor	91	85	81.5
Grader	91	85	81.5
Loader	91	85	81.5
Compactor	88	82	78.5
Water Truck	94	88	84.5
Pile Driver	107	101	97.5
Foundation			
Backhoe	86	80	76.5
Loader	91	85	81.5
Forklift	85	79	75.5
Water Truck	94	88	84.5
Utilities			
Back Hoe	86	80	76.5
Water Truck	94	88	84.5
Forklift	85	79	75.5
Slab on Grade			
Skip Loader	88	82	78.5
Bobcat Tractor	90	84	80.5
Forklift	85	79	75.5
Steel Erection			
Crane	94	88	84.5
Air Compressor	87	81	75.5
Generator	87	81	77.5
Forklift	85	79	77.5
Decking/Slabs			
Generator	87	81	77.5
Forklift	85	79	75.5
Concrete Pump	88	82	78.5
Completion			
Forklift	85	79	75.5
Notes: Noise levels calculated from equations defined by the Federal Transit Administration's <i>Transit Noise and Vibration Impact Assessment</i> document, May 2006, pp. 12-2 to 12-7. Source: EIP Associates, a division of PBS&J, 2006.			

closed windows; newer buildings generally provide a reduction of 25 dB or more. Accordingly, interior noise levels would be reduced by 20 to 25 dB from the levels shown in Table 6.8-4.

Demolition would take approximately 120 days, but construction noise associated with other construction activities taking place over the next eight years, including site grading, excavation for infrastructure and building foundations, pile driving, building construction, and paving and landscaping installation, could affect existing noise-sensitive uses (the closest are within about 2,000 feet of the project site) and noise-sensitive uses constructed on the project site during

early project phases. Also, there are existing office and commercial/industrial uses adjacent to the project site; they would be occupied during the day when construction would occur and noise from construction could disturb people working in these buildings.

The project site would develop in four phases, with new residential uses introduced into the project site after each phase. Residents introduced onto the project site after each of the first three phases would be exposed to construction noise since they would be in close proximity to subsequent construction activity. The closest existing residential uses and the Dos Rios Elementary School to the east of the project site would most likely not be affected by construction noise during most phases because they are 2,000 feet or more from the construction sites. However, it is possible that pile driving noise could be audible at these locations. While it is anticipated that most occupants of these closest residential units would be at work during the day, school children would be in class and could be affected by pile driving activities.

Project construction activities would be limited to the hours of 7 a.m. to 6 p.m. Monday through Saturday, and the hours of 9 a.m. to 6 p.m. on Sunday and so the noise produced from these activities would be exempt from the cumulative exterior noise limits at residential properties set by the Sacramento Municipal Code. However, pile driving and other construction activities would expose occupants of nearby buildings to high levels of noise during the day. Consequently, the impact would be considered *significant*.

Mitigation Measures

Implementation of the following mitigation measures would reduce exposure of occupants on and off the site to the maximum extent feasible; however, due to pile driving and other construction activities, this short-term impact would remain ***significant and unavoidable***.

6.8-1 (A & B) *The contractor shall ensure that the following measures are implemented during all phases of project construction:*

- a) *Whenever construction during later project stages occurs near residential and other noise-sensitive uses built on site during earlier project stages, temporary barriers shall be constructed around the construction sites to shield the ground floor and lower stories of the noise-sensitive uses. These barriers shall be of ¾-inch Medium Density Overlay (MDO) plywood sheeting, or other material of equivalent utility and appearance, and shall achieve a Sound Transmission Class of STC-30, or greater, based on certified sound transmission loss data taken according to ASTM Test Method E90. The barrier shall not contain any gaps at its base or face, except for site access and surveying openings. The barrier height shall be designed to break the line-of-sight and provide at least a 5 dBA insertion loss between the noise producing equipment and the upper-most story of the adjacent noise-sensitive uses. If for practical reasons, which are subject to the review and approval of the City, a barrier can not be built to provide noise relief to the upper stories of nearby noise-sensitive uses, then it must be built to the tallest feasible height.*
- b) *Construction activities shall comply with the City of Sacramento Noise Ordinance, which limits such activity to the hours of 7 a.m. to 6 p.m. Monday through Saturday, the hours of 9 a.m. to 6 p.m. on Sunday, prohibits nighttime*

construction, and requires the use of exhaust and intake silencers for construction equipment engines.

- c) Construction equipment staging areas shall be located away from residential uses; pre-drill pile holes and use quieter "sonic" pile-drivers, where feasible; and restrict high noise activities, such as pile driving, the use of jackhammers, drills, and other generators of sporadic high noise peaks, to the hours of 7 a.m. to 6 p.m. Monday through Friday, or other such hours satisfactory to the City.

Implementation of Mitigation Measures 6.8-1 (a) through (c) would ensure maximal reduction of noise impacts to receptors near the construction sites by shielding construction activities and staging construction equipment away from residential uses, limiting construction hours to daytime hours, and use of exhaust and intake silencers on construction equipment. These measures would reduce exposure of occupants on and off the site to the maximum extent feasible; however, due to pile driving and other construction activities, this short-term impact would remain significant and unavoidable.

6.8-2 Ground-borne vibration from construction activity could cause structural damage to nearby buildings.

Scenario A and B

In addition to noise, construction activity also produces vibration. Construction-related vibration is normally associated with impact equipment such as jackhammers and pile drivers, and the operation of heavy-duty construction equipment such as trucks and bulldozers. Table 6.8-5 shows typical vibration levels for construction equipment.

Construction Equipment	PPV (in./sec.)			
	25 Feet	100 Feet	200 Feet	400 Feet
Pile Driver (Impact)	0.644	0.081	0.028	0.010
Vibratory Roller	0.210	0.026	0.009	0.003
Large Bulldozer	0.089	0.011	0.004	0.001
Loaded Trucks	0.076	0.010	0.003	0.001
Jackhammer	0.035	0.004	0.002	0.001
Small Bulldozer	0.003	<0.001	<0.001	<0.001

Source: Derived from Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006, p. 12-12.

Vibration can damage buildings constructed of reinforced concrete, steel or timber if the strength of the vibration exceeds a peak particle velocity (PPV) of 0.5 inches per second, though historic buildings or archeological sites would be at risk if the vibration peak particle velocities were greater than 0.25 inches per second. Ground-borne vibration that can cause structural damage is typically limited to impact equipment, especially pile-drivers.

All existing buildings on the project site (including the historic on-site cannery complex) would be demolished; the nearest existing office and commercial uses are approximately 75 feet from the project boundary. No historic buildings or archeological sites have been identified in close proximity to the proposed project site. Never the less, new buildings would be introduced to the site as project construction proceeds. As shown in Table 6.8-5, the radius of effect for structural

damage would be very limited, no more than 100 feet for pile driving and 25 feet or less for other equipment. However, construction activity during later project phases may occur very close to on-site structures (within 100 feet) introduced during earlier project phases. Pile driving activities at a distance of greater than 100 feet would not be considered significant.

Therefore, vibration impacts from these activities would be considered *significant*.

Mitigation Measures

Implementation of the following mitigation measures would reduce construction related vibration impacts; however, the impact would remain ***significant and unavoidable***.

6.8-2 (A & B) *For pile driving within 100 feet of an existing building, the project applicant shall drill pilot holes for piles, to the extent feasible, prior to commencement of impact pile driving. Prior to issuance of a building permit, the project applicant shall submit to the City for approval the anticipated depth to which piles will be drilled and the estimated start date and end date of impact pile driving.*

Mitigation Measure 6.8-2 includes measures that reduce the amount of impact pile-driving to reduce vibration impacts within 100 feet of buildings; however, due to the close proximity of residential structures to potential pile driving activities over an extended period of time this impact would remain significant and unavoidable.

6.8-3 Operation of the proposed project would permanently expose sensitive receptors to increased traffic future light rail noise levels.

Scenario A and B

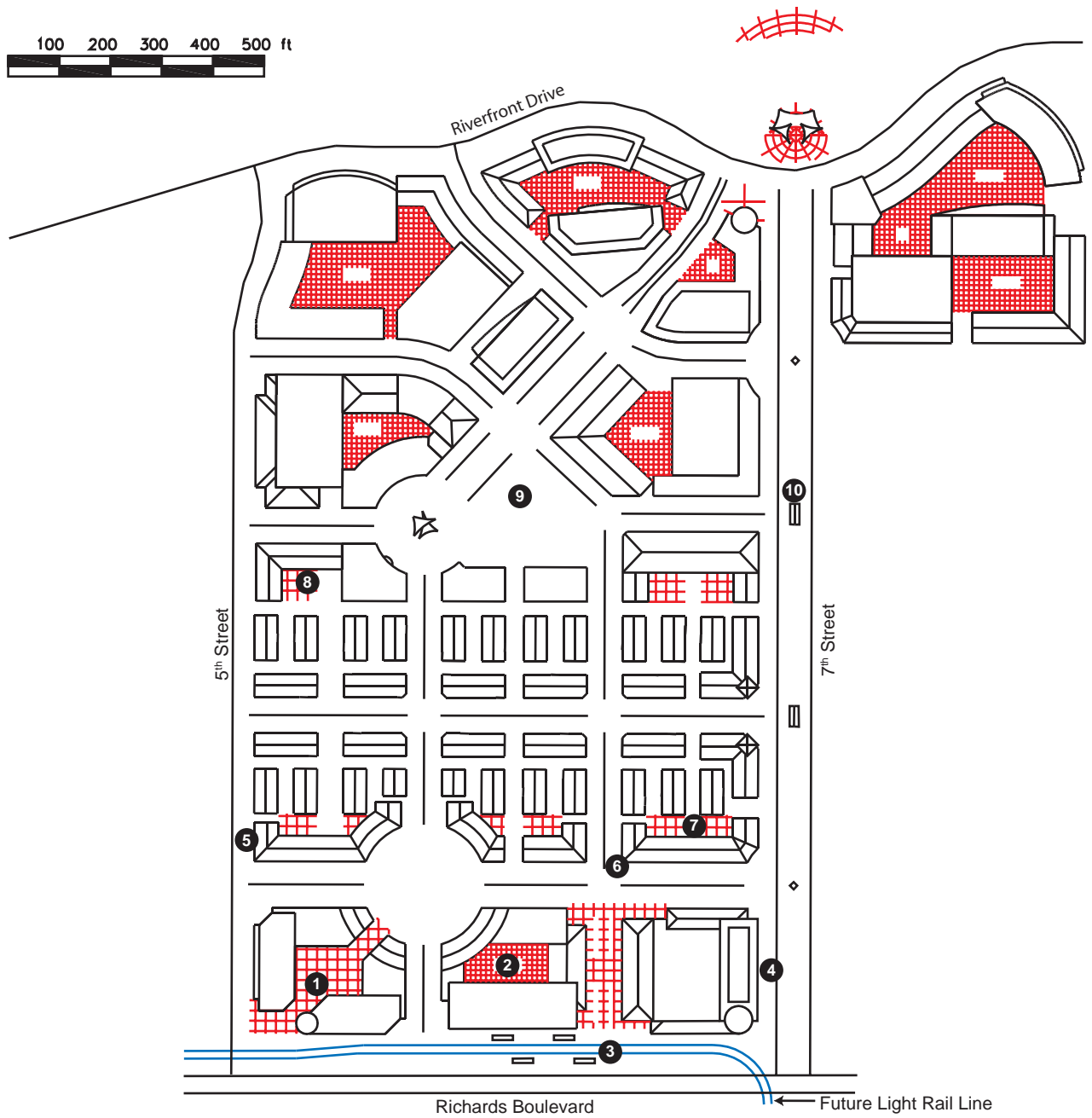
Noise-sensitive land uses include schools, hospitals, retirement homes, and residential areas. Development of the proposed project would introduce residential land uses into the area and these would be the most likely to be affected by project operational noise sources, especially traffic noise from the surrounding roads. In addition, proposed residential uses would be exposed to noise from the future Richards Boulevard light rail station. Residents along Richards Boulevard would be the most vulnerable to noise intrusion because they would be exposed to noise from both traffic and future light rail sources

Vehicle Noise

The results of traffic noise modeling for ground-level receptors located on the project site are shown in Figure 6.8-4. As shown in Figure 6.8-4, project development would increase noise levels along Richards Boulevard (from 75.1 to 76.0 dBA L_{dn}), 7th Street (from 66.6 to 68.3 dBA L_{dn}) and along 5th Street (from 57.4 to 64.1 dBA L_{dn}). Interior project site noise levels would be much lower, varying from 34.4 dBA L_{dn} to 58.7 dBA L_{dn} , depending on location.

Light Rail Noise

The proposed project would site residential uses adjacent to the future Richards Boulevard Light Rail Station along the planned future Downtown-Natomas-Airport (DNA) light rail transit line. Noise associated with the future light rail operations would include signal bells and track squeal. Light rail service generally runs from 5:30 a.m. to 12:30 a.m. each day, every 15 minutes during the morning and evening commute hours, and every 30 minutes during the other operating



Receptor Location	Projected Noise Levels (dBA Ldn)			
	Baseline w/o Project	Baseline + Project	Cumulative w/o Project	Cumulative + Project
1	55.8	58.7	56.2	57.1
2	37.2	40.0	37.3	38.1
3	75.1	76.0	74.6	75.4
4	66.6	68.3	67.0	68.6
5	57.4	64.1	60.2	65.3
6	54.9	55.9	53.8	54.9
7	45.9	47.5	46.8	48.5
8	31.0	34.4	31.6	35.0
9	49.0	51.5	50.1	52.7
10	66.6	67.9	67.2	68.9

Source: EIP Associates, a Division of PBS&J, 2006.



FIGURE 6.8-4
Projected Sound Levels at Receptors

D51214.01

Township 9

hours. Noise modeling conducted along the Sacramento Folsom Corridor averaged approximately 60 dBA L_{dn} /CNEL at 50 feet.² Noise would also be generated by signal crossings. Such signal bells typically operate for approximately 15 to 30 seconds and generate intermittent noise of approximately 73dBA L_{max} at 50 feet.³

Analysis

The City of Sacramento General Plan's exterior noise standard for common outdoor areas at multi-family residential uses generated by traffic and rail is 60 dB L_{dn} . Proposed new residential use outdoor common areas would be subject to vehicle noise levels as high as 76.0 dBA L_{dn} along Richards Boulevard. In addition, these proposed new residential uses located within 50 feet of the light rail line along Richards Boulevard could also be subject to noise levels in excess of the City's maximum acceptable exterior noise standard of 60 dB L_{dn} . While it is likely that some of these residential buildings would have balconies, balconies are considered private space and are not subject to the 60 dB L_{dn} General Plan standard. Outdoor balconies would be subjected to vehicle and future light rail noise, but due to the varying height of receptors, not every floor would be exposed to the same noise level.

In addition to the outdoor noise standard, the General Plan includes a 45 dB L_{dn} interior standard for multi-family uses. Exterior-to-interior reduction in newer residential units is 25 dB or higher. Since outdoor common areas could be subject to vehicle noise as high as 76.0 dBA L_{dn} and instantaneous future light rail noise of up to 73dBA L_{max} along Richards Boulevard, interior noise levels in the residential units along Richards Boulevard could exceed the 45 dB interior standard.

As shown in Figure 6.8-4, noise levels at Receptor 1 suggest that the General Plan standard would not be exceeded at outdoor common areas near the site's peripheral roads. However, the project traffic analysis did not include modeling of interior project roads. Consequently, the effect of local traffic on outdoor common areas cannot be properly evaluated and the possibility of an exceedance cannot be ruled out.

Because outdoor common areas and interior space of residential uses along Richards Boulevard could be exposed to vehicle and future light rail noise exceeding the 60 dB L_{dn} exterior standard and/or the 45 dB L_{dn} interior standard, this would be a *significant impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce this impact to a ***less-than-significant level***.

6.8-3 (A & B)

- a) *Prior to the issuance of building permits, the applicant shall have a certified acoustical professional prepare a site-specific acoustical analysis for residential uses that details how the outdoor common areas would achieve an exterior noise level of less than 60 dB L_{dn} and an interior noise level of less than 45 dB L_{dn} consistent with City of Sacramento General Plan noise standards. Noise reduction measures to ensure acceptable interior noise levels could include, but*

2 Sacramento Regional Transit, *Final EIS/EIR, Downtown Sacramento-Folsom Corridor Project*, 2000.

3 *Ibid.*

might not be limited to: use of dual-pane, sound-rated windows; mechanical air systems; and exterior wall insulation. Noise reduction design features to ensure acceptable exterior noise levels could include, but might not be limited to: orienting buildings between Richards Boulevard and exterior common areas. The results of the analysis shall be submitted to the City for review and approval and appropriate recommended noise reduction measures/design features shall be incorporated into project design, as feasible.

- b) *Prior to issuance of occupancy permits, at least one 24 hour noise measurement per residential unit fronting Richards Boulevard shall be completed to ensure that interior noise levels attain legal requirements. The results of each measurement shall be reported to both the applicant and the City.*

Implementation of Mitigation Measures 6.8-3(a) and (b) would require that a site-specific noise analysis be conducted for residential to identify noise levels. If those levels exceed City of Sacramento Noise standards then the project would be required to implement noise reduction measures and design features including: use of dual-pane, sound-rated windows; mechanical air systems; and exterior wall insulation; and orientation of building to shield outdoor common areas.

6.8-4 Operation of the proposed project would permanently expose sensitive receptors on the project site to increased noise produced by on-site stationary sources.

Scenario A and B

In addition to increases in vehicle noise, operation of the proposed project would also introduce new stationary sources such as heating, ventilation and air conditioning (HVAC) equipment, garbage pickup activity, and truck activity at residential and commercial building loading docks.

HVAC systems would be installed to service the project residential and commercial buildings. Noise generated by HVAC systems can vary significantly depending on the type of equipment and the size. The potential for noise impacts from such equipment would depend on its proximity to noise-sensitive uses, the equipment type and size, and whether the equipment would be surrounded by noise-abating enclosures.

On-site truck activity would be associated with garbage pickup and deliveries to project residential and commercial buildings. At this early stage of the project design/review process, the expected number of deliveries, types of trucks, truck circulation routes, and anticipated delivery times are not available. However, as the uses proposed for the site do not include large retail, warehouse, or industrial, it seems likely that most deliveries would be by small and medium trucks, rather than heavy trucks. Also, the large residential components planned under both development scenarios would argue against the likelihood of a significant fraction of night deliveries.

A riverfront pavilion that would include an outdoor performance facility has been proposed by the applicant near the intersection of 7th Street and Riverfront Drive. According to the project description, the informal lawn seating capacity of the outdoor performance facility would be approximately 2,500 to 3,000 people. Events at the facility would be limited to evenings and weekends. While the outdoor performance venue would be a source of noise, Section 8.68.080 of the Sacramento Municipal Code exempts "outdoor gatherings, public dances, shows and sporting and entertainment events provided said events are conducted pursuant to a

discretionary license or permit by the city or county.” Events at the outdoor facility would be required to be licensed or permitted.

Due to the possibility of stationary source noise exceeding the standards established by the Sacramento Municipal Code at on-site residential and other noise-sensitive uses, the project’s operational stationary source noise sources would be considered to have a *significant impact*.

Mitigation Measures

Implementation of the following mitigation measures would reduce this impact to a ***less-than-significant level***.

6.8-4 (A & B)

- a) *Prior to the issuance of building permits, the applicant shall submit engineering and acoustical specification for project mechanical HVAC equipment to the Planning Director demonstrating that the equipment design (types, location, enclosure, specifications) will control noise from the equipment to at least 10 dBA below existing ambient at nearby residential and other noise-sensitive land uses.*
- b) *Garbage storage containers and building loading docks shall be placed to allow adequate separation to shield adjacent residential or other noise-sensitive uses.*
- c) *Noise generating stationary equipment associated with proposed commercial and/or office uses, including portable generators, compressors, and compactors shall be enclosed or acoustically shielded to reduce noise-related impacts to noise-sensitive residential uses.*
- d) *Events at the waterfront pavilion shall be conducted pursuant to discretionary licenses or permits as required by the city.*

Implementation of Mitigation Measures 6.8-4(a) through (d) would substantially reduce predicted noise levels at noise sensitive receptors by requiring that commercial and/or office uses install noise attenuation devices and/or placement of stationary noise emitting equipment to ensure that operational stationary noise levels would meet or exceed the legal requirement of the Sacramento Municipal Code.

Cumulative Impacts and Mitigation Measures

The cumulative context for noise impacts associated with the proposed project consists of the existing and future noise sources (operation) that could affect the project or surrounding uses in the Central City (including the Towers, 500 Capitol Mall, EPIC Tower and Railyards). Noise generated by project construction, including vibration, would be temporary, and therefore, would not add to the permanent noise. In addition, construction noise is localized and would only be part of the cumulative context if other construction activities would occur immediately adjacent to the project site at the same time that would impact sensitive receptors. There would not be adjacent construction activities that would combine to impact sensitive receptors.

Noise associated with stationary sources (i.e., HVAC systems, truck deliveries, etc.) attributed to project operations would effect on-site project uses and is considered localized noise sources that would not contribute to the cumulative noise environment. Therefore, construction-related and on-site stationary noise sources are not evaluated in a cumulative context.

Increases in vehicle trip associated noise levels due to project development would combine with other development projects in the Central City and result in a cumulative increase in noise at the intersections evaluated as part of the traffic study for this project.

6.8-5 Traffic generated by the proposed project, in conjunction with traffic from planned future development in the surrounding parts of Sacramento and future light rail activity, would permanently expose sensitive receptors to increased noise levels.

Scenario A and B

As shown in Figure 6.8-4, cumulative development would increase noise levels along Richards Boulevard (from 75.1 to 75.4 dBA L_{dn}), 7th Street (from 66.6 to 68.6 dBA L_{dn}) and along 5th Street (from 57.4 to 65.3 dBA L_{dn}). As identified in Impact 6.8-3, modeled noise along the Sacramento Folsom Light Rail Corridor averaged approximately 60 dBA L_{dn} /CNEL at 50 feet and signal bells generate intermittent noise of approximately 73dBA L_{max} at 50 feet. The Sacramento General Plan specifies an acceptable exterior noise level for outdoor common areas of 60 dB L_{dn} and an interior noise level of 45 dB L_{dn} for residential uses. Proposed residential uses along Richards Boulevard, 7th Street and 5th Streets could be subject to cumulative vehicle noise levels that exceed acceptable in the City of Sacramento General Plan for outdoor common areas. In addition, residential units along Richards Boulevard could be subject to unacceptable noise levels associated with the future Richards Boulevard light rail facilities.

As discussed under Impact 6.8-3, exterior-to-interior reduction in newer residential units is 25 dB or higher. However, because residential units along Richards Boulevard could be exposed to cumulative vehicle noise levels of 75.4 dBA L_{dn} and to instantaneous future light rail noise of up to 73dBA L_{max} , interior noise levels in the residential units along Richards Boulevard could exceed the 45 dB interior standard.

Proposed project residential uses, particularly along Richards Boulevard, would be exposed to increased cumulative noise levels. Because the project's contribution to cumulative vehicle noise would be considerable and would contribute to an already excessive noise environment, this would be considered a *cumulatively significant impact*.

Mitigation Measures

Implementation of the following mitigation measure substantially reduces the project's exposure to cumulative noise levels and the cumulative impact would be ***less than significant***.

6.8-5 (A & B) *Implement Mitigation Measure 6.8-3.*

Implementation of Mitigation Measures 6.8-3 would require that a site-specific noise analysis be conducted for residential to identify noise levels. If those levels exceed City of Sacramento Noise standards then the project would be required to implement noise reduction measures and design features including: use of dual-pane, sound-rated windows; mechanical air systems; and exterior wall insulation; and orientation of building to shield outdoor common areas. This would substantially reduce the project's exposure to cumulative noise.

6.9 Public Services

INTRODUCTION

This section of the EIR describes existing service providers and evaluates the ability of providers to meet the proposed project demand. The Initial Study (Appendix A) determined that the proposed project could result in potentially significant impacts to public services. The services evaluated in this section include the following:

- Police Protection;
- Fire Protection;
- Schools;
- Libraries; and
- Parks and Recreation.

No NOP comment letters were received regarding the provision of the above public services.

POLICE PROTECTION

This section describes existing police protection services in the project area. Existing plans and policies relevant to police protection issues associated with implementation of the project are provided. Specifically, information for this section was obtained from project plans, the City of Sacramento General Plan, the Central City Community Plan, the Sacramento Police Department (SPD) 2005 Annual Report, communication with SPD staff, and other relevant environmental documentation in the vicinity of the project area.

ENVIRONMENTAL SETTING

The proposed project would be served by the SPD for law enforcement services. The SPD is staffed by 790 sworn police officers, 382 civilian staff, and 26 part-time non-career employees and received 946,301 calls for service in 2005, resulting in 327,716 calls dispatched.¹ The SPD currently houses its main headquarters at the Public Safety Center, Chief Deise/Kearns Administration Facility, located at 5770 Freeport Boulevard. The SPD has two substations from which patrol divisions operate.² The substation that would serve the proposed project is the William J. Kinney Police Facility, located approximately 4.5 miles from the project site at 3550 Marysville Boulevard. The second substation is the Joseph E. Rooney Police Facility located at 5303 Franklin Boulevard.³

1 Sergeant Eric Poerio, Sacramento Police Department, Memorandum to Nedzelene Ferrario, Senior Planner, City of Sacramento, May 11, 2006.
2 Sergeant Eric Poerio, Sacramento Police Department, Memorandum to Nedzelene Ferrario, Senior Planner, City of Sacramento, May 11, 2006.
3 Sergeant Eric Poerio, Sacramento Police Department, Memorandum to Nedzelene Ferrario, Senior Planner, City of Sacramento, May 11, 2006.

The William J. Kinney Police Facility is currently staffed by one police captain, five police lieutenants, 14 police sergeants, 112.5 police officers, and six community service officers 24 hours a day, seven days a week.⁴ The service area covers the northern portion of the City of Sacramento, bound by Highway 50 to the south, Elkhorn Boulevard to the north, Watt Avenue to the east, and the Sacramento River to the west. The William J. Kinney Facility includes three main districts with three beats each. The project site is located within District 3, Beat A (District 3A), staffed by two police sergeants, 13 police officers, and one community service officer.⁵ District 3A covers the northern portion of the Central City area, including the Railyards, Richards, Alkali Flat, Mansion Flats, and Dos Rios Triangle neighborhoods.

The SPD maintains a goal of two sworn police officers per 1,000 residents and one civilian support staff per two sworn officers. The department was funded for 1.7 officers per 1,000 residents in 2005.⁶

The SPD maintains mutual aid agreements as part of a statewide emergency response system. Locally, the SPD maintains memorandums of understanding (MOUs), which are basically contracts to provide services, with Regional Transit and school districts within the City, with the exception of Grant Joint Unified School District, which employs its own police force. The SPD has specialized staff to work with Regional Transit and in City high schools.⁷

REGULATORY SETTING

Federal Regulations

There are no federal regulations regarding police protection services that pertain to the proposed project.

State Regulations

There are no state regulations regarding police protection services that pertain to the proposed project.

Local Regulations

City of Sacramento General Plan

The following goals and policies from the City of Sacramento General Plan are applicable to the proposed project:

PUBLIC FACILITIES AND SERVICES ELEMENT

- Goal A: Provide and maintain a high quality of public facilities and services to all areas of the City.**
- Goal B: Time all new public facilities and services as closely as possible to approved urban expansion.**

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- 4 Sergeant Eric Poerio, Sacramento Police Department, Memorandum to Nedzelene Ferrario, Senior Planner, City of Sacramento, May 11, 2006.
- 5 Sergeant Eric Poerio, Sacramento Police Department, Memorandum to Nedzelene Ferrario, Senior Planner, City of Sacramento, May 11, 2006.
- 6 Sergeant Eric Poerio, Sacramento Police Department, Memorandum to Nedzelene Ferrario, Senior Planner, City of Sacramento, May 11, 2006.
- 7 Sergeant Eric Poerio, Crime Prevention Through Environmental Design, Sacramento Police Department, written notes, June 27, 2006.
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Goal E: Design public facilities in such a manner as to ensure safety and attractiveness.

POLICE SERVICES

Goal A: Provide the highest level of police service to protect City residents and businesses.

Policies

1.

Continue Police Department participation in the review of subdivision proposals and in assisting the Public Works Department with traffic matters.

2.

Maintain communication with residents and businesses in order to learn about developing crime problems and to educate people on crime prevention measures and programs.

Sacramento Central City Community Plan

The following goals from the Sacramento Central City Community Plan are applicable to the proposed project:

OPEN SPACE AND COMMUNITY FACILITIES GOALS FOR THE RICHARDS BOULEVARD AREA

4.C

Public Safety Provide police, fire, and safety services to meet the future needs of the planning area.

2. Contribute to the construction of a new police station for the Central City.

Richards Boulevard Area Plan

The following policy from the Richards Boulevard Area Plan (RBAP) is applicable to the proposed project:

POLICE AND FIRE

Policy

1.9.

Contribute to the construction of a new police substation for the Richards Boulevard/Central City sector.

Since the time of adoption of the RBAP (1994), the City of Sacramento moved its central station from 6th and I Streets to 5770 Freeport Boulevard, but still has two substations, one serving the south city area and the other serving north city areas. According to the RBAP, the Richards Boulevard area, with its central location between Railyards, Central City, and Natomas, would be suitable for accommodating the construction of a new police substation in the area. It was anticipated in the RBAP, that approximately three acres would be necessary to accommodate the police facility, assuming a two-story building and tandem fleet parking.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

This impact analysis determines whether the proposed project would require new or expanded facilities in order to house officers required to respond to emergencies that the construction of

which would result in physical environmental effects. Reductions in service levels can be indicative of significant project impacts and the need for additional staff and/or police facilities. Proper staffing levels ensure appropriate service levels and response times for police protection. This analysis uses the SPD's (unadopted) staffing goal range of 2 to 2.5 sworn officers per 1,000 residents and a 1:2 ratio for civilian support staff to sworn officers to determine staffing needs to serve the proposed project. These staffing estimates are conservative estimates for police service. They are used in this analysis at the request of the SPD until completion of a formal study review that will provide a more accurate service level goal in the future.⁸

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project requires, or results in, the construction of new, or the expansion of existing, facilities related to the provision of police protection.

Project-Specific Impacts and Mitigation Measures

6.9-1 The proposed project would result in an increase demand for law enforcement services, including the possible construction of new police facilities which could cause significant environmental effects.

Scenario A

At buildout, Scenario A would include up to 2,981 residences, 116,194 square feet (sf) of retail uses, and 30,000 sf of restaurant uses, resulting in an increased demand for law enforcement services to be provided by the SPD. Using the persons per household factor of 2.57, development of 2,981 dwelling units (du) would result in approximately 7,661 new residents. This increase in population would create an additional demand for law enforcement/police services. Based on the SPD's goal of between 2 to 2.5 officers per 1,000 residents, approximately 15 to 19 sworn officers would be required. Seven to nine civilian support staff would be required to maintain the SPD's 1:2 ratio of support staff to sworn officers.

Because Scenario A would develop less than 150,000 sf of retail and restaurant uses, it is a conservative estimate to assume that development would require one sworn officer in addition to those required to serve residential uses.⁹ As proposed, the project would require the addition of approximately 23 to 29 new staff to the SPD. The increased police staff required to provide law enforcement service to the proposed project would not in and of itself require the need for a new substation.

Scenario B

At buildout, Scenario B would include up to 2,350 residences, 116,194 sf of retail uses, 839,628 sf of office uses, and 30,000 sf of restaurant uses, resulting in an increased demand for law enforcement services to be provided by the SPD. Using the persons per household factor of 2.57, development of 2,350 du would result in approximately 6,040 new residents. This

⁸ Sergeant Eric Poerio, Sacramento Police Department, written communication, December 8, 2006.

⁹ Sergeant Eric Poerio, Crime Prevention through Environmental Design, Sacramento Police Department, Personal communication, October 2, 2006.

increase in population would create an additional demand for law enforcement/police services. Based on the SPD's goal of between 2 to 2.5 officers per 1,000 residents, approximately 12 to 15 sworn officers would be required. Six to seven civilian support staff would be required to maintain the SPD's 1:2 ratio of support staff to sworn officers.

Scenario B would result in almost one million sf of office, retail, and restaurant uses that would require additional law enforcement staff. Because this scenario would develop a significant amount of office square footage, approximately 4 sworn officers and 2 support staff would be required to serve the non-residential development for a total of 24 to 28 additional SPD staff to serve Scenario B.¹⁰ The increased police staff required to provide law enforcement service to the proposed project would not in and of itself require the need for a new substation.

Analysis

The SPD is developing a Master Plan designed to accommodate City-wide department needs until 2022. Because the Richard's Boulevard area is experiencing growth the City is planning a new police sub-station that would serve the Richards Boulevard area including the proposed project site. The new sub-station would be funded by tax payers (including future proposed project residents) through the City's General Fund. The SPD would add personnel on an add-needed basis as the project builds out to meet proposed project service goals and would use existing facilities until such time the new sub-station is operational. Because adequate police services will be available to meet project demand this would be considered a ***less-than-significant impact***.

Mitigation Measure

None required.

Cumulative Impacts and Mitigation Measures

The cumulative context for this analysis is the Central City area of Sacramento, which is defined by the Sacramento Central City Community Plan as the area between the Sacramento River on the west, the American River to the north, Sutter's Landing and Alhambra Boulevard to the east, and Broadway to the south, which is served by the SPD. Areas within the Central City have similar densities and land uses, and would be most affected by development of the proposed project.

6.9-2 The proposed project, in combination with future development in the Central City, would result in an increase demand for law enforcement services, including the construction of new police facilities which could cause significant environmental effects.

Scenario A and B

There are approximately 9,800 units planned and/or approved for development in the Central City, not including the proposed project.¹¹ Not all of these developments are residential units,

10 Sergeant Eric Poerio, Crime Prevention through Environmental Design, Sacramento Police Department, Personal communication, October 2, 2006.

11 Sergeant Eric Poerio, Crime Prevention through Environmental Design, Sacramento Police Department, written notes, July 7, 2006.

but they would generate a significant increase in population within the Central City. Each project would require additional police protection services.

The current Sacramento General Plan estimates population in the Central City at 71,997 at buildout in 2030. Current Central City population is 48,980.¹² This increase of 23,017 would require an additional 46 to 58 sworn officers and 23 to 29 support staff in order to provide adequate police protection services by 2030. Population projections would likely increase as the General Plan is updated, although it cannot be said at this time by how many residents.¹³ The current projections are based on lower intensity development in the Central City. Since the adoption of the current General Plan, the City has begun working toward higher intensity uses within the Central City, which would cause increases in population which exceed General Plan projections. There have been several planned and recently approved projects within the Central City area that include higher density residential towers and commercial high rises (including the Towers, EPIC and 500 Capitol Mall), which in combination with the proposed project would exceed the current general plan's population projections. The proposed project's population would require additional SPD staff beyond current staffing levels (23 to 29 under Scenario A and 24 to 28 under Scenario B).

As discussed under Impact 6.9-1, the SPD is developing a Master Plan designed to accommodate City-wide department needs until 2022. Because the Richard's Boulevard area is experiencing growth the City is planning a new police sub-station that would serve the Richards Boulevard area, including the proposed project site. The new sub-station would be funded by tax payers (including future proposed project residents and other future residents in the City) through the City's General Fund. The SPD would add personnel on an add-needed basis as projects build out to meet service goals and would use existing facilities until such time the new sub-station is operational. Therefore, the project's contribution would be less than considerable and this would be a ***less-than-significant cumulative impact***.

Mitigation Measure

None required.

12 Carlos Porros, Sacramento City Planning Department, written notes, July 7, 2006.

13 Carlos Porros, Sacramento City Planning Department, written notes, July 7, 2006.

FIRE PROTECTION

This section describes existing fire protection services in the project area. Existing plans and policies relevant to fire protection issues associated with implementation of the project are provided. Potential impacts to fire protection services due to the project are evaluated based on analyses of service levels and project data. In addition, mitigation measures intended to reduce impacts to fire protection services are proposed, where appropriate.

Information for this section was obtained from project plans, the City of Sacramento General Plan, the Central City Community Plan, the Sacramento Fire Department (SFD) website, communication with SFD staff, and other environmental documentation for the project area.

ENVIRONMENTAL SETTING

The SFD provides fire suppression, emergency medical services, fire prevention, and special operations services within the City of Sacramento. Special operations include hazardous materials response, domestic preparedness, urban search and rescue, swiftwater rescue, and specialized/technical rescue services. The SFD currently employs approximately 535 fire suppression personnel and 100 fire prevention personnel and support staff.¹⁴ The SFD is divided into three offices: the Office of the Fire Chief, providing fiscal management, special projects, and public information, the Office of Operations, providing emergency services, special operations, and shift operations, and the Office of Administrative Services, providing support to operations staff, including fire prevention, training, technical services, human resources, and emergency planning.¹⁵

The SFD currently operates 23 fire stations, which house 23 engine companies, one housed at each station, nine truck companies, and 11 medic units (ambulances), and two public safety boats.^{16,17} The location of existing fire stations can be seen in Figure 6.9-1.

The project site is currently served by Station 14, located at 1341 North C Street.¹⁸ Station 14 houses an engine and hose tender.¹⁹

Stations are staffed by four-person companies for engine and truck companies and two-person companies for each medic unit. At a full station, which would include an engine, a truck, and a medic unit, there would be 10 staff per shift, for three shifts per day.²⁰

The SFD has automatic aid agreements with all the fire departments and fire protection districts that receive dispatch services from the Sacramento Regional Fire/EMS Communications Center

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- 14 Captain Jim Doucette, Public Information Officer, Sacramento Fire Department, written notes, June 20, 2006.
- 15 City of Sacramento, *FY 2006/07 Proposed Budget*, Section 15 – Fire, p. 160.
- 16 Captain Jim Doucette, Public Information Officer, Sacramento Fire Department, written notes, June 20, 2006.
- 17 City of Sacramento, *FY 2006/07 Proposed Budget*, Section 15 – Fire, p. 161.
- 18 Angie Shook, Sacramento Fire Department, written notes, June 22, 2006.
- 19 Sacramento Fire Department website, <www.cityofsacramento.org/fire> (June 22, 2006).
- 20 Angie Shook, Prevention and Plan Review, Sacramento Fire Department, written notes, June 22, 2006.

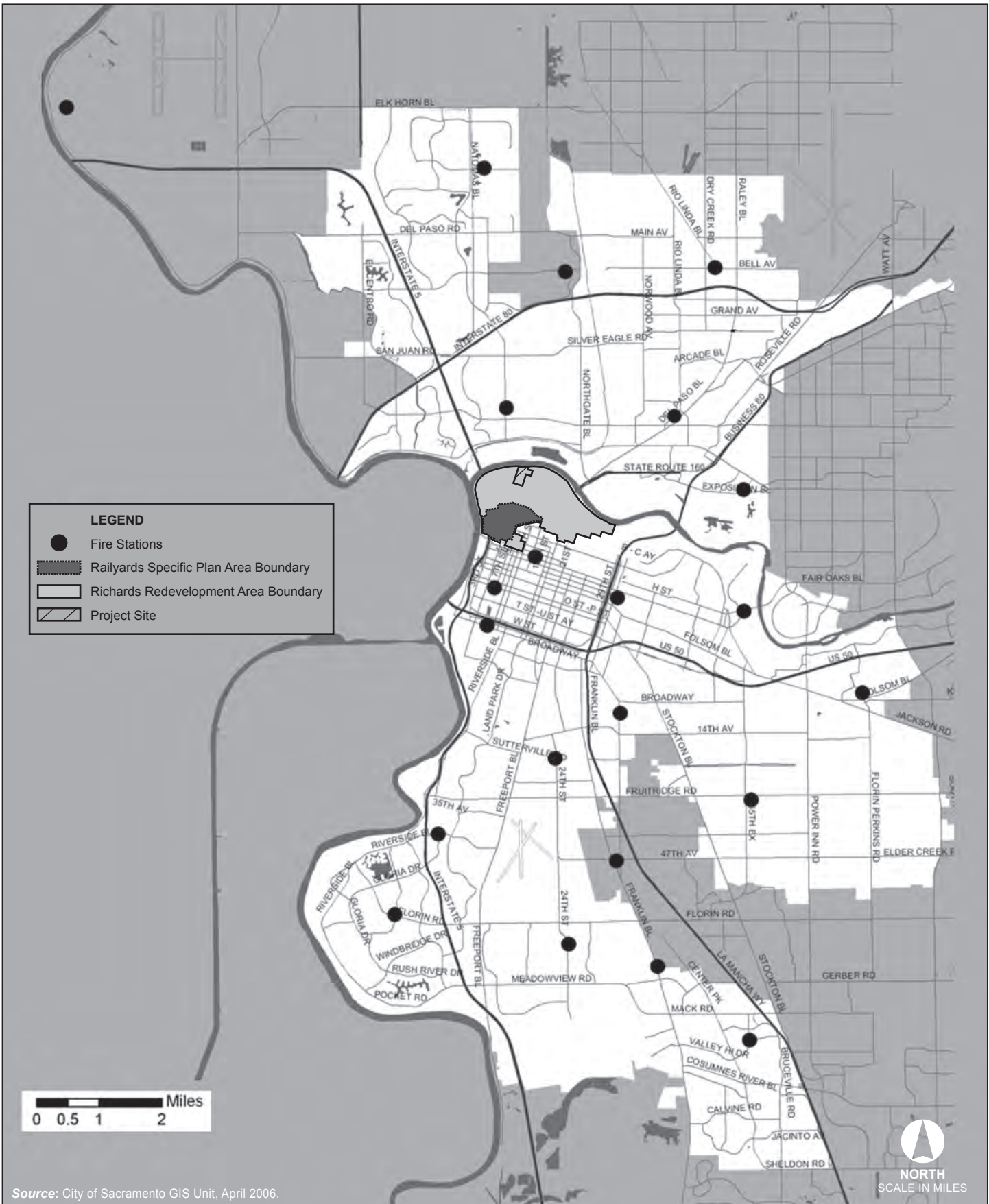


FIGURE 6.9-1
Sacramento City Fire Department Stations

(SRFECC).²¹ The SRFECC is a Joint Powers Authority comprised of the SFD, Sacramento Metropolitan Fire District, Elk Grove Fire Department, Folsom Fire Department, and Galt Fire Protection District.

The SRFECC also provides dispatch services for the Courtland Fire Protection District, Herald Fire Protection District, McClellan Air Force Base Fire Department, Walnut Grove Fire Protection District, and Wilton Fire Protection District.²² SFD also has an automatic aid agreement with the City of West Sacramento.²³

As of June 2006, SFD had already responded to more than 30,000 calls for service since January 1, 2006.²⁴ In 2003, the SFD engine companies responded to total of 63,235 calls.²⁵ The average response time for all SFD engine companies in 2004 was 5.1 minutes.²⁶ In recent years, response times have increased in some areas due to increasing population. Other areas have experienced improved response times due to increased coverage, most notably the North Natomas area due to the opening of Station 30.²⁷

REGULATORY SETTING

Federal Regulations

There are no federal regulations regarding fire protection services that pertain to the proposed project.

State Regulations

California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8 Sections 1270 “Fire Prevention” and 6773 “Fire Protection and Fire Equipment”, the California Occupational Safety and Health Administration (Cal OSHA) has established minimum standards for fire suppression and emergency medical services. The standards include, but are not limited to, guidelines on the handling of highly combustible materials, fire hosing sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance and use of all fire fighting and emergency medical equipment.

Uniform Fire Code

The Uniform Fire Code (UFC) contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and

21 Captain Jim Doucette, Public Information Officer, Sacramento Fire Department, written notes, June 20, 2006.

22 Sacramento City Fire Department website, <www.cityofsacramento.org/fire> (June 20, 2006).

23 Captain Jim Doucette, Public Information Officer, Sacramento Fire Department, written notes, June 20, 2006.

24 Captain Jim Doucette, Public Information Officer, Sacramento Fire Department, written notes, June 20, 2006.

25 Sacramento City Fire Department website, <www.cityofsacramento.org/fire> (June 20, 2006).

26 Angie Shook, Prevention and Plan Review, Sacramento Fire Department, written notes, June 22, 2006.

27 Angie Shook, Prevention and Plan Review, Sacramento Fire Department, written notes, June 22, 2006.

existing buildings and the surrounding premises. The UFC contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, which includes regulations for building standards (as set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers, smoke alarms, high-rise building, childcare facility standards, and fire suppression training.

Local Regulations

City of Sacramento General Plan

The following goals and policies from the City of Sacramento General Plan are applicable to the proposed project:

GOALS AND POLICIES FOR FIRE SERVICE

Goal A: Provide adequate fire service for all areas of the City.

Policies

1.

Continue to support all efforts directed at providing the best fire protection services for the least cost.

2.

Ensure that adequate water supplies are available for fire-fighting equipment in newly developing areas.

3.

Work with the various fire protection districts bordering the City in establishing centralized communications and fire-fighter training facilities.

4.

Promote greater coordination of land use development proposals with the Fire Department in order to insure adequate on-site fire protection provisions.

5.

Promote greater use of fire sprinkler systems for both commercial and residential use.

Sacramento City Code

The following City ordinances from the Sacramento City Code are applicable to the proposed project:

Section 8.100.540 - All buildings or portions thereof shall be provided with the degree of fire resistive construction as required by the California Building Code for the appropriate occupancy, type of construction and location on property or in fire zone; and shall be provided with the appropriate fire-extinguishing systems or equipment required by the California Building Code.

Chapter 15.36 includes numerous codes relating to the inspection and general enforcement of the City of Sacramento fire code, control of emergency scenes, permits, general provisions for safety, fire department access, equipment, and protection systems, and many standards for fire alarm systems, fire extinguisher systems, commercial cooking operations, combustible materials, heat producing appliances, exit illumination, emergency plans and procedures, etc.

Sacramento Central City Community Plan

The following goals from the Sacramento Central City Community Plan are applicable to the proposed project:

OPEN SPACE AND COMMUNITY FACILITIES GOALS FOR THE RICHARDS BOULEVARD AREA

4.C

Public Safety **Provide police, fire, and safety services to meet the future needs of the planning area.**

1. Relocate the existing fire station to a more centralized location within the planning area.

Richards Boulevard Area Plan

The following policy from the RBAP is applicable to the proposed project:

POLICE AND FIRE

Policy

1.8.

Provide for the relocation of the existing fire station on North C Street to a new location which is centrally located within the Richards planning area and meets department criteria for construction and siting.

At the time of adoption of the RBAP, the SFD was seeking to relocate the station on North C Street to a central location within the planning area. The plan supports the relocation and construction of a new fire station approximately 8,000 sf and 12,000 sf of outside area for training, equipment maintenance, and secure parking for employees in a suitable location within the plan area. A suitable location is one that is located with easy access to multi-directional streets and highway transportation corridors, and centrally located to allow equal response time to all parts of the service area. The station at North C Street has not been relocated as of publication of this document.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

This impact analysis determines whether the proposed project would require the construction or expansion of existing facilities necessary to house firefighters required to respond to emergency and fire suppression calls. The SFD does not have an official staffing ratio goal or standard for the number of residents served per station. The SFD is currently preparing a Fire Department Master Plan which will include specific triggers for new fire stations in the City of Sacramento. These triggers will include factors such as number of residents, density, call volume, response times, and proximity to existing stations. However, the Master Plan is not expected to be completed until July 2007. The SFD currently has approximately one station per 20,000 residents. Because the SFD does not have an adopted standard for triggering the need for fire facilities, this analysis utilizes current levels in the SFD service area. Based on consultations

with SFD staff, this analysis uses the 1:20,000 current condition to determine a significant impact.²⁸

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project requires, or results in, the construction of new, or the expansion of existing, facilities related to the provision of fire protection.

Project-Specific Impacts and Mitigation Measures

6.9-3 Implementation of the proposed project would increase the demand for fire and emergency protection services that could result in the need to construct new or expand existing facilities to ensure adequate fire protection services are provided.

Scenario A

At buildout, Scenario A would include residential (including approximately 7,661 new residents), neighborhood-serving retail, restaurant, and open space uses that would require fire protection services.

Scenario B

Scenario B would include residential (including approximately 6,040 new residents), neighborhood-serving retail, restaurant, office uses, and open space which would require fire protection services.

Analysis

Buildout of either Scenario A or Scenario B would not trigger the need for a new fire station. The addition of 7,661 residents (from Scenario A) or 6,040 residents (from Scenario B) are below the current service ratio of one station per 20,000 residents. Therefore, a new fire station would not be required.

Population density within the proposed project would be higher than most of the communities within the SFD's service area. Areas of high density generally experience high levels of traffic congestion, which, in turn, lead to worsening response times.²⁹ As discussed in the Environmental Setting, the SFD's average response time for all calls in 2004 was 5.1 minutes for approximately 60,000 calls. According to the SFD, the response time goals of five minutes for emergency medical response and seven minutes for fire response are currently met most of the time.³⁰ The population and density of the proposed project could likely increase response times for both emergency medical services and fire suppression services. However, the proposed project would include fire protection features as required in the City Code including fire alarm systems, fire extinguisher systems and exit illumination. Due to the requirements of the City Code, the proposed project would not create an inordinate demand for fire protection

28 Angie Shook, Prevention and Plan Review, Sacramento Fire Department, personal communication, February 12, 2007.

29 Angie Shook, Prevention and Plan Review, Sacramento Fire Department, written notes, June 22, 2006.

30 Angie Shook, Prevention and Plan Review, Sacramento Fire Department, written notes, June 22, 2006.

services such that new or altered fire facilities would be required. Therefore, this would be considered a *less-than-significant impact*.

Mitigation Measure

None required.

Cumulative Impacts and Mitigation Measures

The cumulative context for this analysis is the Central City area of Sacramento served by the SFD. Areas within the Central City have similar densities and land uses, and would be most affected by development of the proposed project.

6.9-4 Development of the proposed project, in combination with future development in the Central City, would result in increased demand for fire protection services and the construction of new or expansion of existing facilities in the SFD service area.

Scenario A and B

There are approximately 9,800 units planned and/or approved for development in the Central City, not including the proposed project.³¹ Not all of these developments are residential units, but they would generate a significant increase in population and new structures in the Central City. Each project would require additional fire protection services.

As discussed under Impact 6.9-2, the current Sacramento General Plan estimates population in the Central City at 71,997 at buildout in 2030. Current Central City population is 48,980.³² This would be an increase of 23,017 which would require construction of additional fire stations in order to provide adequate fire protection services and emergency response services by 2030. Population projections would likely change, and increase, as the General Plan is updated, although it cannot be said at this time by how many residents.³³ These projections are based on lower intensity development in the Central City. Since the adoption of the current General Plan, the City has begun working toward higher intensity uses within the Central City, which would cause increases in population which exceed General Plan projections. There have been several planned and recently approved projects within the Central City area that include higher density residential towers and commercial high rises (including the Towers, EPIC and 500 Capitol Mall), which in combination with the proposed project would exceed the current general plan's population projections.

The SFD is currently developing a Master Plan designed to accommodate City-wide department needs until 2022. Because the Richard's Boulevard area is experiencing growth, there are sites under consideration for the construction of a new fire station that could serve the proposed project area. The Fire Department will consider the needs for service in the project area and determine when and where a new facility would be constructed as development occurs. Existing facilities would be used until such time any new facilities are operational. A new fire station would be funded by tax payers (including future proposed project residents and other future residents in the City) through the City's General Fund. Because the timing and location

31 Sergeant Eric Poerio, Crime Prevention through Environmental Design, Sacramento Police Department, written notes, July 7, 2006.
 32 Carlos Porros, Sacramento City Planning Department, written notes, July 7, 2006.
 33 Carlos Porros, Sacramento City Planning Department, written notes, July 7, 2006.

are not yet known, the environmental analysis of the construction and operation of the new facility would occur at prior to its approval.

Therefore, because adequate fire protection service would be provided to the proposed project site through existing facilities and the City will construct a new fire station in the project area that would serve not only the project, but other development in the Central City, the project's contribution would be less than considerable and this would be a ***less-than-significant cumulative impact***.

Mitigation Measure

None required.

SCHOOLS

This section summarizes schools available in the North Sacramento School District (NSSD) and Grant Joint Union High School District (GJUHS). Existing facilities are listed and any expansion of existing facilities or the construction of new facilities is also discussed. Potential impacts to schools as a result of implementation of the proposed project are evaluated, based on whether the proposed project would create an increased demand for schools that would exceed the current or projected capacity such that new or physically altered school facilities would be constructed. Existing plans and policies relevant to schools are also provided. Information was obtained from personal communication with the school districts and school district websites.

ENVIRONMENTAL SETTING

North Sacramento School District

The project site is within the North Sacramento School District (NSSD), an elementary school district. The NSSD is located within the City of Sacramento, north of the Central City. The district was established in 1914 with two schools and currently serves 5,108 students. The district also operates an expanding child development program by providing before- and after-school child care services. Preschool classes are offered at eight sites. The ethnic and linguistic diversity of the NSSD presents a special challenge. Over 70 percent of the students are minorities and over 26 different languages are spoken in the homes of the NSSD students.³⁴ The district's staff of approximately 700 teachers and support personnel works to meet the needs of students from all academic, ethnic, and linguistic backgrounds.

The District currently has 11 elementary schools.³⁵ Table 6.9-1 shows the location and enrollment numbers for the schools in the District for the 2004-2005 school year.

A portion of the project site is within the attendance boundaries for the Dos Rios Early Childhood Education Center, which is located at 700 Dos Rios Street. Dos Rios serves students in grades Pre-K through 6, and also has a special education program. Dos Rios has a design capacity of 350 students,³⁶ and had a beginning enrollment of 393 students in grades K through 6 for the 2004-2005 school year.³⁷ However, Dos Rios is currently undergoing renovation and will be closed for the 2006-2007 school year. Students who would normally attend Dos Rios are currently attending either Woodlake or Smythe Elementary Schools. The school is expected to reopen for the 2007-2008 school year.³⁸ For the 2005-2006 school year, only students in grades Pre-K through 3 attended the school, resulting in an enrollment of approximately 100 students.³⁹ When the school was accepting students in all grades, normal

34 North Sacramento School District website, Our Schools, <<http://www.nssd.k12.ca.us/Superintendent/OurSchools.htm>> (July 9, 2006).

35 North Sacramento School District website, Our Schools, <<http://www.nssd.k12.ca.us/Superintendent/OurSchools.htm>> (July 9, 2006).

36 Dennis Tillett, North Sacramento School District, Superintendent, personal communication, July 11, 2006.

37 North Sacramento School District website, Dos Rios Early Childhood Education Center, <<http://www.nssd.k12.ca.us/>> (July 9, 2006).

38 Dennis Tillett, North Sacramento School District, Superintendent, personal communication, July 11, 2006.

39 Dennis Tillett, North Sacramento School District, Superintendent, personal communication, July 11, 2006.

TABLE 6.9-1

NSSD ENROLLMENT NUMBERS FOR 2004 – 2005 SCHOOL YEAR

Name	Address	Grades	Enrollment
D.W. Babcock Elementary School	2400 Cormorant Way	K-6	447
Ben Ali Children's Center	2625 Plover St.	K-6	-- ¹
Michael J. Castori Elementary School	1801 South Avenue	K-6	637
Dos Rios Early Childhood Education Center	700 Dos Rios Street	K-6	393
Hagginwood Elementary School	1418 Palo Verde Avenue	K-6	458
Harmon Johnson Elementary School	2591 Edgewater Road	K-6	537
Noralto Elementary School	477 Las Palmas Avenue	K-6	732
Northwood Elementary School	2630 Taft Street	K-6	430
Alethea B. Smythe Elementary School	2781 Northgate Blvd.	K-6	634
Hazel Strauch School	3141 Northstead Dr.	K-6	611
Woodlake School	700 Southgate Blvd.	K-6	397
TOTAL			5276

Note
1. Enrollment number not available.
Source: North Sacramento School District website, <<http://www.nssd.k12.ca.us/Superintendent/OurSchools.htm>> (September 20, 2006).

attendance at Dos Rios was approximately 200 students⁴⁰. The NSSD experiences a high fluctuation of student enrollment due to the high transient population within the District. Table 6.9-2 shows the student capacity and excess space available at Dos Rios. Programs that support cultural awareness at Dos Rios Early Childhood Education Center include art contests, Theater Club, and various assemblies.⁴¹

TABLE 6.9-2

RELEVANT NSSD SCHOOLS AND CAPACITIES

School Name	Design Capacity	Current Enrollment	Excess Capacity
Dos Rios Early Childhood Education Center	350	250	100

Source: Dennis Tillett, North Sacramento School District, Superintendent, personal communication, July 11, 2006; EIP Associates, a Division of PBS&J, 2006.

Grant Joint Union High School District

The project site is also within the GJUHSD. The GJUHSD currently has six comprehensive junior high schools, five comprehensive high schools, five alternative school programs, two charter schools, one special education school, and one adult education school.⁴² The GJUHSD serves over 12,000 junior high and high school students.

Students generated from the Township 9 project would attend Rio Tierra Junior High School and Grant Union High School.⁴³ Rio Tierra Junior High serves grades 7-8. Rio Tierra Junior

40 Dennis Tillett, North Sacramento School District, Superintendent, personal communication, July 11, 2006

41 North Sacramento School District website, Dos Rios Early Childhood Education Center, <<http://www.nssd.k12.ca.us/>> (July 9, 2006).

42 Grant Joint Union High School District website, District Schools, <<http://www.grant.k12.ca.us/DistrictSchools/schools.htm>> (July 9, 2006).

43 Grant Joint Union High School District, *Facility Master Plan*, 2004, pp. 1-3 and 1-4

High has a maximum site capacity of 1,438 students, and 704 students were enrolled in 2003-2004.⁴⁴ Grant Union High School serves grades 9-12. Grant Union High School has a maximum site capacity of 2,834 students, and 2,185 students were enrolled there in 2003-2004.⁴⁵ Table 6.9-3 shows the student capacity and enrollment at Rio Tierra and Grant Union High School.

School Name	Design Capacity	Current Enrollment	Excess Capacity
Rio Tierra Junior High School	1,438	704	734
Grant Union High School	2,834	2,185	649

Source: Grant Joint Union High School District, *Facility Master Plan*, 2004, p. 7-4, Figure 38; EIP Associates, a Division of PBS&J, 2006.

REGULATORY SETTING

Federal Regulations

There are no federal regulations pertinent to schools.

State Regulations

California State Assembly Bill 2926 (AB 2926) – School Facilities Act of 1986

AB 2926 authorizes entities to levy statutory fees on new residential and commercial/industrial development in order to pay for school facilities. AB 2926, entitled the “*School Facilities Act of 1986*,” was expanded and revised through the passage of AB 1600, which added Section 66000 *et seq.* of the Government Code.

Proposition 1A/Senate Bill 50

Proposition 1A/Senate Bill (SB) 50 (Chapter 407, Statutes of 1998) is a school construction measure that defined the Needs Analysis process in Government Code Sections 65995.5-65998. Under the provisions of SB 50, school districts may collect fees to offset the costs associated with increasing school capacity as a result of development. The fees (referred to as Level One fees) are assessed based upon the proposed square footage of residential, commercial/industrial, and/or parking structure uses. Level Two fees require the developer to provide one-half of the costs of accommodating students in new schools, while the state would provide the other half. Level Three fees require the developer to pay the full cost of accommodating the students in new schools and would be implemented at the time the funds available from Proposition 1A are expended. School districts must demonstrate to the state their long-term facilities needs and costs based on long-term population growth in order to qualify for this source of funding. However, voter approval of Proposition 55 on March 2, 2004, precludes the imposition of the Level Three fees for the foreseeable future. Therefore, once qualified, districts may impose only Level Two fees, as calculated according to SB 50. Under this statute, payment of statutory fees by developers would serve as total CEQA mitigation to satisfy the impact of development on school facilities.

44 Grant Joint Union High School District, *Facility Master Plan*, 2004, p. 7-4, Figure 38.

45 Grant Joint Union High School District, *Facility Master Plan*, 2004, p. 7-4, Figure 38.

Local Regulations

City of Sacramento General Plan

The following City of Sacramento General Plan goals and policies are applicable to the proposed project:

Goal A **Continue to assist school districts in providing quality education facilities that will accommodate projected student enrollment growth.**

Policies

1.

Assist school districts with school financing plans and methods to provide permanent schools in existing and newly developing areas in the City.

2.

Involve school districts in the early stages of the land use planning process for the future growth of the City.

3.

Designate school sites on the General Plan and applicable specific plans of the City to accommodate school district needs.

Sacramento Central City Community Plan

The following goals from the Sacramento Central City Community Plan are applicable to the proposed project:

OPEN SPACE AND COMMUNITY FACILITIES GOALS FOR THE RICHARDS BOULEVARD AREA

4.B: **Schools Provide adequate school facilities to meet the needs of future residents.**

Richards Boulevard Area Plan

The following Richards Boulevard Area Plan policies are applicable to the proposed project:

SCHOOLS

Policies

1.1.

Provide adequate school facilities to meet the needs of future residents.

1.2.

Improve and expand existing school facilities as the first priority for meeting school needs.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

Impacts on schools are determined by analyzing the projected increase in the demand for schools as a result of the proposed project and comparing the projected increase with the schools' remaining capacities to determine whether new or altered facilities would be required. Impacts on schools are considered to be less than significant with payment of the state Department of Education Development Fee, which was enacted to provide for school facilities construction, improvements, and expansion.

Construction activities are not anticipated to result in an additional demand for schools, nor are the commercial elements of the proposed project. The operational analysis focuses upon the number of residential units that would result from the proposed project. Consequently, this analysis includes only the residential component of the proposed development.

Student Generation Calculations

For the schools impact analysis, expected student yields were derived using current multi-family student generation rates for the elementary, middle, and high school levels since the proposed project consists of the development of apartments, condominiums, and townhouse units. The NSSD does not have student generation rates, so the generation rates for multi-family dwelling units were used to generate the number of elementary school students in the NSSD. This rate was calculated for the City of Sacramento by SCI Consulting Group for the Sacramento City Unified School District which is adjacent to the NSSD. GJUHSD has its own generation rates for junior high school and high school students, however, these generation rates are for single-family residential units, and would result in student generations that are too high for this analysis. The rates for junior high and high school students were also taken from the analysis done for the Sacramento City Unified School District which took into account single-family and multi-family generation rates. Because this project would result in the construction of apartments, condominiums, and townhouses, the multi-family generation rates were used. The student generation calculations can be shown in Table 6.9-4. Scenario A and Scenario B are considered under each impact analysis.

STUDENT GENERATION RATES			
Grade Level	Scenario A		
	Generation Rate	Units	Number of Students
Elementary School – K-6	0.100	2,981	298
Middle School – 7 - 8	0.020	2,981	60
High School – 9- 12	0.030	2,981	89
Total Scenario A			447
Grade Level	Scenario B		
	Generation Rate	Units	Number of Students
Elementary School – K-6	0.100	2,350	235
Middle School – 7 - 8	0.300	2,350	47
High School – 9- 12	0.300	2,350	71
Total Scenario B			353

Source: SCI Consulting Group, Written communication to Nedzlene Ferrario, Senior Planner, City of Sacramento, July 21, 2006.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project would require, or result in, the construction of new, or the expansion of existing, facilities related to the provision of school facilities.

Project-Specific Impacts and Mitigation Measures

6.9-5 The proposed project would generate additional elementary school students in the North Sacramento School District.

Scenario A

Approximately 298 elementary school students would be generated in the NSSD (see Table 6.9-4).

Scenario B

Under Scenario B, 235 elementary school students would be generated in the NSSD (see Table 6.9-4).

Analysis

Dos Rios only has capacity left for 100 additional students and; therefore, would not have the capacity to accommodate all of the elementary school students generated by Scenario A or Scenario B. There are no plans for the construction of new elementary schools in the vicinity of the project. Development of the proposed project would have an adverse affect on the capacity of existing schools. However, the developer would be required to contribute fees towards school facilities funding. Funding for new school construction is provided through state and local revenue sources. However, due to the passage of Proposition 1A in November 1998, Senate Bill (SB) 50 (Chapter 407, Statutes of 1998) was enacted to change the way school districts can levy developer fees. SB 50 has resulted in full state preemption of school mitigation. SB 50 enables the district to collect a fee that is equal to the current statutory Level I fees. Where justified, SB 50 allows the district to collect additional fees in an amount that would approximate 50 percent of the cost of additional facilities. The collection of the 50 percent mitigation fees is with the assumption that the State School Facility funding program remains intact and that state funds are still available for partial funding of new school facilities. If the funds are not available, Districts may collect up to 100 percent mitigation fees under certain circumstances. Although school impact fees are often insufficient to fund 100 percent of new school facility construction and operation, the California State Legislature has declared the school impact fee to be full and adequate mitigation under CEQA. Because the proposed project would be required to pay all applicable fees, the impact would be ***less than significant***.

Mitigation Measure

None required.

6.9-6 The proposed project would generate additional middle school students in the GJUHSD.

Scenario A

Approximately 60 middle school students would be generated by the proposed project in the GJUHSD (see Table 6.9-4).

Scenario B

Scenario B would generate approximately 47 middle school students for enrollment at Rio Tierra in the GJUHSD (see Table 6.9-4).

Analysis

Based on the remaining capacity of Rio Tierra of 734 students, all the students generated under Scenario A or Scenario B could be accommodated. Because the middle school has enough capacity to accommodate the students under either scenario, construction of a new middle

school or expansion of Rio Tierra would be unnecessary. Therefore, the impact is *less than significant*.

Mitigation Measure

None required.

6.9-7 The proposed project would generate additional high school students in the GJUHSD.

Scenario A

Approximately 89 high school students would be generated in the GJUHSD (see Table 6.9-4).

Scenario B

Scenario B would generate approximately 71 high school students in the GJUHSD (see Table 6.9-4).

Analysis

Based on the remaining capacity of Grant Union High School of 649 students, all of the students generated under Scenario A or Scenario B could be accommodated. Because there is an excess capacity of 649 students at Grant Union High School, accommodation of the high school students generated by the proposed project under either scenario would not require the construction of a new high school or the expansion of Grant Union High School. Therefore, this impact is *less than significant*.

Mitigation Measure

None required.

Cumulative Impacts and Mitigation Measures

For the NSSD and GJUHSD, the cumulative context is the district boundaries for each district.

6.9-8 The proposed project, in combination with other projects in the NSSD, would generate additional elementary school students and could result in the construction of new or expanded facilities.

Scenario A and B

The Sacramento Area Council of Governments estimates population in the City at 538,303 by 2025. Current population is 457,514 as of January 1, 2006. This would be an increase of 80,789 residents. Population projections will likely increase as the General Plan is updated, although it cannot be said at this time by how many residents.⁴⁶ There have been several planned and recently approved projects within the Central City area that include higher density residential towers and commercial high rises, which in combination with the proposed project would exceed the current general plan's population projections. The increased population in the City would also increase the number of students that would require new school facilities. However, it is difficult to predict the exact number of students that would be generated within the NSSD because it experiences a high fluctuation of student enrollment due to the high transient population within the District. Dos Rios only has capacity left for 100 additional students and;

46 Carlos Porros, Sacramento City Planning Department, written notes, July 7, 2006.

therefore, would not have the capacity to accommodate all of the elementary school students generated by Scenario A or Scenario B. There are no plans for the construction of new elementary schools in the vicinity of the project. Therefore, the project's contribution to build and/or expand existing facilities would be considerable.

The developer would be required to contribute fees towards school facilities funding. Funding for new school construction is provided through state and local revenue sources. However, due to the passage of Proposition 1A in November 1998, Senate Bill (SB) 50 (Chapter 407, Statutes of 1998) was enacted to change the way school districts can levy developer fees. SB 50 has resulted in full state preemption of school mitigation. SB 50 enables the district to collect a fee that is equal to the current statutory Level I fees. Where justified, SB 50 allows the district to collect additional fees in an amount that would approximate 50 percent of the cost of additional facilities. The collection of the 50 percent mitigation fees is with the assumption that the State School Facility funding program remains intact and that state funds are still available for partial funding of new school facilities. If the funds are not available, Districts may collect up to 100 percent mitigation fees under certain circumstances. Although school impact fees are often insufficient to fund 100 percent of new school facility construction and operation, the California State Legislature has declared the school impact fee to be full and adequate mitigation under CEQA. All future development projects in the City, including the proposed project, would be required to pay all applicable fees, ensuring the impact would be ***cumulatively less than significant***.

Mitigation Measure

None required.

6.9-9 The proposed project, in combination with other projects in the GJUHSD, could generate additional middle school students and could result in the construction of new or expanded facilities.

Scenario A and B

The GJUHSD has developed a 2004 Facility Master Plan to plan for the next five years of growth and development within the District boundaries. The District provides education for students in grades 7 through 12. As discussed in the Environmental Setting, GJUHSD has six comprehensive junior high schools, five comprehensive high schools, five alternative school programs, two charter schools, one special education school, and one adult education school. The GJUHSD serves over 12,000 junior high and high school students.

The Master Plan projects for growth in the District through the year 2010. By 2010, the District expects approximately 14,678 students to be enrolled throughout their service boundaries.⁴⁷ Specifically, the total need for middle schools would be approximately nine middle school classrooms.⁴⁸ Based on the remaining capacity of Rio Tierra Middle School, all of the students generated under Scenario A or Scenario B could be accommodated and the project's contribution to the need to build and/or expand existing facilities would be less than considerable.

47 SchoolWorks, Inc., *Grant Joint Union High School District Facility Master Plan 2004*, March 2004, Section 3-5.

48 SchoolWorks, Inc., *Grant Joint Union High School District Facility Master Plan 2004*, March 2004, Section 4-17.

The Master Plan also identifies alternatives for facilities improvements and funding mechanisms for these improvements through the 2009/2010 school year. The District has identified funding through a local bond passed in March 2002, State Funding, and Developer Fees. Because the GJUHSD Master Plan outlines needed facilities throughout the District service area through 2010, and because the District has accounted for funds to support the increase in population through 2010, this is considered a ***less-than-significant cumulative impact***.

Mitigation Measure

None required.

6.9-10 The proposed project, in combination with other projects in the GJUHSD, could generate additional high school students and could result in the construction of new or expanded facilities.

Scenario A and B

As discussed above, the GJUHSD Facilities Master Plan projects for growth in the District through the year 2010. By 2010, the District expects approximately 14,678 students to be enrolled throughout their service boundaries.⁴⁹ Specifically, the total need for high schools would be approximately 88 high school classrooms. The total need drops to 69 high school classrooms if the existing space is utilized at schools that are under capacity. This is achieved by moving portables. GJUHSD is adding 15 classrooms to each high school. The Master Plan identified a need for up to 58 classrooms if space is not utilized at the under-capacity schools. Overall the District needs an average of 11 new classrooms per year until 2010.⁵⁰ Based on the remaining capacity of Grant Union High School of 649 students, all of the students generated under Scenario A or Scenario B could be accommodated and the project's contribution to the need to build and/or expand existing facilities would be less than considerable.

The Master Plan also identifies alternatives for facilities improvements and funding mechanisms for these improvements through the 2009/2010 school year. The District has identified funding through a local bond passed in March 2002, State Funding, and Developer Fees. Because the GJUHSD Master Plan outlines needed facilities throughout the District service area through 2010, and because the District has accounted for funds to support the increase in population through 2010, this cumulative impact is considered ***less than significant***.

Mitigation Measures

None required.

49 SchoolWorks, Inc., *Grant Joint Union High School District Facility Master Plan 2004*, March 2004, Section 3-5.

50 SchoolWorks, Inc., *Grant Joint Union High School District Facility Master Plan 2004*, March 2004, Section 4-17.

LIBRARIES

This section summarizes the library services provided in the City of Sacramento. Existing facilities are listed and any expansion of existing facilities or the construction of new facilities are discussed. Existing plans and policies relevant to libraries are also provided. Potential impacts to libraries as a result of the proposed project are evaluated, based on the guidelines in the Sacramento Public Library Facilities Master Plan (FMP) and whether the proposed project would create an increased demand for the provision of library services that would exceed the current or planned level of library services. Information was obtained from communications with representatives of the Sacramento Public Library and the Sacramento Public Library Facilities Master Plan.

ENVIRONMENTAL SETTING

Existing Facilities

The Sacramento Public Library (SPL) is a joint powers agency of the City of Sacramento and the County of Sacramento.⁵¹ The SPL serves residents of both the City and County.

The main branch of the SPL, also known as the Central Library, is located in downtown Sacramento at 8th and I Streets. The Central Library was founded by community leaders in 1857. It now contains nearly 300,000 volumes and more than 1,000 periodical subscriptions. Many special collections are housed at the Central Library, including business, government documents, genealogy, and literature. The Sacramento Room at the Central Library includes special collections on California and Sacramento history, local authors, and the history of the Central Library. The Central Library has many unique resources, including online and CD-based resources, internet stations, and the Schwab-Rosenhouse College Resource Center, which provides free consultations with professional college and career counselors and access to a variety of college preparatory resources. The Tsakopoulos Library Galleria, another resource at the Central Library, provides a 5,400 square foot space available for a variety of events, including weddings, meetings, seminars, parties, receptions, fund raisers, or trade shows. The Galleria also includes two smaller meeting rooms.

The SPL operates 27 branches and two bookmobiles to serve residents (see Figure 6.9-2). The bookmobiles visit approximately 50 different sites in the City and County each month. The location and number of items in each library collection, if available, are provided in Table 6.9-5.

Libraries operated by other entities are also located in the City. One such facility is the California State Library in Sacramento, which is operated by the State of California. The State Library operates out of two locations, the Stanley Mosk Library and Courts Building at 9th and Capitol Streets, and the Library and Courts II Building at 9th and N Streets, both in downtown Sacramento. The State Library provides reference services, on-site use of collections, California history information, genealogy resources, Braille and recorded books, a directory of

51 City of Sacramento website, <<http://www.cityofsacramento.org/depts.htm>> (June 16, 2006).

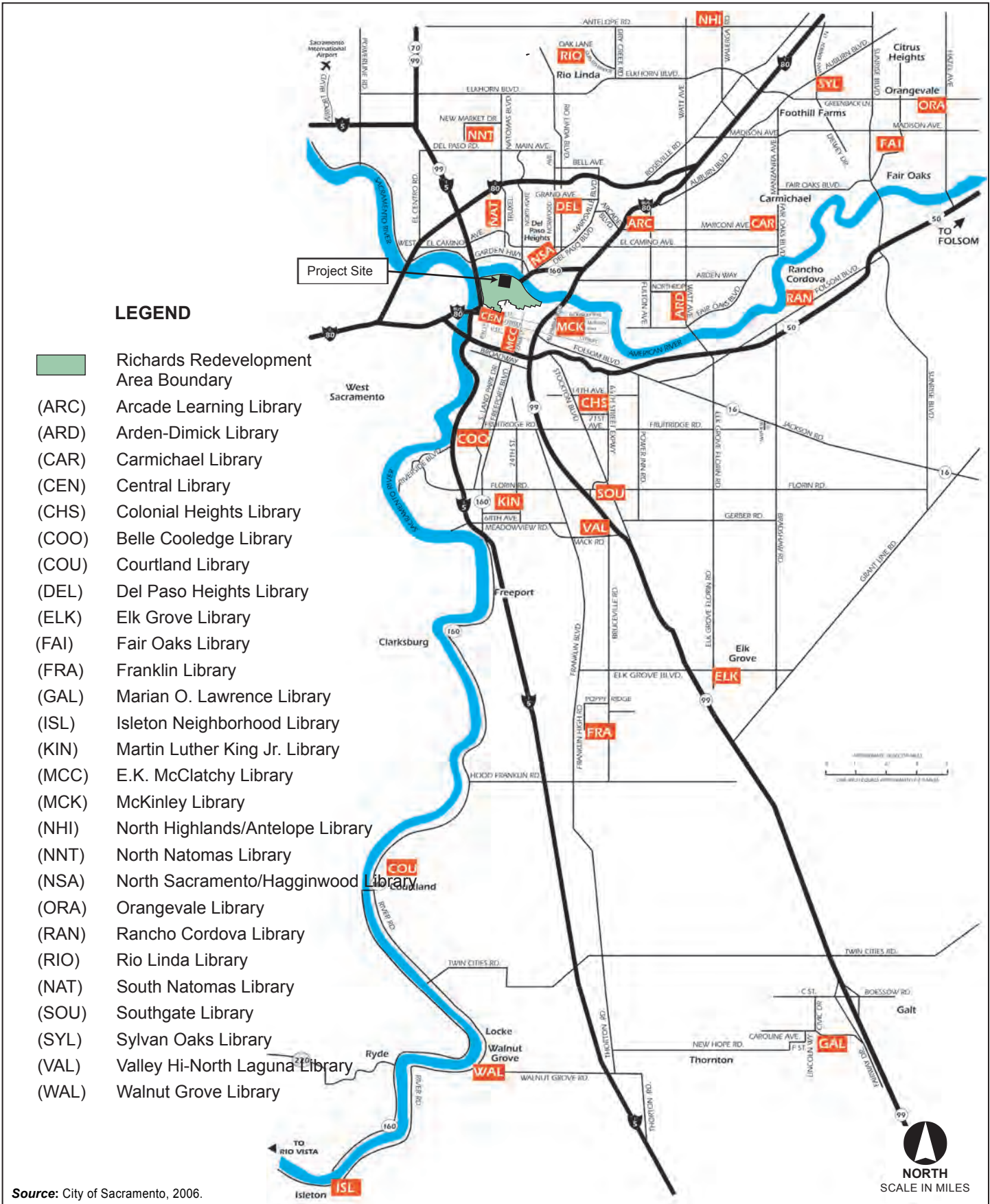


FIGURE 6.9-2
Sacramento Public Library Locations

Branch¹	Location	Collection
Arcade Learning Library (ARC)	2443 Marconi Avenue	67,000 items
Arden-Dimick Library (ARD)	891 Watt Avenue	75,000 items
Carmichael Library (CAR)	5605 Marconi Avenue (in Carmichael)	n/a
Central Library (CEN)	828 I Street	300,000 volumes
Colonial Heights Library (CHS)	4799 Stockton Boulevard	60,000 volumes
Belle Cooleedge Library (COO)	5600 South Land Park Drive	90,000 items
Courtland Library (COU)	170 Primasing Avenue (in Courtland)	n/a
Del Paso Heights Library (DEL)	920 Grande Avenue	32,000 items
Elk Grove Library (ELK)	8962 Elk Grove Boulevard (in Elk Grove)	n/a
Fair Oaks Library (FAI)	11601 Fair Oaks Boulevard (in Fair Oaks)	72,000 items
Franklin Library (FRA)	10055 Franklin High Road (in Elk Grove)	n/a
Marian O. Lawrence Library (GAL)	1000 Caroline Avenue (in Galt)	n/a
Isleton Neighborhood Library (ISL)	412 Union Street (in Isleton)	12,500 items
Martin Luther King Jr. Library (KIN)	7340 24 th Street Bypass	110,000 volumes
E.K. McClatchy Library (MCC)	2112 22 nd Street	n/a
McKinley Library (MCK)	601 Alhambra Boulevard	45,000 volumes
North Highlands/Antelope Library (NHI)	4235 Antelope Road (in Antelope)	70,000 items
North Natomas Library (NNT)	2500 New Market Drive	n/a
North Sacramento/Hagginwood Library (NSA)	2109 Del Paso Boulevard	42,000 items
Orangevale Library (ORA)	8820 Greenback Lane (in Orangevale)	23,000 items
Rancho Cordova Library (RAN)	9845 Folsom Boulevard	100,000 items
Rio Linda Library (RIO)	902 Oak Lane (in Rio Linda)	n/a
South Natomas Library (NAT)	2901 Truxel Road	60,000 items
Southgate Library (SOU)	6132 66 th Avenue	80,000 items
Sylvan Oaks Library (SYL)	6700 Auburn Boulevard (in Citrus Heights)	80,000 items
Valley Hi-North Laguna Library (VAL)	6351 Mack Road	30,000 items
Walnut Grove Library (WAL)	14177 Market Street (in Walnut Grove)	15,000 items

Notes:
1. Abbreviations correspond to map locations on Figure 6.9-2.
Source: Sacramento Public Library website, <http://www.saclibrary.org/about_lib/branches.html> (June 27, 2006).

libraries, and internet access.⁵² The State Library's circulating materials also provides services to the State government, local governments, and local libraries.⁵³

Planned Facilities

The Sacramento Public Library Facility Master Plan (FMP) identifies existing facilities that need to be renovated, relocated, or expanded, or new facilities that need to be built. The recommendations in the FMP are based on facility standards, population projections, and analysis of the age and condition of the existing facilities, combined with a review of site and funding opportunities. The FMP addresses facility needs for the next 20 years.

According to the FMP, 18 new library facilities are currently planned for construction in the City and County of Sacramento through the year 2025. Within the City of Sacramento, two new library facilities are proposed at 65th Street and Folsom Boulevard and at Sojourner Truth Park in the Pocket neighborhood by 2015. These improvements are based on population forecasts

52 California State Library website, <<http://www.library.ca.gov/html/pubserv.cfm>> (June 16, 2006).

53 California State Library website, <<http://www.library.ca.gov/index.cfm>> (June 16, 2006).

from Census 2000 data and Sacramento Area Council of Governments (SACOG) projections. By 2015, the population of the City of Sacramento is expected to increase by 61,736 residents for a total population of 521,291 residents. Currently the City of Sacramento has 252,549 sf of library facilities. Through the expansion, renovation, or relocation of existing facilities, or addition of new facilities, by 2025 the City of Sacramento will add approximately 104,032 sf of facilities for a total of 356,581 sf of library facilities.

Several funding mechanisms have been identified by the FMP to implement the full Sacramento Public Library FMP. Funding sources include City of Sacramento and Sacramento County general and reserve funds, County Fund 11, Redevelopment Agency funding, development impact fees, statewide library bond funds, general obligation bonds, parcel tax through Measure X (discussed below in the Regulatory Setting), Mello-Roos Special Tax Bonds, and certificates of participation. In addition, private donations and partnerships will be pursued.⁵⁴

For fiscal year 2005, the library maintained 0.55 sf of library space per capita in the City of Sacramento (see Table 6.9-6 for the current service ratio in the City).

Library	Current Square Footage	Square Footage by 2025	Current Service Area Population	Population by 2025	Current Service Ratio	Service Ratio by 2025
Valley Hi-North Laguna	5,850	20,000	36,544	41,265	0.16	0.48
Pocket Library	n/a	15,000	n/a	30,000	n/a	0.50
65 th and Folsom	n/a	30,000	n/a	52,000	n/a	0.58
McClatchy	1,900	1,900	13,398	15,880	0.14	0.12
Del Paso Heights	5,425	20,000	32,325	38,693	0.17	0.52
N. Sac Hagginwood	4,000	15,000	27,585	28,686	0.15	0.52
McKinley	4,681	4,681	31,710	32,082	0.15	0.15
Colonial Heights	12,000	20,000	98,798	67,827	0.12	0.29
Belle Cooledge	12,000	25,000	79,544	46,648	0.15	0.54
Central Library – Neighborhood	15,000	20,000	25,367	36,937	0.59	0.54
Central Library – Centralized	140,000	135,000	n/a	n/a	n/a	n/a
Martin Luther King, Jr.	15,078	30,000	49,411	64,175	0.31	0.47
South Natomas	13,615	20,000	40,206	41,470	0.34	0.48
North Natomas	23,000	23,000	24,637	66,294	0.93	0.35
Total	252,549	379,581	459,525	561,957	0.55	0.68

Source: Draft Sacramento Public Library Facilities Master Plan, August 2006.

REGULATORY SETTING

Federal Regulations

There are no federal regulations pertaining to the provision of libraries.

54 Sacramento Public Library, *Facility Master Plan 2007-2025*, August 31, 2006, pp. 85-94.

State Regulations

There are no state regulations pertaining to the provision of libraries.

Local Regulations

City of Sacramento General Plan

The following goals and policies from the City of Sacramento General Plan are applicable to the proposed project:

Goal A: Provide adequate library facilities to contribute to the community cultural, academic, and recreational activities.

Policies

1.

Evaluate all proposed library facilities for consistency with the standards and guidelines of the Libraries Master Plan.

2.

Explore methods of financing new library facilities and expanding and upgrading existing facilities.

Richards Boulevard Area Plan

The following objective in the Richards Boulevard Area Plan is applicable to the proposed project:

COMMUNITY FACILITIES

Objective 1: Provide the community facilities necessary to fulfill the needs of the future population of the planning area.

Measure X

In November 2004, Sacramento voters approved Measure X, an initiative to continue a parcel tax that provides 30 percent of the City libraries' operating expenses. The measure levies a \$26.60 flat tax per household annually.⁵⁵

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

The provision of adequate library services is based on the Sacramento resident population as compared to the square footage-to-capita rate provided in the Sacramento Public Library Planning Guidelines in the FMP.⁵⁶

- Threshold Level: 0.40 sf library facilities per capita
- Target Level: 0.50 sf library facilities per capita
- Prime Level: 0.60 sf library facilities per capita

55 Erika Chavez, Sacramento Bee, *City Voters OK Tax to Aid Libraries*, November 3, 2004.

56 Lois Ross, Project Manager, Sacramento Public Library, personal communication, July 11, 2006.

For the purposes of this analysis, a significant impact would occur if the threshold level of 0.40 sf of library facilities per capita is not reached and the construction of additional library facilities is required causing adverse environmental impacts.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project requires, or results in, the construction of new, or the expansion of existing, facilities related to the provision of library services.

Project-Specific Impacts and Mitigation Measures

6.9-11 The proposed project would result in an increased demand for library services, including the construction of new library facilities which could cause significant environmental effects.

Scenario A

Under Scenario A, the proposed project would generate approximately 7,661 residents. Adding this number of residents to the current population served by the Central Library stated in the FMP, the Central Library would serve a total of 33,028 residents. The additional population under Scenario A would result in a service ratio of 0.45 which is above the threshold level for providing adequate library services (see Table 6.9-7).

TABLE 6.9-7						
LIBRARY SERVICE RATIOS WITH TOWNSHIP 9 POPULATION						
Library	Current Square Footage	Square Footage by 2025	Current Service Area Population Plus Township 9 Population	Population by 2025 Plus Township 9 Population	Resulting Service Ratio	Service Ratio by 2025
FMP Population With Scenario A Population						
Central Library – Neighborhood	15,000	20,000	33,028	44,598	0.45	0.45
Total for City of Sacramento Libraries	252,549	379,581	467,186	569,618	0.54	0.67
FMP Population With Scenario B Population						
Central Library – Neighborhood	15,000	20,000	31,407	42,977	0.48	0.47
Total for City of Sacramento Libraries	252,549	379,581	465,565	567,997	0.54	0.67
Source: Draft Sacramento Public Library Facilities Master Plan, August 2006.						

Scenario B

Under Scenario B, the proposed project would generate approximately 6,040 residents. Adding these residents to the current population projections from the FMP, the Central Library would serve a total of 31,407 residents. The additional residents from Scenario B would result in a

service ratio of 0.48 which is above the threshold level for providing adequate library services (see Table 6.9-7).

Analysis

The closest library to the project site is the Central Library, which is located at 828 I Street. The Central Library is 160,000 sf and has approximately 300,000 volumes. The Central Library is divided into a neighborhood serving space and a centralized service space. The neighborhood serving space is 15,000 sf and is designed to serve the immediate population in the Downtown Sacramento area. The centralized service space is approximately 140,000 sf which serves the needs of the entire Sacramento Public Library system. The Central Library uses a historic building for its operations and is unable to expand in order to add more square footage. However, the Central Library plans to renovate its space to a new service model. By 2015, the Central Library will have 20,000 sf for the neighborhood serving space and 135,000 sf for the centralized service space.

In addition to the Central Library, Township 9 residents would be able to utilize the E.K. McClatchy Library and McKinley Library both of which are located in close proximity to the project site in the Downtown/Midtown Sacramento area.

Because these libraries are also located in historic buildings, they will be undergoing renovations rather than expansions by the year 2025. Additional libraries that may be utilized and are north of the project site are the North Sacramento-Hagginwood Library, which would be relocated to a larger facility within the same service area, and the South Natomas Library, which is slated for a 6,000 sf expansion by 2015.

As indicated above, the Central Library is planning on renovating the existing facility to accommodate an increase in population and demand for library services. Funding for the renovation would come from both the City of Sacramento and Sacramento County general and reserve funds, County Fund 11, Redevelopment Agency funding, statewide library bond funds, the City's general obligation bonds, parcel tax through Measure X, Mello-Roos Special Tax Bonds, and certificates of participation. The population generated by the project would contribute tax dollars into the City's general fund along with payment of other city fees and taxes.

Therefore, because implementation of the project would contribute funds for future renovation of the Central Library impacts to library services would be considered *less than significant*.

Mitigation Measure

None required.

Cumulative Impacts and Mitigation Measures

The cumulative context for library services is the Sacramento Public Library service area, including the City of Sacramento, until the horizon year of 2025 as used in the Facilities Master Plan.

6.9-12 The proposed project, in combination with cumulative development in the City of Sacramento, would result in an increased demand for library services, including

the construction of new library facilities which could cause significant environmental effects.

Scenario A and B

Scenario A would add 7,661 residents to the City of Sacramento. Using the population from the FMP, this would result in a total population of 467,186 residents in the City. By 2025, the City of Sacramento population would grow to 569,618 residents, including the residents from Scenario A of the Township 9 project. Scenario B would add 6,040 residents to the City, resulting in a total population of 465,565 residents in the City. By 2025, the City would grow to 567,997 residents including the residents from Scenario B of the Township 9 project (see Table 6.9-7).

Service ratios for the entire City of Sacramento take into account all of the libraries in the City of Sacramento as well as population projections until the year 2025. For Scenario A, the entire City would have a library service ratio of 0.54 sf per capita with buildout of the Township 9 project (see Table 6.9-7). Population projections and library improvements have also been calculated through the year 2025. The square footage proposed for completion by 2025 is 379,581 sf, an increase of approximately 127,000 sf. This would result in a service ratio of 0.67 per capita by 2025 (see Table 6.9-7).

Buildout of Scenario B would result in a library service ratio of 0.54 for all libraries in the entire City (see Table 6.9-7). Population projections and library improvements have also been calculated through the year 2025 for Scenario B. The square footage proposed for completion by 2025 is 379,581 sf. This would result in a service ratio of 0.67 per capita by 2025 (see Table 6.9-7).

Because the Sacramento Public Library FMP has proposed improvements to library facilities throughout the City of Sacramento with identified funding, and because the resulting 0.67 sf per capita service ratio for the entire City would be above the prime level of 0.60 sf per capita by 2025, impacts to library services resulting from the development of either scenario would not be considerable and this would impact would be ***cumulatively less than significant***.

Mitigation Measure

None required.

PARKS AND RECREATION

This section summarizes the parks and recreational facilities provided in the City of Sacramento. Existing facilities are listed and any expansion of existing facilities or the construction of new facilities are discussed. Existing plans and policies relevant to parks and recreation are also provided. Potential impacts to parks and recreation as a result of the proposed project are evaluated, based on the guidelines in the City of Sacramento Parks and Recreation Master Plan (PRMP) and whether the proposed project would create an increased demand for the provision of park services that would exceed the current or planned level of facilities. Information was obtained from the City of Sacramento Parks and Recreation Master Plan and the General Plan Technical Background Report.

ENVIRONMENTAL SETTING

The City of Sacramento Department of Parks and Recreation (Department) maintains more than 3,000 acres of developed parkland, and manages more than 204 parks, 81 miles of on- and off-road bikeways and trails, 17 lakes, ponds, or beaches, over 20 aquatic facilities, and 18 community centers.⁵⁷ The City of Sacramento Parks and Recreation Master Plan (PRMP) identifies 11 planning areas. The proposed project is within Planning Area 1, the Central City. Parks in the Sacramento area are generally categorized into three distinct park types by the Department: neighborhood, community, and regional parks.

There are a total of 882 acres of neighborhood serving parks in the City of Sacramento. Within the Central City area, there are approximately 68 acres of neighborhood parks. The City also has approximately 1,243 acres of community serving parks, while the Central City has approximately 75 acres of community parks. The Department identifies a citywide/regional serving category for parks; however, it should be noted that some portions of the acreages are also considered community and neighborhood serving due to their locations near existing communities. The existing citywide/regional serving park acreage in 2004 was approximately 3,520 acres.⁵⁸ Looking strictly at the regional park type, the City has approximately 1,125 acres, while the Central City contains 153 acres of regionally serving parks.⁵⁹ Table 6.9-8 inventories all the park facilities in the City of Sacramento.

The City's parks contain a variety of recreational facilities, with areas available for organized sports, including soccer fields, baseball diamonds, tennis courts, volleyball courts, and basketball courts. Additionally, benches, picnic tables, and barbecues are available for informal recreation activities. There are many play areas for children in the City's parks. Biking and walking trails are also utilized. In addition, swimming pools and wading and play pool facilities are available to the public. Additional recreational facilities include community centers; bocce ball courts; equestrian trails; four 18-hole golf courses; and two 9-hole golf courses. Specialized

57 City of Sacramento, *Parks and Recreation Master Plan*, Adopted December 2004, Services Chapter, p. 1.

58 City of Sacramento, *Parks and Recreation Master Plan*, Adopted December 2004, Assessment Chapter, p. 8.

59 City of Sacramento, *General Plan Technical Background Report*, September 27, 2005, p. 5.3-3.

TABLE 6.9-8

CITY OF SACRAMENTO PARKS INVENTORY

Location and Number		Acreage			Park Type (Acres)			Other				
Planning Area	# of Parks	Total	Developed	Undeveloped	Neighborhood	Community	Regional	Parkway Acres	Open Space Acres	Natural/Nature Area (Acres)	Walking/Jogging Trail (Miles)	Bicycle Trail (Miles)
Central City	20	307.75	124.82	182.93	68.27	74.80	152.60	25.73	0.00	1	2	3
Land Park	12	314.52	309.37	5.15	48.09	79.52	203.49	25.73	10.80	1	2	1
Pocket	19	238.46	182.28	56.18	91.26	121.00	0.00	45.85	0.00	6	3	12
South Sacramento	21	318.48	282.38	36.10	100.65	145.66	0.00	6.00	87.30	2	5	3
East Broadway	17	241.66	111.81	129.85	69.89	85.10	125.60	14.12	5.00	1	1	0
East Sacramento	9	67.75	50.46	17.29	39.04	63.61	0.00	4.30	0.00	0	1	1
Arden-Arcade	2	355.571	86.55	269.02	13.76	70.00	373.15	0.00	269.02	1	1	2
North Sacramento	21	491.80	200.95	290.85	109.47	153.73	0.00	90.08	249.00	6	2	3
South Natomas	22	219.72	122.75	96.97	77.22	139.72	0.00	86.30	11.50	8	4	9
North Natomas	45	432.88	128.70	304.18	170.44	180.82	120.00	20.48	1.70	5	1	4
Airport-Meadowview	16	133.381	83.59	49.79	94.2	128.98	150.00	0.00	0.00	1	0	0
TOTALS	204	3,121.97	1,683.66	1,438.31	882.29	1242.94	1124.84	318.59	634.32	32	22	38

Notes:

1. Golf course acreages are not considered park sites, although they are counted as meeting either Neighborhood/Community serving or Citywide/Regionally serving acres. These courses are maintained by the City Convention, Culture, and Leisure Department. Some acreage for parkland is located in multiple Community Planning Areas.

Source: City of Sacramento, *Parks and Recreation Master Plan*, December 2004, Appendix D, Table 27 and Table 28.

recreational facilities include the Garden & Art Center, the Southside Jogging Center, the Mangan Rifle and Pistol Range, and the Sacramento Horsemen's Association.⁶⁰

The Department also provides for community services as well as recreational and leisure time opportunities. The Department offers adult and youth sports classes; special events; after-school, summer, and aquatic programs; community classes and enrichment programs; and reservations for baseball and softball fields, picnics, and facilities.

Planned Parks and Recreational Facilities

The PRMP outlines the total amount of acres needed by 2010 in order to meet the Service Level Goal of 5.0 acres per 1,000 residents. The PRMP projects a population for the City based on the City's Planning Department, the 2000 US Census, and the Department of Finance. The Parks and Recreation Department has policies in place that require formal updates to the PRMP a minimum of every five years. The Parks and Recreation Department has indicated that they will also be developing amendments to the plan in 2007.⁶¹

By 2010, the City of Sacramento is expected to grow to 497,544 residents. In order to serve this population, the City must increase the amount of acres dedicated to parks and open space. The acreage service level analysis in the Master Plan identifies the need for approximately 1,128 acres of neighborhood/community serving acres by 2010. The analysis also identifies the need for 460 acres of citywide/regionally serving acres by 2010 to meet the Service Level Goal of 8.0 acres per 1,000 residents for regional parks. The City would also need 168 miles of trails or bikeways to meet the Service Level Goal of 0.5 miles per 1,000 residents by 2010.⁶²

The Department has policies that require formal updates of the PRMP to be completed a minimum of every five years. The Department is also planning amendments to the PRMP in 2007.⁶³

REGULATORY SETTING

Federal Regulations

There are no federal regulations regarding police protection services that pertain to the proposed project.

State Regulations

State Public Park Preservation Act

The primary instrument for protecting and preserving parkland is the State Public Park Preservation Act. Under the Public Resources Code, cities and counties may not acquire any real property that is in use as a public park for any non-park use unless compensation or land, or both, are provided to replace the parkland acquired. This provides no net loss of parkland and facilities.

60 City of Sacramento, *General Plan Technical Background Report*, September 27, 2005, pp. 5.3-8 – 5.3-9.

61 J.P. Tindell, Interim Planning and Development Manager, Parks and Recreation Department City of Sacramento, written communication, October 27, 2006.

62 City of Sacramento, *Parks and Recreation Master Plan 2005-2010*, Adopted December 2004.

63 J.P. Tindell, Interim Planning and Development Manager, Parks and Recreation Department, written communication, October 27, 2006.

Quimby Act

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fee are based upon the residential density, parkland cost, and other factors. Land dedicated and fees collected pursuant to the Quimby Act may only be used for developing new, or rehabilitating existing park or recreational facilities.

Local Regulations

Sacramento City Code

Chapter 12.72 Park Buildings and Recreational Facilities

This City Code includes regulations associated with building and park use, fund raising, permit procedures, and various miscellaneous provisions related to parks. Park use regulations include a list of activities that require permits for organized activities that include groups of 50 or more people for longer than 30 minutes; amplified sound; commercial and business activities; and fund raising activities. This code also includes a list of prohibited uses within parks such as unleashed pets; firearms of any type; and riding bicycles, drinking alcoholic beverages, or smoking with children's playground areas. Activities such as golfing, swimming, and horseback riding are only permitted within the appropriate designated areas.

Chapter 16.64 Parks and Recreational Facilities

Chapter 16.64 provides standards and formulas for the dedication of parkland and in-lieu fees. These policies help the City to acquire new parkland. This chapter sets forth the standard that five acres of property for each 1,000 persons residing within the City be devoted to local recreation and park purposes. Where a recreational or park facility has been designated in the general plan or a specific plan, and is to be located in whole or in part within a proposed subdivision to serve the immediate and future needs of the residents of the subdivision, the subdivider shall dedicate land for a local recreation or park facility sufficient in size and topography to serve the residents of the subdivision. The amount of land to be provided shall be determined pursuant to the appropriate standards and formula contained within the chapter. Under the appropriate circumstances, the subdivider shall, in lieu of dedication of land, pay a fee equal to the value of the land prescribed for dedication to be used for recreational and park facilities which will serve the residents of the area being subdivided.

Chapter 18.44 Park Development Impact Fee

Chapter 18.44 imposes a park development fee on residential and non-residential development within the City. Fees collected pursuant to Chapter 18.44 are primarily used to finance the construction of park facilities and reimburse the City for existing facilities.

City of Sacramento General Plan

The following goals and policies from the City of Sacramento General Plan are applicable to the proposed project:

Goal A	Provide adequate parks and recreational services in all parts of the City, adapted to the needs and desires of each neighborhood and community. Attempt to achieve the Acreage Service Level Goals established in the Parks and Recreation Master Plan.
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Policies

1.
Encourage private development of recreational facilities that complement and supplement the public recreational system.
2.
Give high priority to acquiring land and improving parks, open space and recreation uses in redevelopment, Community/Specific Plan and infill target areas where these uses are deficient.
3.
Encourage joint development of parks with compatible uses such as new schools, libraries and detention basins.
4.
Apply Smart Growth and environmental sustainability principles to park and recreation facility planning, location, design and management.
5.
Design parks to enhance and preserve natural site characteristics and environmental values.
6.
Review all necessary infrastructure improvements for their potential park and open space usage.
7.
Locate community and regional parks and linear recreational areas on or adjacent to major thoroughfares.
8.
Periodically review and update the Parks and Recreation Master Plan.
9.
Continue the practice of partnering with school districts and the community to provide neighborhood or community serving outdoor recreation facilities on and adjacent to public schools.
10.
Develop and implement programs to help ensure the safety of residents utilizing the parks and recreational facilities.
11.
Ensure adequate public access to the American and Sacramento Rivers in developing areas.

Sacramento Central City Community PlanOPEN SPACE AND COMMUNITY FACILITIES GOALS FOR THE RICHARDS BOULEVARD AREA

- 4.A: Parks** **Provide a system of parks and recreational facilities that serves the needs of future residents and employees, and that enhances the overall identity of the Central City and the Richards Boulevard Area.**
1. Set aside an open space zone and landscaped parkway along the length of the American River.
 2. Provide parks to serve new residential areas at a ratio of 5 acres per 1,000 residents.
 3. Design and locate parks to provide convenient and safe access by residents, and to reinforce the overall pedestrian network and experience of the area.

4. Establish up to a 10-acre park at the terminus of North 7th Street adjacent to the American River Parkway.

Richards Boulevard Area Plan

The following policies from the RBAP are applicable to the proposed project:

PARKS AND OPEN SPACE

Policies

1.3.

Provide parks to serve new residential neighborhoods at a ratio of 5 acres per 1,000 residents.

1.4.

Design and configure new neighborhood parks to meet the following criteria:

- All parks must be a minimum of four acres in area;
- Parks should be centrally located within residential areas; and
- Parks should be configured in a manner which reinforces the pedestrian network.

1.5.

Establish a minimum 10-acre park at the terminus of North 7th Street, adjacent to the American River Parkway.

1.6.

Provide open space within the Office District at a ratio of 1 square foot per 10 square feet of new office development. New open space within this district should be aggregated into two parks which are no less than four acres in area.

1.7.

Parks and open space associated with new commercial development should be configured to:

- Promote critical pedestrian linkages;
- Effectively serve surrounding employment uses; and
- Give structure, identity, and a higher level of organization to the project area.

Policy 1.5 of the RBAP states that “a minimum 10-acre park should be established [at the terminus of North 7th Street] through land dedication and in-lieu fees associated with new residential development.”⁶⁴ Township 9 proposes a 5-acre park at the terminus of North 7th Street; however, inconsistencies with the RBAP would be accommodated for through the PUD zoning. In addition, the proposed project does adhere to the intent of RBAP Policy 1.5 by providing 27 acres of a variety of park land throughout the entire project site.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

The City of Sacramento has park acreage service level goals for the three types of parks identified in the PRMP. While the PRMP identified a Service Level Goal of 5.0 acres per 1,000 residents for neighborhood and community serving parks, this is a preferred goal, instead of a minimum guideline. Meeting the following guidelines, also identified in the PRMP, would provide public residential opportunities within reasonable walking or driving distance of all

64 Roma Design Group, *Richards Boulevard Area Plan*, October 1994, p. 59.

residences. Table 6.9-9 shows the park acres required to serve the proposed project. Impacts to bike trails and pedestrian facilities are discussed in Section 6.11 Transportation and Circulation:

- Neighborhood Serving Parks: 2.5 acres per 1,000 population with a service area guideline of 0.5 mile
- Community Serving Parks: 2.5 acres per 1,000 population with a service area guideline of 3 miles
- Citywide/Regionally Serving: 8.0 acres per 1,000 population

Type of Park	City Standards	Population	Required Park Acres/Mileage
Scenario A			
Neighborhood Serving Park	2.5 acres per 1,000 population	7,661	19.15 ac
Community Serving Park	2.5 acres per 1,000 population	7,661	19.15 ac
Citywide/Regionally Serving Park	8.0 acres per 1,000 population	7,661	61.29 ac
Trails/Bikeways	0.5 miles per 1,000 population	7,661	3.83 mi
Scenario B			
Neighborhood Serving Park	2.5 acres per 1,000 population	6,040	15.10 ac
Community Serving Park	2.5 acres per 1,000 population	6,040	15.10 ac
Citywide/Regionally Serving Park	8.0 acres per 1,000 population	6,040	48.32 ac
Trails/Bikeways	0.5 miles per 1,000 population	6,040	3.02 mi

Source: City of Sacramento, Parks and Recreation Master Plan 2005-2010, December 7, 2004.

The 0.9-acres of private parks, which are part of the proposed project, do not qualify as parkland under the City of Sacramento's standards because they would be private and only residents would have access to the parks. The parks would be owned and maintained by a Homeowner's Association (HOA), with HOA dues applied towards park operations, including security.

For the purposes of this analysis, a significant impact would occur if the threshold park standards are not reached and the construction of additional park facilities is required which could cause adverse environmental impacts.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project causes or accelerates a substantial physical deterioration of existing area parks or recreational facilities; or
- The project creates a need for construction or expansion of recreational facilities beyond what was anticipated in the General and/or Community Plans.

Project-Specific Impacts and Mitigation Measures

6.9-13 The proposed project could result in the need to construct new, or expanded existing neighborhood serving parks.

Scenario A

Scenario A would bring approximately 7,661 new residents to the City and would result in the need for approximately 19.15 acres of neighborhood serving park within 0.5 miles of the project site.

Scenario B

Scenario B would bring approximately 6,040 new residents to the City and would result in the need for approximately 15.10 acres of neighborhood serving parks within 0.5 miles of the project site.

Analysis

The proposed project would include approximately 27 acres of public open space and approximately 0.09 acres of private open space (see Figure 2-8). Open space, as defined in Chapter 2, Project Description, would include urban parks and plazas, parkways, and natural open space along the American River. Because the project site is no more than 0.5 mile across, all parks in the proposed project would be within the 0.5 mile radius required to meet the neighborhood and community serving park standards. In addition, the project also includes a paseo along 7th Street and a riverfront Pavilion at the terminus of North 7th Street as it approaches the waterfront. Pavilion uses could include an outdoor performance venue, an observation tower or monument, an overlook onto the American River, and other public urban park uses. The Pavilion would offer specialized facilities that would serve the larger community not found in smaller, neighborhood parks.

The proposed project would require a minimum of 19.15 acres of neighborhood serving parks with buildout of Scenario A. Neighborhood parks are generally 5 to 10 acres in size and are intended to be used primarily by residents within a half-mile radius. In addition to landscaping, improvements could include a tot lot, adventure area, and unlighted sport fields or courts. Implementation of the proposed project would include approximately 27 acres of public open space with passive open space areas for recreation, as defined above. However, the City has indicated that much of the 27 acres of public open space would not qualify as parkland under City Code 16.64 (Quimby Act), which permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The City collects Quimby Act in-lieu fees through the City's Park Development Impact Fee fund (Chapter 18.44, Sacramento City Code) used to finance the construction of parkland. The required park fee is based upon the residential density, parkland cost, and other factors. The Development Agreement would be used to allow for more flexibility in the type of dedication required by the Quimby Act. However, the project does not provide the required 19.15 acres of parkland to meet the city's standards.

Scenario B would require a minimum of 15.10 acres of neighborhood serving park. As discussed above, the 27 acres of open space does not meet the City's definition of parkland. Therefore, under Scenario B the project would not provide the required 15.10 acres of neighborhood parkland. Because both scenarios do not meet the park standard for

neighborhood serving parks and could result in the need to construct new park facilities, this would be considered a *significant impact*.

Mitigation Measure

Compliance with the City's Park Development Impact Fund would require that the applicant or developer pay adequate fees to enable the city to finance future neighborhood park construction. Therefore, the impact would be reduced to a ***less-than-significant level***.

6.9-13 (A&B) *The project applicant or developer shall comply with the City's Park Development Impact Fund and pay required fees to ensure adequate neighborhood park facilities are provided in the City.*

6.9-14 The proposed project could result in the need to construct new, or expanded existing community serving parks.

Scenario A

Scenario A would bring approximately 7,661 new residents to the City and would result in the need for approximately 19.15 acres of community serving park within 0.5 miles of the project site.

Scenario B

Scenario B would bring approximately 6,040 new residents to the City and would result in the need for approximately 15.10 acres of community serving parks within 0.5 miles of the project site.

Analysis

As discussed above, Scenario A would include approximately 27 acres of public open space and approximately 0.09 acres of private open space. Because the project site is no more than 0.5 mile across, all parks within the proposed project would be within the 0.5 mile radius required to meet the neighborhood and community serving park standards.

Community Parks are generally 10 to 60 acres in size and have a service area of approximately two to three miles, which encompasses several neighborhoods and meets the requirements of a large portion of the City. In addition to neighborhood park elements, a community park might also have restrooms, on-site parking, a community center, a swimming pool, lighted sports fields or courts, and other specialized facilities not found in a neighborhood park. Some of the smaller community parks may be dedicated to one use, and some elements of the park might be leased to community groups.

The proposed project would require a minimum of 19.15 acres of community serving parks with buildout of Scenario A. Implementation of the proposed project would include approximately 27 acres of public open space. A riverfront Pavilion is proposed at the terminus of North 7th Street as it approaches the waterfront. Pavilion uses could include an outdoor performance venue, an observation tower or monument, an overlook onto the American River, and other public urban park uses (see Figure 2-8). The Pavilion would offer specialized facilities that are not found in a smaller, neighborhood park. These facilities would draw residents from the larger community and would serve more than just the project residents.

Scenario B would require a minimum of 15.10 acres of community serving park. As discussed above, the City has indicated that much of the 27 acres of public open space would not qualify as parkland under City Code 16.64 (Quimby Act). Therefore, because both scenarios would not meet the City's park standard for community serving parks which could result in the need to construct new park facilities this would be considered a *significant impact*.

Mitigation Measure

Compliance with the City's Park Development Impact Fund would require that the applicant or developer pay adequate fees to enable the city to finance future community park construction. Therefore, the impact would be reduced to a ***less-than-significant level***.

6.9-14 (A&B) *The project applicant or developer shall comply with the City's Park Development Impact Fund and pay required fees to ensure adequate community park facilities are provided in the City.*

6.9-15 The proposed project could result in the need to construct new, or expanded existing Citywide/regionally serving parks.

Scenario A

Scenario A would bring approximately 7,661 new residents to the City and would result in the need for approximately 61.29 acres of Citywide/regionally serving park.

Scenario B

Scenario B would bring approximately 6,040 new residents to the City and would result in the need for approximately 48.32 acres of Citywide/regionally serving park.

Analysis

Scenario A would require a minimum of 61.29 acres of Citywide/regionally serving park uses and Scenario B would require a minimum of 48.32 acres. Citywide/Regional parks are larger sites developed with a wide range of amenities not usually found in local neighborhood or community facilities. Citywide parks are designed to meet the needs of the entire City population. In addition to neighborhood and community park type improvements, regional parks may include a golf course, marina, amusement area, zoo, nature area, and other amenities. Some elements in the park may be under lease to community groups. The City has approximately 3,520 acres of Citywide/regionally serving acres.⁶⁵

As discussed above, the construction of a riverfront Pavilion could include an outdoor performance venue, an observation tower or monument, an overlook onto the American River, and other public urban park uses. In addition, the existing American River levee has been adapted to accommodate a City bicycle trail along the southern levee of the American River, known as the Two Rivers Trail, which runs between Interstate 5 and State Route 160. The trail was completed in October 2006 and provides public access to the river. These facilities are unique improvements that would meet the needs of the entire City.

Implementation of the proposed project under either Scenario A or B would include approximately 27 acres of public open space which would not meet the City's requirement of

65 City of Sacramento, *Parks and Recreation Master Plan*, Adopted December 2004, p. 8.

8 acres of Citywide/regional serving park per 1,000 residents. Because the project would not meet the City's defined parkland standards which could result in the need to construct new park facilities, this would be considered a *significant impact*.

Mitigation Measure

Implementation of the following mitigation measure would reduce this impact to a ***less-than-significant level***.

6.9-15 (A&B) *The project applicant or developer shall comply with the City's Park Development Impact Fund and pay required fees to ensure adequate citywide or regional park facilities are provided in the City.*

Compliance with the City's Park Development Impact Fund would require that the applicant or developer pay adequate fees to enable the city to finance future citywide/regional park construction.

Cumulative Impacts and Mitigation Measures

The cumulative context for analyzing the provision of parks and recreational facilities is the City of Sacramento through the PRMP horizon year of 2010. The Parks and Recreation Department has policies that require formal updates of the PRMP to be completed a minimum of every five years. The Department is also planning amendments to the PRMP in 2007.⁶⁶ If future development projects are not incorporated in the current PRMP, the project would go through environmental review to determine the acreage of parks needed in the development to satisfy the park standards. This would ensure that the provision of parks is appropriately maintained between adoptions of subsequent PRMPs.

6.9-16 The proposed project, in combination with other future development in the Central City, could result in the need to construct new, or expanded existing neighborhood serving parks.

Scenario A and B

In addition to the 19.15 acres required by implementation of Scenario A or the 15.10 acres required by Scenario B, the PRMP outlines the total amount of land needed by 2010 in order to meet the City's Service Level Goal (rather than Service Level Standard, which is the minimum required) of 5 acres per 1,000 residents. By 2010, the City of Sacramento is expected to grow to 497,544 residents, based on information provide by the Department of Finance and the City's General Plan. In order to serve this population, the City must increase the amount of land dedicated to neighborhood parks and open space. The acreage service level analysis in the Master Plan identifies the need for approximately 315 additional acres of neighborhood/community serving acres by 2010.⁶⁷ The Master Plan identifies funding and mechanisms necessary for implementing construction and expansion of parks and recreational facilities through 2010 to serve the new population. However, because the project, under either Scenario, does not include the required amount of acreage for neighborhood parkland which

66 J.P. Tindell, Interim Planning and Development Manager, Parks and Recreation Department, written communication, October 27, 2006.

67 City of Sacramento, *Parks and Recreation Master Plan*, Adopted December 2004, Assessment Section, p. 7.

could necessitate the need to construct new park facilities, the project's contribution to the cumulative effect is considerable and this would be a *significant cumulative impact*.

Mitigation Measure

Implementation of the following mitigation measure would reduce this cumulative impact to a ***less-than-significant level***.

6.9-16 (A&B) *Implement Mitigation Measure 6.9-13.*

Implementation of Mitigation Measure 6.9-13 would ensure funds are provided to off-set the project's requirement to provide neighborhood parkland. Compliance with this mitigation would reduce the project's contribution to a less than considerable level.

6.9-17 The proposed project, in combination with other future development in the Central City, could result in the need to construct new, or expanded existing community serving parks.

Scenario A and B

In addition to the 19.15 acres required by implementation of Scenario A or the 15.10 acres required by Scenario B, the PRMP outlines the total amount of acres needed by 2010 in order to meet the City's Service Level Goal (rather than Service Level Standard, which is the minimum required) of 5.0 acres per 1,000 residents. By 2010, the City of Sacramento is expected to grow to 497,544 residents, based on information provided by the Department of Finance and the City's General Plan. In order to serve this population, the City must increase the amount of land dedicated to community parks and open space. The acreage service level analysis in the PRMP identifies the need for approximately 315 acres of neighborhood/community serving acres by 2010.⁶⁸ The PRMP identifies funding and mechanisms necessary for implementing construction and expansion of parks and recreational facilities through 2010 to serve the future population. However, because the project, under either Scenario, does not include the required amount of acreage of community parkland which could necessitate the need to construct new park facilities, the project's contribution to the cumulative effect is considered *significant*.

Mitigation Measure

Implementation of the following mitigation measure would reduce this cumulative impact to a ***less-than-significant level***.

6.9-17(A&B) *Implement Mitigation Measure 6.9-14.*

Implementation of Mitigation Measure 6.9-14 would ensure funds are provided to off-set the project's requirement to provide community parkland. Compliance with this mitigation would reduce the project's contribution to a less than considerable level.

68 City of Sacramento, *Parks and Recreation Master Plan*, Adopted December 2004, Assessment Section, p. 7.

6.9-18 The proposed project, in combination with other future development in the Central City, could result in the need to construct new, or expanded existing Citywide/regionally serving parks.

Scenario A and B

In addition to the 61.29 acres required by implementation of Scenario A or the 48.32 acres required by Scenario B, the PRMP outlines the total amount of acres needed for citywide or regional parkland by 2010 in order to meet the City's Service Level Goal (rather than Service Level Standard, which is the minimum required) of 8 acres per 1,000 residents. According to the Department of Finance and the City's General Plan by 2010, the City of Sacramento is expected to grow to 497,544 residents. In order to serve this population, the City must increase the amount of parkland dedicated to citywide parks and open space. The acreage service level analysis in the PRMP identifies the need for approximately 460 acres of citywide/regionally serving parks by 2010 to meet the Service Level Goal of 8 acres per 1,000 residents for regional parks.⁶⁹ The PRMP identifies funding and mechanisms necessary for implementing construction and expansion of parks and recreational facilities through 2010 to ensure the new population would meet the Service Level Goals established in the Master Plan and the City's General Plan. Because the project, under either Scenario, does not include the required amount of acreage of citywide or regional parkland which could necessitate the need to construct new park facilities, the project's contribution to the cumulative effect is considered *significant*.

Mitigation Measure

Implementation of the following mitigation measure would reduce this cumulative impact to a ***less-than-significant level***.

6.9-18 (A&B) *Implement Mitigation Measure 6.9-15.*

Implementation of Mitigation Measure 6.9-15 would ensure funds are provided to off-set the project's requirement to provide citywide or regional parkland. Compliance with this mitigation would reduce the project's contribution to a less-than-considerable level.

69 City of Sacramento, *Parks and Recreation Master Plan*, Adopted December 2004, Assessment Section, p. 8.

6.10 Public Utilities

6.10 PUBLIC UTILITIES

This section of the EIR describes existing public utilities available to serve the proposed project and evaluates the effects of project development on the capacity of these utilities. Impacts are evaluated in relation to increased demand for public utilities and actions needed to provide services that could potentially lead to physical environmental effects. The Initial Study (Appendix A) found that the proposed project could result in potentially significant impacts to public utilities. The utilities evaluated in this section include the following:

- Solid Waste;
- Wastewater;
- Water Supply; and
- Electricity and Natural Gas.
- Storm drainage infrastructure capacity is addressed in Section 6.7, Hydrology and Water Quality. No comment letters associated with the provision of public utilities were received during the NOP review period.

SOLID WASTE

This section describes existing solid waste collection services in the project area. Existing plans and policies relevant to solid waste issues associated with implementation of the project are provided. Potential impacts to solid waste collection services due to the project are evaluated based on analyses of service levels and project data. In addition, mitigation measures intended to reduce impacts to solid waste collection services are proposed, where appropriate.

Information for this section was obtained from project plans, the City of Sacramento General Plan, the Central City Community Plan, the California Integrated Waste Management Board, communication with City of Sacramento Solid Waste Division staff, and other environmental documentation for the project area.

ENVIRONMENTAL SETTING

In 2005, the City of Sacramento alone disposed of a total of 291,691 tons of solid waste. The total generation, including the disposal of waste from private haulers in the City, generated 1.13 million tons of waste with approximately 50 percent diversion.¹

Solid waste in the City of Sacramento is collected by City and permitted private haulers. The City offers residential and commercial solid waste collection services. Construction and demolition waste is collected by private companies. Waste collected by the City is transported to the Sacramento Recycling and Transfer Station at 8491 Fruitridge Road. The Sacramento Recycling and Transfer Station accepts approximately 2,000 tons of mixed municipal waste per day and is permitted for a maximum daily disposal of 3,000 tons. The Transfer Station was recently approved for 2,500 tons per day by the City and is awaiting approval from the state.²

1 Marty Strauss, IWPS, Solid Waste Services, City of Sacramento, written communication, December 5, 2006.
2 Marty Strauss, IWPS, Solid Waste Services, City of Sacramento, written communication, December 5, 2006.

From the transfer station the waste is currently transported to the Lockwood Regional Landfill located in Sparks, Nevada. The Lockwood Landfill is a Class I landfill that currently accepts an average of 7,700 tons of solid waste per day, 800 tons of which come from the City of Sacramento. The Lockwood Landfill does not have maximum daily disposal limits, and it has a remaining capacity of 32.5 million tons. The landfill currently operates on a 550-acre site; however, to accommodate planned future growth, the process for expansion to 1,100 acres is underway.³ The expansion is expected to be completed by 2008.⁴

Construction and demolition waste and commercial waste that is collected by private companies is disposed at a variety of facilities, including the Sacramento County Kiefer Landfill, the Yolo County Landfill, Forward Landfill, and L and D Landfill. Private haulers can deliver waste to the landfill of their choice and base the decision on market conditions and capacity. Other transfer facilities in the area are the Elder Creek Transfer Station and the North Area Recovery Station Transfer Station.

The Sacramento County (Kiefer) Landfill, operated by the County Department of Public Works, is the primary municipal solid waste disposal facility in Sacramento County. Kiefer Landfill, categorized as a Class III facility, also accepts waste from the general public, businesses, and private waste haulers. More specifically, wastes accepted include: construction/demolition, mixed municipal, and sludge (biosolids). The facility is on a 1,084-acre site near the intersection of Kiefer Boulevard and Grantline Road. The permitted capacity for the landfill is 117,400,000 cubic yards (10,815 tons/day) and, as of 2000, the landfill had a remaining capacity of 86,163,462 cubic yards (73 percent). The landfill has an estimated closure date of 2064.

REGULATORY SETTING

Federal Regulations

Resource Conservation and Recovery Act

Volume 40 of the Code of Federal Regulations, Part 258 (Resource Conservation and Recovery Act (RCRA, Subtitle D)) contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design, groundwater monitoring, and closure of landfills.

State Regulations

Assembly Bill 939

Regulation affecting solid waste disposal in California is embodied in California State Assembly Bill (AB) 939, which is known as the California Integrated Waste Management Act and was codified in the Public Resources Code and in Title 14 of the California Code of Regulations in 1992. AB 939 was designed to increase landfill life by diverting solid waste from landfills within the state and conserving other resources through increasing recycling programs and incentives. AB 939 requires that counties prepare Integrated Waste Management Plans to implement landfill diversion goals, and requires that cities and counties prepare and adopt Source Reduction and Recycling Elements (SRRE). The SRRE must set forth a program for

3 City of Sacramento, *Draft Environmental Impact Report for the ParkeBridge Residential Subdivision*, SCH# 2005012119, October 2005, pp. 5.5-1 and 5.5-2.

4 Chris Thomas, Waste Management, Lockwood Landfill, personal communication, April 25, 2006.

management of solid waste generated with the jurisdiction of the respective city or county. Each source reduction and recycling element must include, but is not limited to, all of the following components for solid waste generated in the jurisdiction of the plan:

- A waste characterization component,
- A source reduction component,
- A recycling component,
- A composting component,
- A solid waste facility capacity component,
- An education and public information component,
- A funding component, and
- A special waste component.

The SRRE programs are designed to achieve landfill diversion goals by encouraging recycling in the manufacture, purchase and use of recycled products. AB 939 also requires that California cities implement plans designed to reduce waste deposited in landfills by 50 percent per person by December 31, 2000. The diversion rate is adjusted annually for population and economic growth when calculating the percentage achieved in a particular jurisdiction.

Assembly Bill 1220

The California Integrated Waste Management Board (CIWMB) and the State Water Resources Control Board (SWRCB) completed a parallel rulemaking as a result of Assembly Bill 1220 (Chapter 656, Statutes of 1993). Assembly Bill 1220 required clarification of the roles and responsibilities of the two boards, the Regional Water Quality Control Boards and the CIWMB's local enforcement agencies in regulating solid waste disposal sites. The approved Title 27 regulations combine prior disposal site/landfill regulations of the CIWMB and SWRCB that were maintained in Title 14 CCR and Chapter 15 of Title 23 CCR (which contains requirements for disposal of hazardous waste). The regulations were adopted at a joint meeting of the CIWMB and SWRCB on January 23, 1997.

The purpose for the CIWMB standards in this subdivision is to protect public health and safety and the environment. The regulations apply to active and inactive disposal sites, including facilities or equipment used at the disposal sites. These standards make clear that the primary responsibility for enforcing state minimum standards rests with the local enforcement agency in cooperation with the Regional Water Quality Control Board or other oversight agency. Subchapters of Title 27 include operating criteria for landfills and disposal sites, requirements to have enough materials to cover waste to prevent a threat to human health and the environment, requirements for operations at solid waste facilities for the handling of waste and equipment needs of the site, requirements for controlling activities on site, requirements for controlling landfill gas that is made from the decomposition of wastes on site, and requirements of the owner/operator of a facility to properly operate the site to protect the site from fire threat.

Local Regulations

Sacramento Regional Solid Waste Authority (SWA)

The Sacramento Regional Solid Waste Authority (SWA) is a joint powers authority consisting of a board of supervisors representing Sacramento County and the cities of Sacramento and Citrus Heights. The SWA enforces its ordinances to regulate commercial solid waste collection, permit franchised haulers, and promote recycling programs.

Ordinance 8

Ordinance 8 was established to regulate the transport, transfer, disposal, and recycling of commercial solid waste kept or accumulated within the SWA region. The ordinance was put into place for the purposes of ensuring the orderly operation of solid waste transport and disposal, and also to minimize adverse effects on human health and the local environment. Sections 24 and 25 of Ordinance 8 specify that commercial franchisees must divert 30 percent of their commercial solid waste for recycling, and establishes a recycling incentive fee for tonnage shortfall of waste diversion. Section 35 provides restrictions for solid waste disposal, including prohibiting the dumping of solid waste on any property, road, or highway not designated by the ordinance for solid waste disposal or dumping.

City of Sacramento General Plan

The following goal is applicable to solid waste and the proposed project:

Goal	Provide adequate solid waste disposal facilities and services for collection, storage and reuse of refuse.
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Source Reduction and Recycling Element

The California Integrated Waste Management Act of 1989 (Assembly Bill 939, noted above) mandates that each city shall prepare, adopt, and submit a SRRE. AB 939 required all cities to achieve a minimum diversion of 25 percent of the City's waste stream from landfilling by the year 1995 and 50 percent diversion by the year 2000. The City of Sacramento's Final Draft SRRE, approved in 1995, pledges to exceed the requirements of AB 939, where feasible, in an effort to achieve a 70 percent landfill avoidance goal adopted by City Council in August 1989. In order to achieve this goal, the City has implemented a number of programs, including curbside recycling, drop-off and buy-back centers, and compost programs. The City has met the 50 percent diversion mandated by AB 939 every year since 2000, with the exception of 2004. The 2004 diversion rate was 49 percent in the City due to commercial haulers not meeting the 30 percent diversion requirement pursuant to the franchise agreements with independent haulers. If the franchise agreements were consistently met, the City would have a diversion rate between 54 and 56 percent. There is a proposal to replace these agreements with a business recycling-generator based recycling requirement.⁵ The City is currently looking into ways to increase solid waste diversion rates to up to 75 percent.⁶

The City also requires construction and demolition recycling for construction projects. This is part of the conditions of approval for new construction and plans. The conditions require 90 percent diversion for asphalt and concrete and 50 percent for other materials. All construction

⁵ Marty Strauss, IWPS, Solid Waste Services, City of Sacramento, written communication, December 5, 2006.

⁶ Tyler Stratton, Solid Waste Division, Department of Utilities, City of Sacramento, personal communication, May 31, 2006.

projects must submit a plan of how they will achieve these diversion rates prior to receiving a building permit.⁷

Richards Boulevard Area Plan

There are no goals or policies applicable to solid waste services and the proposed project.

Sacramento Municipal Code

Chapter 17.72 of the City of Sacramento Municipal Code outlines the recycling and solid waste disposal regulations. These regulations are necessary in order to lengthen the lifespan of landfills, encourage recycling, and meet State mandated goals for waste reduction and recycling, specifically AB 939. These policies provide guidelines regarding the location, size and design features of recycling and trash enclosures in a manner by which adequate, convenient space for the collection, storage, and loading of recyclable and solid waste material is provided. In addition, developers are required to submit a "statement of recycling information" to the City's solid waste manager. The requirement for this statement includes: a site plan which includes design specifications, plans for demolition and construction, and any details of proposed education/public relations programs.⁸

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

The analysis uses the following solid waste generation rates, provided by the City of Sacramento.⁹

- Office = 31 tons/acre/year
- Retail = 31 tons/acre/year
- Residential = 0.7 tons/unit/year

Scenario A contains no office uses, so the office generation rate will not be applied to this scenario. Scenario B, however, does contain all three types of land uses, and then office generation rate will be applied to this development option. For both scenarios, the restaurant square footage (30,000 sf) is included in the retails square footage for this analysis.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project would require or result in the construction of new landfills or the expansion of existing facilities to accommodate the project's solid waste disposal needs.

7 Marty Strauss, IWPS, Solid Waste Services, City of Sacramento, written communication, December 5, 2006.

8 City of Sacramento, Municipal Code, Chapter 17.72, *Recycling and Solid Waste Regulations*, <<http://ordlink.com/codes/sacramento/index.htm>> (June 19, 2006).

9 Marty Strauss, IWPS, Solid Waste Services, Department of Utilities, City of Sacramento, personal communication, December 11, 2006.

Project-Specific Impacts and Mitigation Measures

6.10-1 Solid waste generated by the proposed project could exceed landfill capacity.

Scenario A

Scenario A would include development of retail and residential uses on the project site which would generate up to 5.95 tons per day (2,172 tons per year) (see Table 6.10-1). The solid waste generated by the proposed project would constitute a 0.7 percent increase in solid waste accepted at Lockwood Landfill from the City of Sacramento each day and approximately 0.07 percent of the total waste accepted at the landfill every day. This would also increase Sacramento's total annual solid waste disposal by less than one percent.

Scenario B

Development of Scenario B would include development of retail, residential, and office uses on the project site that would generate up to 6.38 tons per day (12,751 tons per year) (see Table 6.10-1). Solid waste generate from this scenario would also contribute an approximately 0.8 percent increase in waste accepted at the Lockwood Landfill from the City each day. The City's annual solid waste disposal would also increase by less than one percent.

Land Use	Units	Generation Rate	Solid Waste in Pounds	Solid Waste in Tons
Scenario A				
Residential	2,981 du	0.7 tons/unit/year	4,173,400 lbs/yr	2,088 tons/yr
Retail	146,194 sf (2.7 ac)	31 tons/acre/year	167,400 lbs/yr	84 tons/yr
TOTAL per year			4,340,800 lbs/year	2,172 tons/year
TOTAL per day			11,893 lbs/day	5.95 tons/day
Scenario B				
Residential	2,350 du	0.7 tons/unit/year	3,290,000 lbs/yr	1,645 tons/yr
Retail	146,194 sf (2.7 ac)	31 tons/acre/year	167,400 lbs/yr	84 tons/yr
Office	839,628 sf (19.3 ac)	31 tons/acre/year	1,196,600 lbs/yr	598 tons/yr
TOTAL per year			4,654,000 lbs/year	2,327 tons/year
TOTAL per day			12,751 lbs/day	6.38 tons/day

Source: Marty Strauss, IWPS, City of Sacramento Solid Waste Services, personal communication, December 11, 2006.

Analysis

As shown in Table 6.10-1, the proposed project would result in the disposal of approximately 2,172 tons per year (Scenario A) and 2,327 tons per year (Scenario B). There is currently capacity to accommodate the proposed project's solid waste generation based on the capacity at the Lockwood Landfill. The City only has exclusive rights for solid waste disposal for single-family residential land uses with up to four attached units. If the residential land use has greater than four attached units, the contract for solid waste disposal is commercial and available in the competitive market.¹⁰ Private waste haulers operate in the City of Sacramento, so the destination of the solid waste is uncertain. The destination for waste from the competitive market is also uncertain. Nonetheless, there are several landfills in northern California and

10 Marty Strauss, IWPS, City of Sacramento Solid Waste Services, written communication, December 11, 2006.

northwestern Nevada with adequate capacity that could serve the proposed project.¹¹ They include:

- Neal Road Landfill, Butte County, 22,001,876 cubic yards remaining capacity
- L and D Landfill, Sacramento County, 5,190,536 cubic yards remaining capacity
- Sacramento County (Kiefer) Landfill, Sacramento County, 86,163,462 cubic yards remaining capacity
- Foothill Sanitary Landfill, San Joaquin County, 94,969,466 cubic yards remaining capacity
- Forward Landfill, San Joaquin County, 40,031,058 cubic yards remaining capacity
- North County Landfill, San Joaquin County, 13,239,032 cubic yards remaining capacity
- Hay Road Landfill, Solano County, 22,815,505 cubic yards remaining capacity
- Potrero Hills Landfill, Solano County, 8,200,000 cubic yards remaining capacity
- Tehama County/Red Bluff Landfill, Tehama County, 2,424,448 cubic yards remaining capacity
- Fink Road Landfill, Stanislaus County, 10,000,000 cubic yards remaining capacity
- Yolo County Central Landfill, Yolo County, 16,122,000 cubic yards remaining capacity
- Norcal Waste Systems Ostrom Road LF Inc., Yuba County, 11,252,490 cubic yards remaining capacity
- Lockwood Landfill, Sparks, Nevada, 37,500,000 cubic yards remaining capacity

Although the ultimate destination of the solid waste generated by the proposed project cannot be determined with certainty at this time, there are several other facilities with substantial capacity remaining that could serve the proposed project. Some of the landfills listed above are planning expansions to further increase their ability to accept solid waste. If the Lockwood Landfill or Kiefer Landfill cannot serve the proposed project, other landfills would be available to accept solid waste from the proposed project without substantially affecting capacity.

Solid waste disposal by local agencies is governed by California State Assembly Bill 939 (AB 939). AB 939 is designed to increase landfill life and conserve other resources through intensified recycling. AB 939 requires counties to prepare Solid Waste Master Plans to implement the Bill's goals, particularly to divert approximately 50 percent of the solid waste generated by the year 2000. Additionally, the Bill requires cities and counties to prepare Source Reduction and Recycling Elements (SRRE) of their General Plans. This Element is designed to develop programs to achieve the landfill diversion goals, to stimulate local recycling in manufacturing and the purchase of recycled products.

In compliance with AB 939, the City of Sacramento's Comprehensive Zoning Ordinance has provisions pertaining to solid waste recycling. In 1991, an amendment was added (Section 3, Chapter 4) to the Zoning Ordinance to address recycling and solid waste disposal requirements

11 California Integrated Waste Management Board, *Active Landfill Profiles*, <www.ciwmb.ca.gov> (June 14, 2006).

for new and existing developments. These provisions require that all commercial (including retail), office, industrial, public/quasi-public, and 5-unit or more multiple-family residential developments prepare a recycling program before issuance of a building permit. The recycling program must include a flow chart depicting the routing of recycled materials, and a site plan specifying the location and design components and storage locations associated with recycling efforts. The required recycling program also includes the development of the following: a construction plan to identify the recyclable materials being used in the construction of the proposed structures, a demolition plan identifying the proposed recycling of reusable or recyclable building materials in the demolition of any existing structures, and an educational program about recycling.

The proposed project would be required to comply with Chapter 3, Section 4 (Recycling and Solid Waste Disposal Regulations) of the City of Sacramento Zoning Ordinance prior to issuance of building permits. This section regulates the location, size, and design features of recycling and trash enclosures in order to provide adequate, convenient space for the collection, storage, and loading of recyclable and solid waste material for existing and new development. The project applicant is required to submit a Statement of Recycling Information prior to issuance of a building permit, to be reviewed and approved by the City Solid Waste Manager.

In addition, the proposed project includes the operation of a temporary portable recycling facility. The recycling facility would be an interim use in operation for approximately six weeks during initial project demolition. The facility would be used to recycle material from the demolition of buildings and paved areas on-site. These materials could include brick, tile, concrete, and asphalt as well as other materials. Some material would be re-used on the project site for new buildings and some would be hauled off-site. The recycling facility would also be used to recycle demolition material from off-site for use in new construction, subject to appropriate conditions and restrictions. This would reduce the amount of waste generated associated with demolition activities.

Because there is sufficient capacity at various landfills that could serve the project and the project would be required to comply with regulations that would divert a portion of the solid waste generated by the project from landfills, this is a ***less-than-significant impact***.

Mitigation Measure

None required.

Cumulative Impacts and Mitigation Measures

The cumulative analysis is based on the project's contribution and potential impact upon landfills. The cumulative context for solid waste services includes all development in the Sacramento Regional County Solid Waste Authority service area. This includes the cities of Sacramento and Citrus Heights and unincorporated areas of the County.

6.10-2 Solid waste generated by the proposed project, in combination with other development in the City, could exceed landfill capacity.

Scenario A and B

Implementation of development under either Scenario A or Scenario B would contribute less than one percent of solid waste to the Sacramento's total annual solid waste. As addressed in

the setting section, a number of landfills operate in the Sacramento region, and landfills outside the region also serve Sacramento's solid waste needs. Lockwood Landfill, the primary destination for waste collected by the City of Sacramento, is undergoing an expansion that will increase its capacity enough to continue operation for at least the next 100 years. Kiefer Landfill is not expected to reach capacity for another 60 years. As growth continues in the region, in accordance with the County General Plan and city general plans, population would increase and the solid waste stream would continue to grow. Implementation of the Solid Waste Authority and Sacramento recycling requirements, however, would continue to significantly reduce potential impacts on landfill capacity. Because the project's contribution to the total annual waste stream would be less than one percent; and the existence of significant capacity at the City's primary landfills, the exporting of solid waste, and aggressive recycling policy cumulative solid waste, including the proposed project, would not exceed available land fill capacity and therefore, this would be a ***less-than-significant cumulative impact***.

Mitigation Measure

None required.

WASTEWATER

The focus of this section is on the capacity of City systems for collection, conveyance, and treatment of wastewater flows from the project site. Issues associated with drainage and associated water quality are evaluated in Section 6.7, Hydrology and Water Quality.

Information for this section comes from variety of sources, including the preliminary engineering plans for the proposed project, information regarding the City's existing wastewater collection facilities that serve the project site, including the Central Valley Regional Water Quality Board's (CVRWQCB) Monitoring Program reports, as well as the environmental documents prepared for the Sacramento Regional Wastewater Treatment Plant (WTP) and the 2020 Master Plan for the plant. Additional information comes from the City's 2006-2011 Capital Improvement Program.

ENVIRONMENTAL SETTING

Existing Wastewater System

Separated Sewer System

Wastewater treatment within the City of Sacramento is provided by the Sacramento Regional County Sanitation District (SRCSD). SRCSD operates all regional interceptors and wastewater treatment plants serving the City except for the combined sewer and storm drain treatment facilities which are operated by the City of Sacramento. Local and trunk wastewater collection in the City is provided by County Sanitation District 1 (CSD-1) and the City of Sacramento. Within this area, the CSD-1 serves the community plan areas of South Natomas, North Natomas, and portions of Arcade-Arden, East Broadway, East Sacramento, Airport Meadowview and South Sacramento. The City provides wastewater collection to about two-thirds of the area within the City Limits, which is comprised of two distinct areas; the area served by the combined sewer system (CSS) and the areas served by a separated sewer system. The community plan areas served by the City include the Central City, Land Park, Pocket, North Sacramento, and portions of Arden-Arcade, South Sacramento, East Sacramento, East Broadway and Airport Meadowview.

The City provides wastewater collection to the site by a separated sewer system. However, all wastewater flows from the project site within the separated sewer system are directed into the CSS in the Central City and are ultimately directed to the Sacramento Regional Wastewater Treatment Plant (SRWTP) for treatment.

The SRWTP, which is located just south of the City Limits, is owned and operated by SRCSD and provides sewage treatment for the entire City. Sewage is routed to the wastewater treatment plant by collections systems owned by CSD-1 and the cities of Sacramento and Folsom. SRWTP is a secondary treatment facility that includes raw influent and effluent pumping, primary clarification, secondary treatment with the high-purity oxygen activated sludge process, disinfection, solids thickening, and anaerobic solids digestion. The SRWTP is permitted to treat an average dry weather flow (ADWF) of 181 million gallons per day (mgd) and a daily peak wet weather flow of 392 mgd. Currently, the facility's ADWF is approximately 150 mgd. The SRWTP also receives an average of 220 mgd during wet weather conditions. The SRWTP 2020 Master Plan projects a population-based flow of 218 mgd ADWF. After secondary treatment and disinfection, a portion of the effluent from the plant is further treated in

SRCS D's Water Reclamation Facility and then used for landscape irrigation within the City of Elk Grove. The majority of the treated wastewater is dechlorinated and discharged into the Sacramento River. The SRCS D maintains the regional interceptors that convey sewage to the treatment plant.

Currently, improvements are being made to the system in anticipation of future growth and to help relieve the existing interceptor system. The Lower Northwest Interceptor (LNWI) and Upper Northwest Interceptor (UNWI) will convey flows from the Northeast, Gibson Ranch, Rio Linda, McClellan, Natomas, and a portion of the North Highlands drainage basins. These projects will provide relief for the existing interceptor system as well as provide capacity for future growth. The target date for completion of the LNWI project is January 2007.¹² The UNWI project has been completed.¹³

The CSD-1 service area is divided into 10 trunk sheds which are based on the collection systems of the individual sewer districts from which CSD-1 was originally formed. Each trunk shed consists of a number of hydraulically independent systems, each discharging into the SRCS D interceptor system. According to the CSD-1 Sewerage Facilities Expansion Master Plan dated March 2002, there are capacity deficiencies in portions of the Southeast (Central), Natomas, Arden/North Highlands and Rio Linda trunk systems. These areas are generally served by older sewer systems that are subject to substantial amounts of infiltration/inflow during wet weather.

Combined Sewer System

The CSS is a wastewater collection system designed to convey domestic sewage, commercial and industrial wastewater, and surface stormwater runoff in a single pipeline. The construction of combined sewers, for the specific use of conveying both sanitary and storm flows, was discontinued in 1946. Since that time, separate sanitary sewers and stormwater conveyance have been constructed in newer parts of the service area, and portions of the original CSS have been separated. The project site is outside of the CSS wastewater collection system; however, wastewater flows from the project site eventually flow to CSS infrastructure for treatment at the SRWTP.

The City of Sacramento's CSS consists of pipelines and other facilities. Facilities include pumping stations, an off-line storage facility known as Pioneer Reservoir, and the two primary treatment plants: the Combined Wastewater Treatment Plant (CWTP) and Pioneer Reservoir. The collection system is divided into networks consisting of trunks, interceptors, reliefs, force mains, laterals, and other pipelines. Trunk sewers represent 70 percent of the total collection system capacity (5,000,000 cubic feet total capacity).

The City operates two pump stations, known as Pump Station 1/1A and Pump Station 2/2A. Pump Station 2/2A, the primary pump station for the CSS, operates continuously throughout the year as well as during storm events, while Pump Station 1/1A operates only during storms.

The off-line storage facility, Pioneer Reservoir, is a 3.5-acre, pile-supported, covered, reinforced concrete structure located near Front and U Streets. It was constructed in 1980 to provide 23

12 Sacramento Regional County Services District, Lower Northwest Interceptor, <<http://www.lowernorthwest.com>> (December 12, 2006).

13 Sacramento Regional County Services District, Lower Northwest Interceptor, <<http://www.lowernorthwest.com>> (October 30, 2006).

million gallons of temporary storage in order to reduce overflows down to approximately five to six events per year. It has a peak hydraulic capacity of 350 mgd and treatment capacity of 250 mgd. Pioneer Reservoir was capable of primary treatment only after improvements resulting from the CSS Improvement and Rehabilitation Plan of 1999. Flows from Pump Station 2/2A are routed to the reservoir via the Pioneer Interceptor, a 120-inch diameter, 8,800-foot long pipe. The Interceptor can also provide an additional 5 mgd of storage.

The SRWTP, located approximately five miles south of the City in the unincorporated community of Freeport, is a secondary treatment facility. Currently the discharge rates to the SRWTP are restricted to 60 mgd peak flow from Sump 2 by an Operating Agreement with the SRCSD (see information about Sump 2, below). Approximately 20 to 30 mgd of dry weather sewage flows to the SRWTP from Sump 2. The SRWTP also processes wastewater for most of the urbanized areas of the County, including Citrus Heights, Rancho Cordova, and Elk Grove.

Operation of the CSS

Initially, all combined wastewater is sent to the City's pump stations via underground pipes; the primary station is Sump 2, located on the east side of the Sacramento River. Sumps 1 and 2 direct combined wastewater to the SRWTP, the CWTP, and Pioneer Reservoir where it receives secondary and primary treatment, respectively, before it is discharged to the Sacramento River.

Wet weather flows have been known to exceed system capacity during storm events. During storm events when the CSS flows are greater than 60 mgd to the SRWTP, CSS flows are diverted to the City's CWTP, located near South Land Park Drive and 35th Avenue. These flows receive primary treatment at the CWTP. The CWTP basins may also be used for storage of flows until capacity is available at the SRWTP. During heavy storm events, flows may be sufficient to exceed the 190 mgd combined capacities of SRWTP (60 mgd) and CWTP (130 mgd). A combined sewer overflow (CSO) results when capacity is exceeded. The overflows are diverted to Pioneer Reservoir reaches its capacity, the excess untreated flows are discharged directly into the Sacramento River. If the capacities of the pipeline system and treatment plant are surpassed, excess untreated flows flood local streets in the downtown area through manholes and catch basins.

The CSO discharges of untreated combined wastewater to the river consist primarily of stormwater runoff (90 percent or more), with the remainder as sanitary sewage. The water quality of these discharges varies significantly depending upon the point of discharge and extent of treatment at Pioneer Reservoir (removal of floatables and grit). The untreated CSOs have low pollutant concentrations because the first flush of more polluted flow is treated at the SRWTP and CWTP.

The City identified a long-term control plan (CSS Improvement Program) which includes system improvements to reduce CSOs to the Sacramento River and outflows to City streets. The 1995 plan consists of increasing the pumping capacities of Sumps 1/1A and 2, converting Pioneer Reservoir to a primary treatment facility with disinfection, installing a relief sewer system in the downtown area, and constructing several local or regional underground storage facilities and relief sewers in areas that are currently subjected to frequent outflows and flooding. Many of these improvements have been completed, but others are part of an ongoing process to improve the CSS system. The Utilities Department continues to upgrade pipes and construct additional storage facilities. However, because local outflows of combined sewer water are discharged to the City's streets during moderate and large storms and sewer flows from this

project are discharged to the City's CSS, they are subject to control and mitigation as defined in Chapter 13.08 of the City Code, including Resolution 2005-162.

Wastewater Infrastructure

Most of the project site currently consists of light industrial uses. Sanitary sewage and stormwater runoff in the project area currently flows directly to the SRWTP south of the City or the Sacramento River west of the project site. There are existing sanitary sewer lines located in the Richards Boulevard, North 5th Street, and North 7th Street right-of-ways. The lines range from 8-inch pipes along the northern portion of the site, and flows empty into a larger 24-inch pipe along Richards Boulevard. Flows from the site then flow east into a 33-inch pipe and flow toward a connection in 16th Street where sewage is directed into the CSS. The entire Richards Boulevard area encompasses 1,100 acres; 80 percent of the area is served by the separated sewer, however, all flows generated from this area, whether from the separated or combined system, eventually flow to the CSS and connect with the SRWTP for treatment.¹⁴

REGULATORY SETTING

Federal and State Regulations

Federal and State Clean Water Act

The Federal Clean Water Act and regulations set forth by the California Department of Health Services and SWRCB are aimed primarily at discharges of effluent to surface waters. Title 40 of the Code of Federal Regulations (CFR) Part 503, Title 23 California Code of Regulations, and standards established by the Central Valley Regional Water Quality Control Board regulate the disposal of biosolids.

U.S. Environmental Protection Agency's National CSO Control Policy

In April 1994, the U.S. EPA issued its Combined Sewer Overflow Policy for controlling discharges to the nation's waters from combined sewer systems (40 CFR Part 122). One of the cornerstones of the CSO Policy is the requirement for Nine Minimum Controls (NMCs), which apply to every CSS in the nation. The NMCs are defined as the minimum technology-based actions or measures designed to reduce CSOs and their effects on receiving water quality without extensive engineering studies or major construction. This policy stipulates that at least 85 percent of the average annual CSS storm flow be captured and receive primary treatment with disinfection prior to discharge.

The results of a five-year monitoring effort and study (*Effluent and Receiving Water Quality and Toxicity Summary Report for 1991-1995*) found that the City is in compliance with this policy and has generally treated 92 percent of the total CSS storm flow volume prior to discharge.¹⁵ This monitoring effort was completed prior to implementation of the improvements detailed in the CSS Improvement and Rehabilitation Plan.

In addition, the City's NPDES Permit (No. CA0079111) requires that the CWTP be in operation when Pioneer Reservoir is discharging to the river. This plan ensures that the City maximizes flow to the public-owned treatment works, which is one of the nine minimum controls in EPA's National CSO Policy.

14 Bruce Barbosa, City of Sacramento Utilities Department, personal communication, October 3, 2006.

15 City of Sacramento, *Combined Sewer System Rehabilitation and Improvement Plan Draft Environmental Report*, November 1996, p. 7.2-10.

Local Regulations

City of Sacramento General Plan

The following goal and policies are applicable to wastewater services within the City.

Goal A **Provide adequate sewer service for all urbanized or developing neighborhoods.**

Policies

1.

Provide and upgrade sewer facilities where needed to newly developing areas in the City.

2.

Develop plans for extension of sewer lines to existing developed areas where sewer service is lacking.

3.

Work with property owners to develop financing arrangements in order to provide sewer services.

Sacramento City Code, Chapter 13.08

Sacramento City Code, Chapter 13.08 outlines the requirements for permitted discharges to the sewer service system. The Code specifies requirements for food service establishments and other businesses for discharge. There are also provisions for pretreatment, private sewer or storm drain lines, structures overlying public utilities, swimming pools and fish ponds, air conditioning and refrigeration devices, interruptions and discontinuation of service, inspections, and construction of sewer and storm drain facilities. Article V of the chapter establishes charges and fees for customers receiving sewer service and storm service from the City.

Richards Boulevard Area Plan

There are no goals or policies applicable to the provision of wastewater collection and treatment services and the proposed project.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

The proposed project would result in a variety of land uses and increases in population that would generate new sources of wastewater. This analysis used the equivalent single-family dwelling units (ESD) for proposed land uses to generate rates for wastewater.¹⁶ The ESD is a unit used that refers to the average wastewater flows generated by a single-family dwelling unit. Any land use type can be converted to these units. Below are the generation rates for wastewater by land use per City of Sacramento Improvement Standards.

- Multi-Family Residential ESD 0.75 per unit
- Restaurant ESD 2.0 per 1,000 square feet
- Store ESD 0.2 per 1,000 square feet
- Office ESD 0.2 per 1,000 square feet

16 Sean Smith, Associate Engineer, Nolte Associates, Inc., personal communication, September 29, 2006.

The average flows were calculated for each land use. Table 6.10-2 shows the volume of wastewater for each land use within the project site. A variable peaking factor based on average flows of 3.6 was used to calculate peak flows for each land use per the City of Sacramento Improvement Standards. Table 6.10-3 shows the peaking factor for each land use and each Scenario.

TABLE 6.10-2				
WASTEWATER GENERATION				
Use	Unit of Measurement	Generation Rate (1 ESD = 400 gpd)	ESD	Wastewater (gpd)
Scenario A				
Single-Family Residential		1.0 per unit		
Multi-Family Residential	2,981 du	0.75 per unit	2,236	894,400
Restaurant	30,000 sf	2.0 per 1,000 sf	60	24,000
Store	116,194 sf	0.2 per 1,000 sf	23	9,200
TOTAL (gpd)				927,600 gpd
TOTAL (mgd)				0.928 mgd
Scenario B				
Single-Family Residential		1.0 per unit		
Multi-Family Residential	2,350 du	0.75 per unit	1,763	705,200
Restaurant	30,000 sf	2.0 per 1,000 sf	60	24,000
Store	116,194 sf	0.2 per 1,000 sf	23	9,200
Office	839,628 sf	0.2 per 1,000 sf	168	67,200
TOTAL (gpd)				805,600 gpd
TOTAL (mgd)				0.806 mgd

Source: Sean Smith, Associate Engineer, Nolte Associates, Inc., Personal communication, September 29, 2006.

TABLE 6.10-3				
PEAK WASTEWATER FLOW				
Use	ESD	Peaking Factor¹	Peak ESD	Peak Flow (gpd)
Scenario A				
Multi-Family Residential	2,236	3.6	8,050	3,220,000
Restaurant	60	3.6	216	86,400
Store	23	3.6	83	33,200
TOTAL (gpd)				3,339,600 gpd
TOTAL (mgd)				3.340 mgd
Scenario B				
Multi-Family Residential	1,763	3.6	6,347	2,538,800
Restaurant	60	3.6	216	86,400
Store	23	3.6	83	33,200
Office	168	3.6	605	242,000
TOTAL (gpd)				2,900,400 gpd
TOTAL (mgd)				2.900 mgd

Notes:
1. A range of peaking factors from 3.15 to 3.8 was given for each lot which has differing land uses. An average of all peaking factors was taken for each lot on the project site to estimate the peaking factor for each land use.
Source: Sean Smith, Associate Engineer, Nolte Associates, Inc., Personal communication, September 29, 2006.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project results in the determination of the wastewater treatment provider that adequate capacity is not available to serve the project's demand in addition to existing commitments; or
- The project requires or results in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental effects.

Project-Specific Impacts and Mitigation Measures

6.10-3 The proposed project would increase wastewater flows that could exceed treatment capacity at the SRWTP and/or wastewater collection infrastructure.

Scenario A

Scenario A would increase the amount of developed land uses and population in the City and result in the generation and discharge of additional wastewater requiring treatment at the SRWTP. As shown in Table 6.10-2, Scenario A would generate an average flow of approximately 0.928 mgd. As shown in Table 6.10-2, Scenario A would generate approximately 3.34 mgd of wastewater during peak flow periods, which would increase dry weather flows to the SRWTP by more than two percent.

Scenario B

Scenario B would increase the amount of developed land uses and population in the City resulting in additional wastewater requiring treatment at the SRWTP. As shown in Table 6.10-2, Scenario B would generate an average flow of approximately 0.806 mgd. Scenario B would generate approximately 2.90 mgd of wastewater during peak flow periods, which would increase dry weather flows to the SRWTP by less than two percent.

Analysis

SRWTP is a high purity oxygen activated sludge facility, and is permitted to treat an ADWF of 181 mgd and a daily peak wet weather flow of 392 mgd. Currently, the SRWTP treats an average of 155 mgd. As shown in Table 6.10-2, Scenario A would generate approximately 3.34 mgd of wastewater during peak flow periods and 0.928 mgd during dry weather flows. Existing flows plus flows from the Scenario A would be 155.928 mgd, an increase of almost 1 mgd. This is well below the capacity of the SRWTP.

Scenario B would generate approximately 2.90 mgd of wastewater during peak flow periods and 0.806 mgd during dry weather flows. Existing flows plus flows from Scenario B would be 155.806 mgd, an increase of almost 1 mgd. The increase from either Scenario A or Scenario B would not exceed the dry weather capacity of the plant and would not require expansion of the SRWTP.

The proposed project would construct separate stormwater and wastewater conveyance systems onsite to connect to the existing separated system. All backbone infrastructure within the project site would be engineered and constructed according to the City's design criteria for

wastewater flows to maintain the maximum peak flows. Wastewater from the project site would be conveyed to the existing pipelines in North 5th Street and North 7th Street, eventually flowing to the 33-inch main in Richards Boulevard. The pipe system internal to the project would consist of 6-inch to 10-inch pipes. The only existing pipelines that are undersized based on proposed flows are located on the north half of North 7th Street.¹⁷ The proposed sanitary sewer system is presented on Figure 2-8 in the Project Description.

The wastewater flows from the proposed project would not exceed the capacity of existing larger pipes from separated sewer infrastructure and would not require the construction of new wastewater collection infrastructure than already anticipated as part of the project. Infrastructure on site would also be constructed as part of the proposed project. Therefore, this impact would be *less than significant*.

Impacts associated with the installation of wastewater collection infrastructure on site are evaluated as part of the construction-related impacts evaluated in the other technical sections of this EIR, as appropriate.

Mitigation Measure

None required.

Cumulative Impacts and Mitigation Measures

Cumulative impacts to the SRWTP are based on consideration of all future growth within the service area of the SRWTP and the City of Sacramento.

6.10-4 The proposed project, in combination with other development within the SRWTP service area, would increase wastewater flows that could exceed treatment capacity at the SRWTP and/or wastewater collection infrastructure.

Scenario A and B

Currently, the SRWTP treats an average of 155 mgd. Existing flows plus project flows would be 155.928 mgd under Scenario A and 155.806 mgd under Scenario B which would be an increase of almost 1 mgd. The increase from either Scenario A or Scenario B would not exceed the dry weather capacity of the plant and would not require expansion of the SRWTP.

The proposed project, in combination with other development in the SRWTP service area, would increase population in the City and result in a cumulative increase in wastewater flows to the SRWTP. This includes sewage received from the separated system as well as the CSS. The average daily dry weather flow to the SRWTP at full build-out of the City General Plan is estimated at 129.1 mgd and peak flow is estimated at 305.9 mgd. As previously discussed, the SRWTP currently receives an average dry weather flow of 155 mgd, less than its permitted capacity of 181 mgd of dry weather flow, so the SRCSD is not currently undergoing any expansions to the treatment plant.

In addition to wastewater from the City of Sacramento, the City of West Sacramento has entered into a wastewater services agreement and was annexed into the SRCSD in April 2004. The City of West Sacramento will connect to the regional facilities via the Lower Northwest

17 Sean Smith, Associate Engineer, Nolte Associates, Inc., Memorandum to Steven Smith, EIP Associates, September 1, 2006, p. 1.

Interceptor (LNWI). As discussed in above, the LNWI is a major pipeline with pumping facilities being constructed by SRCSD to serve West Sacramento and portions of Sacramento County. The construction of the LNWI project is on schedule to be completed by the end of January 2007.¹⁸ The City of West Sacramento anticipates an October 2007 connection to the LNWI. Following connection to the LNWI, the existing South River Road wastewater treatment plant will be decommissioned and demolished.¹⁹ The SRCSD's Regional 2020 Master Plan takes into account the annexation of sewer service from the City of West Sacramento to the SRCSD.

Based on the Sacramento Area Council of Government's (SACOG) regional population projections, SRCSD's Regional 2020 Master Plan accommodates for expansions of the treatment plant as growth occurs. This plan is intended to ensure that the SRWTP facilities have sufficient capacity to meet planned growth in the service area through the year 2020. In addition, the Master Plan is updated every five years to account for changes in existing and projected population. Any necessary changes to capacity would occur incrementally, as regional population growth demands greater treatment capacity.²⁰

Wastewater from the project site would be conveyed to the existing pipelines in North 5th Street and North 7th Street, eventually flowing to the 33-inch main in Richards Boulevard. The pipe system internal to the project would consist of 6-inch to 10-inch pipes. The only existing pipelines that are undersized based on proposed flows are located on the north half of North 7th Street.²¹ The proposed sanitary sewer system for the proposed project is presented on Figure 2-8. Future development in the City of Sacramento must assess, in consultation with the Utilities Department, the ability for existing wastewater infrastructure to serve the project. This assessment would be done on a case-by-case basis and improvements and developer fees would be determined at that time.

Because implementation of the existing programs is expected to ensure that capacity is available at the SRWTP and in the existing wastewater infrastructure as growth occurs, and the project would not contribute to the need to expand the SRWTP, the project's contribution to cumulative wastewater flows would not be considerable and impacts to the SRWTP facilities would be ***cumulatively less than significant***.

Mitigation Measure

None required.

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- 18 Patti Ransdell, Public Outreach Manager, Lower Northwest Interceptor, personal communication, January 16, 2007.
- 19 Sacramento Regional County Services District, Lower Northwest Interceptor, <<http://www.lowernorthwest.com>> (December 12, 2006).
- 20 City of Sacramento, *The Towers on Capitol Mall Draft EIR*, May 2005, p. 5.5-16.
- 21 Sean Smith, Associate Engineer, Nolte Associates, Inc., Memorandum to Steven Smith, EIP Associates, September 1, 2006, p. 1.

WATER SUPPLY

The Water Supply section of the EIR describes the water supply that would serve the proposed project in relation to overall water supplies provided by the City of Sacramento. In doing so this section assesses the expected water demand resulting from the proposed project, evaluates the effects of the proposed project on existing and future water infrastructure, and recommends mitigation measures where appropriate. Information in this section is based on the Water Supply Assessment (WSA, Appendix M) prepared for the Township 9 project, the City of Sacramento General Plan Technical Background Report, the City of Sacramento 2006 Urban Water Management Plan (UMWP), and information from City staff.

ENVIRONMENTAL SETTING

Existing Water Sources and Supplies

The City of Sacramento is primarily supplied with surface water from the Sacramento and American Rivers. The City diverts water pursuant to pre-1914 rights to divert 75 cubic feet per second (cfs) from the Sacramento River and secured five additional appropriative water rights with various priorities from October 1947 to September 1954. Sacramento River permit 00992 and American River permits 011358 and 011361 authorize the taking of water from the respective sources by direct diversion. The other two permits, 011359 and 011360, authorize re-diversion and consumptive uses of stored water and releases from the Upper American River Project (UARP). The City's surface water permits require use of the diverted water within the authorized Place of Use (POU). Permits 11359 and 11361 designate a 96,000-acre area within and adjacent to the City as the POU. Permits 11358 and 11360 designate a 79,500-acre area within and adjacent to the City as the authorized POU. Permit 992 designates lands within the City of Sacramento as the authorized place of use, which would include all annexations into the city limits.²²

Additionally, the City maintains 32 groundwater wells for potable and non-potable use; 23 wells are actively used to supply drinking water. The total capacity of the wells is 33 mgd and produces up to 33,600 acre-feet per year (AFA).

In 1957, the U.S. Bureau of Reclamation (USBR) and the City executed a contract that ensures maximum entitlements through the Central Valley Project (CVP). At buildout in 2030, the USBR contract provides the City a maximum annual diversion of 326,800 AFA. This contract has no delivery limitations. The City's surface water entitlements through the permits discussed above and the USBR contractual diversions are listed in Table 6.10-4. As of 2005, the City is authorized to receive 205,000 AFA. Table 6.10-5 illustrates the annual diversion limits. The contract amount increases annually to a maximum of 326,800 AFA in 2030 also presented in Table 6.10-5.

An important component of water supplies within Sacramento region is the Water Forum Agreement (WFA). The Sacramento WFA is briefly introduced here; a thorough discussion of the WFA is included in the Regulatory Setting of this section. The WFA is an agreement

22 City of Sacramento, Urban Water Management Plan, November 2006, p. 4-1.

Permit	Authorized Diversion	Maximum Permitted Diversion	
		AFA	cfs
1957 USBR 2030 Contractual Maximum ^a	American River	245,000	675
	Sacramento River	81,800	225
	Total Combined Diversion	326,800	900

Notes:
a. Based on permits 00922, 011358, 011359, 011360, and 11361.
Source: EIP Associates, 2006 adapted from City of Sacramento 2006 Urban Water Management Plan and 2000 Water Forum Agreement.

Source	2005	2010	2015	2020	2025	2030
American River	123,200	145,700	170,200	196,200	222,200	245,000
Sacramento River	81,800	81,800	81,800	81,800	81,800	81,800
Total	205,000	227,500	252,000	248,000	304,000	326,800

Source: EIP Associates, 2006 adapted from the City of Sacramento USBR Contract.

between multiple stakeholders in the Sacramento metropolitan area and lower foothill regions. After seven years of meetings, sub-committee negotiations, and small group operations, the Water Forum members established a working agreement that provides water quality and reliability for all participants. The WFA's coequal goals were to (1) provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030, and (2) preserve the fishery, wildlife, recreational and aesthetic values of the Lower American River.²³ From these coequal goals, the Water Forum signatories determined seven major elements that must be implemented. The elements specific to reliability of water supplies include: Increased Surface Water Diversions, Actions to Meet Customers' Needs While Reducing Diversion Impacts in Drier Years, Water Conservation, Groundwater Management, and the Water Forum Successor Effort. Each water purveyor that participated in the WFA signed a purveyor specific agreement (PSA) that outlines that purveyor's Water Forum commitments.²⁴ As a signatory of the WFA, the City of Sacramento Utilities Department is actively participating in all seven elements. Most recently, the City has increased water treatment capacity at the Sacramento River WTP and the E.A. Fairbairn WTP.

In an effort to continue to develop a reliable water supply consistent with the WFA, the City is participating in the Sacramento River Water Reliability Study, which includes a feasibility study for a new Sacramento River diversion. The Sacramento River Water Reliability Study includes development of alternatives, an environmental evaluation, and consultation with federal and state agencies regarding potential impacts. The USBR is the lead agency for federal review and Placer County Water Agency is the lead agency for local review.

The WFA places flow restrictions on diversions from the American River when the flow is below "Hodge flows"; signatories of the WFA cannot divert water from the American River unless Hodge flow conditions are met. Hodge flow conditions must measure at least 2,000 cfs from

23 Water Forum Agreement, 2000, p. 29.

24 City of Sacramento, Urban Water Management Plan, August 2006, p. 5-2.

October 15 through February; 3,000 cfs from March through June; and 1,750 cfs from July to October 14. Based on CALSIM II analysis of the 1922 to 1994 climate data, 59 percent of years will experience flows that are less than Hodge flow conditions during the peak months of June through August. As a signatory of WFA, the City voluntarily reduces direct diversion from the American River when flows fall below Hodge flow conditions.

During years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre-feet (AF), the WFA limits diversion from the American River to 50,000 AFA. The WFA has labeled the extremely low flow conditions as a “conference year” where signatories will meet to discuss water management strategies. Most notably, the WFA does not restrict diversion of the American River entitlements from a Sacramento River diversion point; therefore, total surface water supplies in normal year and dry years are identical for the City in any given year. However, annual surface water diversion amounts are limited by the diversion and treatment capacity from the Sacramento River. Assuming a maximum treatment capacity of 50,000 AFA at the Fairbain WTP and 180,000 AFA at the Sacramento WTP, the current drought limiting scenario still allows the production of 230,000 AFA.

One of the alternatives being evaluated in the Sacramento River Water Reliability Study is for an additional WTP with a treatment capacity of 145 mgd (225 cfs) off the Sacramento River near Elverta Road, north of the Sacramento International Airport. With the addition of the new Sacramento River WTP, the combined production of potable water at all three WTP’s will be 505 mgd, or a total annual production capacity of 311,800 AFA. This is 95 percent of the maximum USBR contract deliveries. The potential completion date of a new Sacramento WTP is within the next 9 years, or roughly 15 years prior to buildout in 2030 of Sacramento’s current General Plan.

Current Water Use

The City’s average water demand is 52.7 mgd for the American River and 63.9 mgd for the Sacramento River; the peak demand is 96 mgd and 113 mgd, respectively.²⁵ The City wholesales water to California American Water and the County of Sacramento, which, in water year 2004 -2005, was roughly 7,700 AF. The total water demand for the year 2004 was 143,784 AF (approximately 128 mgd); therefore, based on 2005 entitlements of 205,000 AFA, the City has an excess supply of 61,216 AFA of water.²⁶ Table 6.10-6 presents the City’s historical water deliveries.

Water Treatment, Storage, and Distribution

Annually, the City of Sacramento provides more than 45 billion gallons of water for drinking, household use, fire suppression, landscaping, and commercial and industrial use. The distribution system is a pipeline network, where surface water and groundwater is mixed within the system.²⁷ The Department of Utilities operates and maintains the City’s two water treatment plants, eight pump stations, 10 storage reservoirs, 32 municipal wells, thousands of hydrants, and more than 1,500 hundred miles of pipeline necessary to distribute water to homes and

25 City of Sacramento Utilities Department, Annual Report, Operational Statistics Fiscal Year 2004/2005.

26 City of Sacramento Utilities Department, Annual Report, Operational Statistics Fiscal Year 2004/2005.

27 City of Sacramento, Urban Water Management Plan, 2000. p. 2-7.

TABLE 6.10-6

CITY OF SACRAMENTO HISTORICAL WATER DELIVERIES

Year	Surface Water and Groundwater Supplies ^b			Total Water Delivered ^b				
	Population	Annual Surface Water Delivered (AFA)	Annual Groundwater Delivered (AFA)	Maximum Day Water Delivered (mgd)	Maximum Day to Average Day Ratio	Total Annual Water Delivery (AFA)	Average (mgd)	Percent Increase
1998	392,800	93,131	22,692	212.7	2.06	115,822	107.5	
1999	396,200	109,695	23,694	219.7	1.85	133,389	112.3	15.2%
2000	405,963	110,150	24,130	213.0	1.78	134,280	103.4	0.7%
2001	418,711	115,984	24,156	214.5	1.71	140,140	119.1	4.4%
2002	426,013	115,628	23,236	226.8	1.83	138,864	119.9	-0.9%
2003	433,400	114,674	25,607	223.2	1.78	140,281	125.2	1.0%
2004	441,000	128,903	17,924	NA	NA	146,827	131.1	4.7%
2005 ^a	452,959	116,452	22,521	NA	NA	138,974	124.1	-5.3

Notes:
a. Operational Statistics 2004/2005.
b. Other data from corresponding annual reports.
N/A = Not yet available.
Source: Adapted from City of Sacramento, Department of Utilities Operational Statistics 2004/2005.

businesses throughout the City.²⁸ The City's service area spans north to Elkhorn Boulevard in North Natomas, east to Watt Avenue and Highway 50, west to the Sacramento River and south to Sheldon Road.

Water Treatment

The City owns and operates two water diversion and treatment facilities: the Sacramento River WTP and the E.A. Fairbain WTP on the American River. The Sacramento WTP is west of I-5 and south of Richards Boulevard, and was expanded in 2003; this increased the plant's capacity from 110 mgd (123,260 AFA) to 160 mgd (179,288 AFA). The Fairbain WTP, located on the south bank of the lower American River, was recently rehabilitated and expanded, which increased the plant's capacity from 100 mgd (112,055 AFA) to a permitted quantity of 160 mgd. The City is currently investigating those improvements necessary to increase the Fairbain WTP up to 200 mgd. The 2006 UWMP states that the plant would be operational 334 days a year and could produce 205,000 AFA.²⁹ According to the provisions in the PSA, when lower American River flows are unrestricted, the Fairbain WTP can divert up to 310 cfs, which represents the full capacity of the Fairbain WTP.³⁰ If both plants operated at their maximum production, the combined output would be approximately 403,000 AFA. At ultimate build out and future expansions, the two treatment plants could produce 545 mgd or 610,670 AFA, if the plants operated at maximum capacity everyday, which is not the case in the winter months. The WTPs only operate as demands dictate, in other words treatment is directly related to consumer demands.

28 City of Sacramento Utilities Department, Annual Report, Operational Statistics Fiscal Year 2004/2005.

29 City of Sacramento, Urban Water Management Plan, August 2006. p. 5-3.

30 City of Sacramento, Urban Water Management Plan, August 2006. p. 5-3.

Water Storage

Water storage is required to meet water demand for periods when peak hour demand exceeds maximum daily supply rates. These high demand periods usually occur for four to six hours during hot summer days and for potentially longer periods during large fire events. The City of Sacramento has nine above-ground storage reservoirs; each with a capacity of three million gallons (mg) and one underground reservoir with a capacity of 15 mg. The reservoirs are at different locations throughout the City's water distribution system. In addition, 34.5 mg of on-site storage exists at the water treatment plants (14.5 mg at the Sacramento WTP and 20 mg at the Fairbain WTP). Therefore, the total water storage capacity in the City is 76.5 mg. This capacity represents approximately 64 percent of the City's 2004/2005 average daily water demand of 120 mg,³¹ or approximately one-third of the 2004/2005 average maximum day demand of 215 mg.³¹

Water Supply Infrastructure at the Project Site

In the City, water distribution mains range from four inches to 12 inches in diameter and convey water for municipal and industrial services, fire services and fire hydrants. City policy states, new commercial areas are required to install 12-inch mains in order to maintain fire flow capacities. Transmission mains are 18 inches and larger and are used to transport large volumes of water from the treatment plants throughout the distribution system. Transmission lines are utilized to transfer water to and from the storage reservoirs to meet changing daily and/or seasonal demands. The City determines new water distribution facilities and pipeline alignments as development plans are formulated.

The City is anticipating that existing water supply infrastructure from neighboring areas of the proposed project site would extend onto the project site. Installation of the water distribution system would construct permanent water distribution mains and appurtenances,³² corresponding to the construction phasing of the project. The proposed water distribution system is presented on Figure 2-7. The on-site water system for the project would consist of 12-inch water distribution lines within the street right-of-way with connections to existing City transmission mains in North 5th Street, North 7th Street, and Richards Boulevard as evaluated by the project applicant's water supply engineers, water supply design specifications would comply with Section 13 of the City's Design Standards regarding requirements for design and operation of water distribution facilities. Final approvals would be necessary prior to delivery of water to the project site.

REGULATORY SETTING

Federal Regulations

U.S. Environmental Protection Agency (EPA)

The EPA established primary drinking water standards in the Clean Water Act (CWA) Section 304 and states are required to ensure that potable water for the public meets these standards. Standards for 81 individual constituents have been established under the Safe Drinking Water Act, as amended in 1986. The U.S. EPA may add additional constituents in the future.

31 City of Sacramento Utilities Department, Annual Report, Operational Statistics Fiscal Year 2004/2005.

32 City of Sacramento Utilities Department Comments on Railyards Notice of Preparation.

State Regulations

The California Department of Health Services (DHS), SWRCB, and the Department of Water Resources (DWR) would have input into the provision of water for the project site. In compliance with State Water Code Sections 10910(a) and 10910(c)(1), the water supplier for the proposed project is required to prepare a WSA for the water service as part of the CEQA EIR process. The SWRCB regulates the water quality functions of the State and manages the State's Water Code. State primary and secondary drinking water standards are promulgated in California Code of Regulations (CCR) Title 22 Sections 64431-64501. Secondary drinking water standards incorporate non-health risk factors including taste, odor, and appearance.

Water Rights and Entitlements

Since 1914, the SWRCB administers and controls all water rights permits in California. Under this process, an application is filed and the SWRCB issues a permit for surface water diversion, including the approved POU for that water. California water law typically applies only to surface water resources, although according to the SWRCB, "California law also recognizes and protects rights to extract and use waters percolating beneath the surface of the land."³³

Urban Water Management Planning Act

California Water Code Section 10610 (et seq.) requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 AFA, must prepare an UWMP. DWR provides guidance to urban water suppliers in the preparation and implementation of UWMPs. UWMPs must be updated at least every five years on or before December 31, in years ending in five and zero. The City adopted the most recent UWMP on November 14, 2006.

Senate Bill 610 - Water Supply Assessments

Senate Bill (SB) 610 was adopted in 2001 and reflects the growing awareness of the need to incorporate water supply and demand analysis at the earliest possible stage in the land use planning process. SB 610 amended the statutes of the Urban Water Management Planning Act, as well as the California Water Code Section 10910 et. seq. The foundation document for compliance with SB 610 is the UWMP, which provides an important source of information for cities and counties as they update their general plans. Likewise, planning documents such as general plans and specific plans form the basis for the demand information contained in an UWMP, as well as WSAs required under SB 610.

Water Code Section 10910 (c)(4) states "If the city or county is required to comply with this part pursuant to subdivision (b), the water assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses."

Water supply planning under SB 610 and SB 221 (see below) requires reviewing and identifying adequate available water supplies necessary to meet the demand generated by a project, as well as the cumulative demand for the general region over the next 20 years, under a broad range of water conditions. This information is typically found in the current UWMP for the

33 State Water Resources Control Board, Statutory Water Rights Law, 1999.

project area. The SB 610 requires the identification of the public water supplier; the City has been identified in the WSA as the public water supplier to the Township 9 project.

In addition, SB 610 requires the preparation of a WSA if a project meets the definition of a "Project" under Water Code Section 10912 (a). The code defines a "Project" if it meets any of the following criteria:

- A proposed residential development of more than 500 dwelling units (du);
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (sf) of floor space;
- A commercial building employing more than 1,000 persons or having more than 250,000 sf of floor space;
- A hotel or motel with more than 500 rooms;
- A proposed industrial, manufacturing, or processing plant, or industrial park, planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sf of floor area;
- A mixed-use project that includes one or more of these elements; or
- A project creating the equivalent demand of 500 residential units.

Alternately, if a public water system has less than 5,000 service connections, the definition of a "Project" includes any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of service connections for the public water system. The proposed project includes more than 500 du, and, therefore, qualifies as a "Project" under Section 10912 (a) of the Water Code. Thus, the City has prepared a WSA as required by these criteria under SB 610 (included as Appendix M).

Water Code Section 10910 (d)(1) states: "The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights or water service contracts."

Section 10910 (d)(2) of the Water Code further defines requirements of WSAs, including: (A) documentation showing proof of water supply entitlements, water rights, or existing water service; (B) copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system; (C) copies of federal, state, or local permits for construction of necessary infrastructure associated with delivery of the water supply; and (D) copies of any necessary regulatory approvals that are required to convey or deliver the water supply.

The City prepared the Draft WSA in November 2006 for the proposed project using technical information included in the City's UWMP which satisfies the documentation requirements of SB 610, CEQA 10583.5, and Water Code sections 10631, 10910, and 10912. The WSA concludes that the project site is within the City's service area and the City would provide domestic water to all development in the City's General Plan. Furthermore, the WSA finds that

the City has sufficient water allocations secured from their 1957 contracts with the USBR and related permits to serve the proposed project and projected future growth in the City over the next 20 years.³⁴

Senate Bill 221- Written Verification of Water Supply

Government Code Section 66473.7(a)(1) requires an affirmative written verification of sufficient water supply. Senate Bill 221 is designed as a “fail-safe” mechanism to ensure that collaboration on finding the needed water supplies to serve a new large subdivision occurs early in the planning process. This verification must also include documentation of historical water deliveries for the previous 20 years, as well as a description of reasonably foreseeable impacts of the proposed subdivision on the availability of water resources of the region. Government Code section 66473.7 (b)(1) states “The legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove the tentative map, shall include as a condition in any tentative map that includes a subdivision a requirement that a sufficient water supply shall be available. Proof of the availability of a sufficient water supply shall be requested by the subdivision applicant or local agency, at the discretion of the local agency, and shall be based on written verification from the applicable public water system within 90 days of a request.” In other words, as a result of the information contained in the written verification, the city or county may attach conditions to assure there is an adequate water supply available to serve the proposed project as part of the tentative map approval process. A SB221 verification will be required for the proposed project.

Drinking Water Quality

The California Department of Health Services (DHS) is responsible for implementing the federal Safe Drinking Water Act of 1974 and its updates, as well as California statutes and regulations related to drinking water. As part of their efforts, the DHS inspects and provides regulatory oversight for public water systems within California. In addition, in the Sacramento area the CVRWQCB has the responsibility for protecting the beneficial uses of the State’s waters, including groundwater, and these include municipal drinking water supply, as well as various other uses.

Public water system operators are required to regularly monitor their drinking water sources for microbiological, chemical, and radiological contaminants to show that drinking water supplies meet the regulatory requirements listed in Title 22 of the California Code of Regulations as primary maximum contaminant levels (MCLs). Primary standards are developed to protect public health and are legally enforceable. Among these contaminants are approximately 80 specific inorganic and organic contaminants and six radiological contaminants that reflect the natural environment, as well as human activities. Examples of potential primary inorganic contaminants are aluminum and arsenic, while radiological contaminants can include uranium and radium.

Public water system operators are also required to monitor for a number of other contaminants and characteristics that deal with the aesthetic properties of drinking water. These are known as secondary MCLs. Secondary standards are generally associated with qualities such as taste, odor, and appearance, but these are generally non-enforceable guidelines. However, in California secondary standards are legally enforceable for all new drinking water systems and

34 EIP Associates, a Division of PBS&J, Township 9, Draft Water Supply Assessment, November 2006, p. 4-1.

new sources developed by existing public water suppliers.³⁵ The public water system operators are also required to analyze samples for unregulated contaminants, and to report other contaminants that may be detected during sampling.

Local Regulations

Water Forum Agreement

The WFA, as previously mentioned established the guiding principles for water management in the Sacramento area and adjacent foothill region. The collaborative effort represents business, agricultural, environmental, citizen, water management, and local government interests in Sacramento County, and water interests in Placer County and western El Dorado County. The agreement proposes the American River, the Sacramento River, and groundwater as sources of future water supply. The agreement provides a comprehensive package of linked actions that will achieve the two co-equal objectives: (1) to provide a reliable and safe water supply for the region's economic health and planned development through to the year 2030; and (2) to preserve the fishery, wildlife, recreational, and aesthetic values of the Lower American River.³⁶ From these coequal goals, the Water Forum signatories determined seven major elements that must be implemented during the next thirty years if the agreement is to be successful. These seven major elements include:

1. *Increased surface water diversions* (as noted above, these would occur primarily on the American River);
2. *Actions to meet customers' needs while reducing diversion impacts on the lower American in drier years.* This element is to ensure that sufficient water supplies will be available to customers in dry years as well as wet years;
3. *Support for an improved pattern of fishery flow releases from Folsom Reservoir.* This element supports needed assurances for continued implementation of a pattern of water releases from Folsom Reservoir that more closely matches the needs of anadromous fish;
4. *Lower American River Habitat Management Element.* This element combined with elements #2 and #3 is included to mitigate the impacts of diversions on the Lower American River in a reasonable and feasible manner;
5. *Water Conservation Element.* This element incorporates various conservation measures to help meet both of the co-equal goals listed above;
6. *Groundwater Management Element.* Establishes a framework to protect groundwater resources in Sacramento County and to ensure these resources are used in a sustainable manner. Introduces the concept of "conjunctive use", which entails monitoring the amount of water withdrawn from the groundwater basin and the planned use of surface water in conjunction with groundwater; and
7. *Water Forum Successor Effort.* This element outlines the way WFA members oversee, monitor, and report on implementation of the WFA.

City of Sacramento

City of Sacramento General Plan

The City's current General Plan policies related to water are provided below. The City is presently updating its General Plan, which is anticipated to be completed in 2008.

35 California Department of Water Resources, California's Groundwater, Bulletin 118, 2003.

36 Water Forum Agreement, 2000, p. 29.

Goal A **Provide and improve water supply facilities to meet future growth of the City and assure continued supply of safe potable water.**

Policies

1.

Develop and adopt a comprehensive water policy for the City of Sacramento that is consistent with a long range adopted plan.

2.

Develop and implement a financing strategy that the City can use to construct needed water facilities.

3.

Work with property owners to develop financing arrangements in order to provide needed water facilities.

4.

Give high priority in the Capital Improvements Program to funding infrastructure in highly depressed and designated infill areas.

5.

Provide water service meeting or exceeding State and federal regulatory agency requirements.

Richards Boulevard Area Plan

The following policy from the Richards Boulevard Area Plan relates to water supply.

Public Utilities

The water filtration plant for the City of Sacramento is located at the western edge of the planning area, adjacent to I-5 and the Southern Pacific Railyards planning area. The water filtration plant is attractively landscaped and appears as an open space feature within the Richards area. The plan encourages the maintenance of this important feature in its present location. Continuation of the current landscape and architectural character of the water filtration plant is encouraged in any future expansion of the plant.

City of Sacramento Design Standards

Section 13 of the City's Design Standards sets forth requirements regarding the design and operation of water distribution facilities. Those requirements include standards for pipe design, fire hydrants, and specific requirements for residential, commercial and industrial water service.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

The analysis in this section focuses on the nature and magnitude of the change in levels of water use compared with existing and projected water use in the project site and the City's water service area. To determine potential impacts, water demands were estimated from demand projection calculations and quantitative evaluation of data relative to the proposed project, along with existing land uses, approved projects, and proposed development. The primary resources used for this analysis include the following technical documents: *Draft Water Supply Assessment for the Proposed Township 9 Project*, EIP Associates (February 2007); *City of Sacramento Urban Water Management Plan*, adopted November 14, 2006; and the *Sacramento River Water Reliability Study* (March 2005).

Water Demand Analysis

Water Code Section 10910 (c)(3) states “If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the public water system’s total projected water supplies available during normal, dry and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system’s existing and planned future uses, including agricultural and manufacturing uses.” As presented in Current Water Use above, Table 6.10-6 shows the historical comparison of water demands based on population and treated water delivered.

The most accurate projection of demand can be developed using water demand factors based on land use sectors. The expected water use of the proposed project was determined by analyzing each parcel and building use and then assigning a demand factor for each use. To determine the water demand factors of the proposed project, water use demand factors were formulated based on data from a number of water supply planning sources including regional water resources studies, current or historical uses at similar facilities, federal guidelines, personal communications with the State Department of Water Resources, Placer County Water Agency, Irvine Ranch Water District, and the City of Sacramento, Department of Utilities. For the purpose of this EIR total household water demand is estimated at 208 gallons per day per dwelling unit (gpd/du) for each residential use (apartment, townhome or condominium), restaurant and retail uses were calculated at 0.350 gallons per day per square foot (gpd/sf) and irrigation on open spaces is estimated to be 3.89 acre-feet/acre/year. Table 6.10-7 shows the demand factors for each of the facilities at the proposed project site. Water demands for the facilities on each lot were calculated and then aggregated to determine the total water demands for each lot, then the lot demands calculations were tallied to estimate total water demanded for each scenario. The calculated demand represents the upper range of the potential demand for the proposed project.

WATER DEMAND FACTORS FOR FACILITIES	
Building/Facility	Demand Factors/Units
Office ^a	0.0375 gallons/day/ft ²
Residential/Housing ^b	208 gallons/day/dwelling unit
Retail/Restaurant ^c	0.35 gallons/day/ft ²
Open Space/Parks ^d	3.89 acre-feet/year/acre
Notes:	
a. Billings, B. R. and C. V. Jones. 1996. Forecasting Urban Water Demand. American Water Works Association.	
b. City of Sacramento, Department of Utilities; High density water demand factor, February 6, 2007	
c. Mazzetti & Associates, June 2005 for PAMF-SCC Sutter Health Foundation.	
d. City of Sacramento, Department of Utilities; Irrigation demand factor, February 6, 2007	
Source: EIP Associates, a division of PBS&J, <i>Water Supply Assessment for the Proposed Township 9 Project</i> February 2007; Appendix M: Township 9 - Water Demand spreadsheet.	

A more accurate analysis is necessary to determine the water demands above those current uses at the project site; this analysis is developed to present the net gain in water demands. The proposed project net gains for each scenario were calculated by subtracting the estimated current water uses at the project site from the calculated water demands of the proposed project

Under Scenario A, the proposed project demand would be approximately 834 AFA, as presented in Table 6.10-8. The net gain under this scenario is estimated at 700 AFA (0.62 mgd). Under Scenario B, the demand would be approximately 722 AFA as presented in Table 6.10-9. The net gain under this scenario is estimated at 588 AFA (0.52 mgd).

Land Use Designation	Units/ Areas	Average Annual Demand (gpd)	Water Demand (AFA)	Water Demand (mgd)
Residential ^a	2981 Dwelling Units	620,048	694	0.62
Retail/Restaurant ^b	146,194 sf	51,168	57	0.05
Open Space/Parks ^c	21.29 Acres	73,935	83	0.07
Totals^d		745,151	835	0.75
Net Project Demand^e		n/a	700	0.63

Notes:
 Transit Rights of Way have no water demands.
 a. Residential: 208 gallons/day/dwelling unit - City of Sacramento, Department of Utilities; High density water demand factor, February 6, 2007
 b. Retail/Restaurant: 0.35 gallons/day/ft² - Mazzetti & Associates, June 2005 for PAMF-SCC Sutter Health Foundation.
 c. Open Space/Parks: 3.89 acre-feet/year/acre - City of Sacramento, Department of Utilities; Irrigation water demand factor, February 6, 2007
 d. Totals include unaccountable losses of 7.5% of proposed project site demands.
 e. Net Project Demand equals Existing Project Site Demands (134 AFA) subtracted from Proposed Project Demand
 Source: EIP Associates, a division of PBSJ, *Water Supply Assessment for the Proposed Township 9 Project* February 2007; Appendix M: Township 9 - Water Demand spreadsheet.

Land Use Designation	Units/Areas	Average Annual Demand (gpd)	Water Demand (AFA)	Water Demand (mgd)
Residential ^a	2350 Dwelling Units	488,800	547	0.48
Retail/Restaurant ^b	146,194 sf	51,168	57	0.05
Open Space/Parks ^c	21.29 Acres	73,935	83	0.07
Office ^d [Lots 13,14,17]	839,628 sf	31,486	35	0.03
Totals^e		645,389	722	0.64
Net Project Demand^f		n/a	588	0.52

Notes:
 Transit Rights of Way have no water demands.
 a. Residential: 208 gallons/day/dwelling unit - City of Sacramento, Department of Utilities; High density water demand factor, February 6, 2007
 b. Retail/Restaurant: 0.35 gallons/day/ft² - Mazzetti & Associates, June 2005 for PAMF-SCC Sutter Health Foundation.
 c. Open Space/Parks: 3.89 acre-feet/year/acre - City of Sacramento, Department of Utilities; Irrigation water demand factor, February 6, 2007
 d. Office: 0.0375 gallons/day/ft² - Billings, B. R. and C. V. Jones. 1996. Forecasting Urban Water Demand. American Water Works Association.
 e. Totals include unaccountable losses of 7.5% of proposed project site demands.
 f. Net Project Demand equals Existing Project Site Demands (134 AFA) subtracted from Proposed Project Demand
 Source: EIP Associates, a division of PBSJ, *Water Supply Assessment for the Proposed Township 9 Project* February 2007; Appendix M: Township 9 - Water Demand spreadsheet.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact occurs if:

- The project creates an increase in water demand in excess of 10 mgd; or

- The project requires or results in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental effects.

Project-Specific Impacts and Mitigation Measures

6.10-5 The proposed project's demand for water could exceed available sources of water supply sources.

The WSA assumed that the proposed project would use water supplied through surface water rights and entitlements from the Sacramento and American Rivers. These supplies would be delivered through existing City supply facilities and new water infrastructure constructed for delivery into the project site per the requirements of the City of Sacramento. Overall water consumption for 2004 totaled 143,764 AF, leaving the City with an excess of 56,736 AFA from the 2004 contracted supply. The contract with USBR increases each year ultimately culminating in 2030 at 326,800 AFA.

Scenario A

Under Scenario A the potential project net demand would be 700 AFA or an annual average of 745,151 gpd, which represents less than 0.40 percent of the City's 2006 authorized supply of 209,500 AFA. Alternately, if the increased demand under this scenario is added to the 2004 demand of 143,764 AFA, the total demands in the City would be 144,464 AFA, leaving a surplus of approximately 65,036 AFA; this is well below the contracted amounts with the USBR.

Scenario B

Under Scenario B the net potential project demand would be 588 AFA or an annual average of 645,389 gpd, which represents less than 0.40 percent of the City's 2006 authorized supply of 209,500 AFA. Alternately, if the increased demands under this scenario is added to the 2004 demand of 143,764 AFA, the total demands in the City would be 144,352 AFA, leaving a surplus of approximately 65,148 AFA; this is well below the contracted amounts with the USBR.

Analysis

Under both Scenario A and Scenario B the net project water demand would not exceed supply. In addition, the USBR contract continues to increase annually and culminates at 326,800 AFA in 2030. Therefore, the surplus will continue to increase simultaneously with customer demands. Therefore, the City of Sacramento has sufficient water supplies secured from their 1957 contracts with the USBR and other related permits to serve the proposed project. Therefore, this is considered a ***less-than-significant impact***.

Mitigation Measure

None required.

6.10-6 The proposed project could increase water demand in excess of 10 mgd.

Scenario A

Water demand for the proposed project under Scenario A would increase by 0.62 mgd (Table 6.10-8). Peak day demand using a peaking factor of 1.8 under Scenario A would be 1.11 mgd.

Scenario B

Water demand for the proposed project under Scenario B would increase by 0.52 mgd (Table 6.10-9). Peak day demand using a peaking factor of 1.8 under Scenario B would be 0.93 mgd.

Analysis

Under Scenario A or Scenario B water demand at the project site would be increased. This analysis is used to further estimate potential water supply demands on the City's system, and both of these estimates are below the City's 10 mgd threshold. Therefore, this would be considered a *less-than-significant impact*.

Mitigation Measure

None required.

6.10-7 The proposed project could require the construction of new water supply treatment and/or distribution utilities or the expansion of existing utilities, the construction of which could cause significant environmental effects.

Scenario A

The proposed project's net water demand estimated at 624,919 gpd (0.62 mgd) for Scenario A (Table 6.10-8) would require treatment prior to delivery to customers at the project site.

Scenario B

The proposed project's net water demand estimated at 525,761 gpd (0.52 mgd) for Scenario B (Table 6.10-9) would require treatment prior to delivery to customers at the project site.

Analysis

The proposed project's net water demand under either Scenario A or Scenario B would require treatment prior to delivery to customers at the project site. The Sacramento WTP and Fairbairn WTP have a maximum combined capacity of 360 mgd (403,398 AFA) if operated continuously. Based on Sacramento's 2004/2005 water demand of 117 mgd (52.7 mgd from the American River, 63.9 mgd from the Sacramento River), the treatment plants have a combined excess capacity of 244 mgd. The proposed project demands for either scenario compared to water treatment would be roughly 0.23 percent of the excess capacity available at the treatment plants.

The City is anticipating that existing water supply infrastructure from neighboring areas of the proposed project site would extend onto the project site. Installation of the water distribution system would construct permanent water distribution mains and appurtenances,³⁷ corresponding to the construction phasing of the project. Figure 2-7 shows the proposed water distribution system. The on-site water system for the project would consist of 12-inch water distribution lines within the street right-of-way with connections to existing City transmission mains in North 5th Street, North 7th Street, and Richards Boulevard as evaluated by the project applicant's water supply engineers. As stated previously, Section 13 of the City's Design

37 City of Sacramento Department of Utilities preliminary comments for water supply distribution. Railyards Project, Notice of Preparation April 18, 2006.

Standards sets forth requirements regarding the design and operation of water distribution facilities. Those requirements include standards for pipe design, fire hydrants, and specific requirements for residential, commercial and industrial water service. Final approvals by Department of Utilities' staff would be necessary prior to delivery of water to the project site. Any impacts associated with the installation of water supply infrastructure on-site are evaluated as part of the construction-related impacts analyzed in the other technical sections of this EIR, as appropriate.

The City has adequate conveyance systems and sufficient treatment capacity to serve the proposed project and this coupled with on-site conveyance improvements evaluated by the project applicant's water engineers and approved by City staff, impacts pertaining to infrastructure would be considered *less than significant*.

Mitigation Measure

None required.

Cumulative Impacts and Mitigation Measures

The cumulative analysis for water supply, distribution, and storage considers the potential environmental effects of supplying water to the proposed project in addition to water demands generated in Sacramento County under the provisions of WFA as they apply to the City of Sacramento.

6.10-8 The proposed project, in combination with buildout of the City of Sacramento General Plan, could increase water demand throughout the City but would not exceed available water supplies.

Scenario A and B

The proposed project would increase the demand for water in the City's service area beyond the existing demand of approximately 143,000 AFA in 2004; this demand is well below the current USBR contracted limit of 200,500 AFA for that year. In addition, the City's authorized supply under both the WFA and USBR contract increases until 2030 when the City's contracted amount will reach 326,800 AFA. The City projected annual demand remains approximately 70 percent of the USBR contracted annual diversion when using a constant 2.0 percent annual growth rate to achieve the 2030 projected demand of roughly 240,000 AFA, as shown in Table 6.10-10. The City water demand would have to nearly triple the 2004 demand in order to exceed the available supply. The City is in the process of updating its General Plan, and it is unlikely that the updated plan would include a doubling of the population over current buildout estimates. Current, population projections for Sacramento County estimate that the County would grow less than 10 percent every 5 years.³⁸

The City has limited diversions to 50,000 AFA during Hodge flow (drought year) conditions in the American River as shown in Table 6.10-10, but is not limited to divert American River entitlements from the Sacramento River, resulting in no reduction in contracted delivery for single or multiple dry years. In other words, the City can divert the full American River

38 State of California, *Interim County Population Projections*, Estimated July 1, 2000 and Projections for 2005, 2010, 2015, and 2020, June 2001.

TABLE 6.10-10

SUPPLY AND DEMAND COMPARISON DURING "CONFERENCE YEARS" (AFA)^a

	2005	2010		2015		2020		2025		2030	
American River	50,000	50,000		50,000		50,000		50,000		50,000	
American River diverted from the Sacramento River	73,200	95,700		98,200 ^b		98,200 ^b		98,200 ^b		98,200 ^b	
Sacramento River	81,800	81,800		81,800		81,800		81,800		81,800	
Total Surface Water Supply	205,000^c	227,500^c		230,000		230,000		230,000		230,000	
Groundwater Supplies^d	33,600	33,600		33,600		33,600		33,600		33,600	
TOTAL WATER SUPPLY^b	238,600	261,100		263,600		263,600		263,600		263,600	
City Demand and Wholesale/Wheeling Demand ^e	146,647	161,401		178,253		196,759		217,182		239,805	
<i>Net Project Demand [A or B]</i>	~	700	588	700	588	700	588	700	588	700	588
TOTAL DEMAND	146,647	162,101	161,989	178,953	178,841	197,459	197,347	217,882	217,770	240,505	240,393
AVAILABLE SUPPLY	58,353	98,999	99,111	84,647	84,759	66,141	66,253	45,718	45,830	23,095	23,207

Notes:

a. "Conference Year", defined by the WFA, when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre-feet.

b. Limited by present Sacramento River WTP capacity not WFA agreement.

c. Total Surface water supply is based on maximum amounts specified in the City's USBR settlement contract and not based on the maximum conference year treatment and diversion capacity of 230,00 AFA.

d. Based on City's current groundwater production.

e. Demands during Hodge Flow and Conference Years are reduced by 6,616 AFA as no sales from the City to Sacramento Suburban are required.

Source: EIP Associates, a division of PBSJ, July 2006 adapted from City of Sacramento Urban Water Management Plan.

entitlements for that year at the Sacramento River diversion point. This analysis reinforces the previous statements that cumulative development within the service area of the City of Sacramento would not exceed water supplies or entitlements provided to the City through the USBR contract or WFA. Therefore, the project's contribution to cumulative water demand would be less than considerable and this would be a ***less-than-significant cumulative impact***.

Mitigation Measure

None required.

6.10-9 The proposed project, in combination with buildout of the City of Sacramento General Plan, could require the construction of new water supply treatment and/or distribution utilities or the expansion of existing utilities, the construction of which could cause significant environmental effects.

Scenario A and B

Although much of the downtown area is already developed, it is likely that the land uses within the City's service area will intensify in the future as development pressure throughout the metropolitan area increases; this proposed project is an example of such intensified development. The intensification of uses and buildout of the General Plan could result in the need for upgrades in the City's water distribution and/or treatment systems.

The most appropriate approach to address the diversion and treatment limitations is to analyze maximum day demand. The dry year treatment production estimate of 230,000 AFA is based upon a diversion 50,000 AFA from the American River at the Fairbairn WTP and 180,000 AFA at the Sacramento WTP. In order for the Sacramento WTP to achieve 180,000 AFA, the plant would have to consistently treat 160 mgd. However, because the plant only treats water as demand requires, during low demand times, such as during winter months, the plant would produce less than the 160 mgd capacity. Currently, the City does not store surplus water beyond that necessary for operational and emergency needs; consequently, the Sacramento WTP does not produce its annual capacity of 180,000 AFA.

Because of diversion limitations during Hodge flow conditions, the maximum peak day demand should also be considered during the supply and demand analysis. Table 6.10-11 shows the maximum day surface water supply and demand under normal flow conditions. Table 6.10-12 shows a reduction of the Fairbairn WTP capacity from 200 mgd to 100 mgd during Hodge flow conditions, resulting in a total treatment capacity of 260 mgd. Assuming a 2.2 percent growth rate for maximum day demand, and assuming no groundwater use whatsoever, Hodge flow conditions will result in a deficit of surface water production capacity as early as 2013 without a new Sacramento River diversion and WTP. Assuming use of the current sustainable groundwater supply of 30 mgd, during Hodge flow conditions the capacity deficit will occur in 2017 without a new Sacramento River diversion and WTP. In 2030, during Hodge flow conditions the projected capacity deficit is 112 mgd without a new Sacramento River diversion and WTP and 142 mgd deficient without groundwater. The City is aware of this shortfall, and is a partner on the Sacramento River Water Reliability Study, which is investigating alternatives for an additional diversion on the Sacramento River. The environmental documentation for the

TABLE 6.10-11

**PEAK DAY SURFACE WATER SUPPLY CAPACITY (EXISTING FACILITIES) AND
DEMAND COMPARISON DURING NORMAL FLOW CONDITIONS (MGD)**

	2005	2010	2015	2020	2025	2030					
American River ^a	200	200	200	200	200	200					
Sacramento River ^a	160	160	160	160	160	160					
TOTAL SURFACE WATER SUPPLY	360	360	360	360	360	360					
Groundwater Supply	30	30	30	30	30	30					
Total Water Supplies	390	390	390	390	390	390					
City Demand and Wholesale/Wheeling Demands ^b	235.7	261.9	291.5	324.5	361.2	402					
<i>Net Project Demand [A or B]</i>	~	0.62	0.52	0.62	0.52	0.62	0.52				
TOTAL WATER DEMAND		262.52	262.42	292.12	292.02	325.12	325.02	361.82	361.72	402	402
Available Capacity without new facilities		127.48	127.58	97.88	97.98	64.88	64.98	28.18	28.28	-12	-12

Notes:

a. Surface supply is based on nominal plant capacity.

b. Based on 2.2 percent annual growth rate between 2004 and 2030 demand.

Source: EIP Associates, a division of PBSJ, July 2006

TABLE 6.10-12

**PEAK DAY SURFACE WATER SUPPLY CAPACITY (EXISTING FACILITIES)
AND DEMAND COMPARISON DURING HODGE FLOW CONDITIONS (MGD)**

	2005	2010	2015	2020	2025	2030					
American River ^a	100	100	100	100	100	100					
Sacramento River ^a	160	160	160	160	160	160					
TOTAL SURFACE WATER SUPPLY	260	260	260	260	260	260					
Groundwater Supply	30	30	30	30	30	30					
Total Water Supplies	290	290	290	290	290	290					
City Demand and Wholesale/Wheeling Demands ^b	235.7	261.9	291.5	324.5	361.2	402					
<i>Net Project Demand [A or B]</i>	~	0.62	0.52	0.62	0.52	0.62	0.52				
TOTAL WATER DEMAND	235.7	262.52	262.42	292.12	292.02	325.12	325.02	361.82	361.72	402	402
Available Capacity without new facilities	54.3	27.48	27.58	-2.12	-2.02	-35.12	-35.02	-71.82	-71.72	-112	-112

Notes:

a. American River diversion is limited 100 mgd during Hodge flow conditions.

b. Sacramento WTP peak day supply is based on the nominal capacity of the plant.

c. Based on a constant 2.2 percent annual growth rate between 2004 and 2030 demand.

d. Reduced by 20 mgd during Hodge Flow or Conference Year when sales to Sacramento Suburban Water District are not required. A new Sacramento River diversion and WTP potentially could be used to make up this reduction during Hodge Flow or Conference Year conditions (not reflected in "Available Capacity without new facilities").

Source: EIP Associates, a division of PBSJ, July 2006.

alternatives analysis is scheduled to be completed in 2007,³⁹ essentially providing eight years for the design and construction of a selected project before any potential maximum demand shortfall. This alternative of a 145 mgd diversion and WTP included in the Sacramento River Water Reliability Study would ensure the delivery of the entitled water for the City, as well as all wholesale and wheeling agreements in 2015 and beyond 2030. In addition, the proposed project's contribution to demands for either scenario compared to water treatment would be roughly 0.23 percent of the excess capacity available at the treatment plants. Therefore, this is considered a ***less-than-significant cumulative impact*** on water treatment and deliveries.

Mitigation Measure

None required.

39 Initial Alternatives Report. Final diversion, March 2005. Sacramento River Reliability Study. Updated by personal communication with David Stevens of MWH, April 18, 2006.

ELECTRICITY AND NATURAL GAS

This section describes the existing distribution system for electricity and natural gas in the Township 9 project area. This section also estimates energy consumption for the proposed project and describes service delivery effects of projected demands. Existing plans and policies relevant to electricity and natural gas are provided. This section also addresses Appendix F of the CEQA Guidelines, which require that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on measures to avoid or reduce the inefficient, wasteful, or unnecessary consumption of energy.

Information for this analysis was obtained from the Sacramento General Plan, the Sacramento Municipal Utility District (SMUD), and the Pacific Gas and Electric Company (PG&E).

No comments were received regarding electrical and natural gas capacity to serve the proposed project during the NOP comment period.

ENVIRONMENTAL SETTING

Electricity

Regional Energy Supplies

In the 2005 Energy Policy Report,⁴⁰ the California Energy Commission (CEC) indicated that as the state's demand for electricity increases, California could face severe shortages in the next few years. Of particular concern are the potential impacts of higher-than-average summer temperatures, which can drastically increase the state's electricity demand, as well as shortages resulting from decreased hydroelectric generation in lower-than-average precipitation years. Either of these situations could cause dangerously low reserve margins and potential supply disruptions, particularly in southern California. Reserve margins could also be affected by the retirement of aging natural gas-fired power plants, which remain critical components of California's generation fleet, despite strong policy directives to diversify the state's electricity supplies.

The 2005 Energy Report assessment of electricity supply and demand concludes that maintaining adequate electricity reserves will be difficult over the next few years. The state has made some progress toward resource adequacy for investor-owned utilities by requiring them to maintain year-round 15 to 17 percent reserve margins. Jurisdictional authority over other load-serving entities is less clear. Until recently, there was no formal mechanism to ensure resource adequacy for publicly owned utilities, which provide up to 30 percent of the state's electricity. In September 2005, the Legislature passed and the Governor signed AB 380 (Nunez), Chapter 367, Statutes of 2005, which extends jurisdiction over independent load serving entities and requires publicly owned utilities to report their respective supply circumstances to the CEC so that their resource adequacy progress can be accurately assessed.

The lack of long-term power contracts has stalled development and construction of more than 7,000 megawatts (MW) of permitted plants and sharply curtailed the number of new permit applications. California's dependence on natural gas to generate electricity is also increasing as

40 California Energy Commission, *2005 Integrated Energy Policy Report*, 2005.

utilities continue to purchase generation from the state's aging fleet of natural gas-fired power plants under short-term contracts.

A significant percentage of California's electricity supply comes from the in-state Diablo Canyon and San Onofre nuclear power plants. Operators at these nuclear plants face many issues involving the transportation and disposal of spent fuel, upcoming extensions of their operating licenses, and major capital expenditures to replace aging steam generators. New nuclear power plant construction in California was suspended in 1976 pending determination by the CEC that a high-level federal nuclear waste disposal repository would be approved and built. The CEC reaffirms its 1978 finding that a high-level nuclear waste repository has been neither approved nor built.

The CEC strongly supports the following nuclear recommendations:

- The federal government should return some portion of the funds paid by California ratepayers for a permanent national repository for nuclear waste in order to pay for interim storage of waste at California reactor sites.
- The Legislature should develop a suitable state framework to review the costs and benefits of nuclear power plant license extensions.

Reducing the demand for energy is the most effective way to conserve energy. Reducing demand also reduces the likelihood of supply shortages that can affect reliability. While California will continue to depend upon petroleum fuels and natural gas to meet its energy needs for the foreseeable future, the use of various energy efficiency measures and renewable resources are top priorities in California's electricity policy.

Simultaneously, the state needs to shore up its electricity supplies, such as generation from aging power plants, to maintain adequate reserve margins for peak demand periods and provide regional and local reliability services. In addition, California must maximize its ability to share resources, both inside the state between the investor-owned utilities (IOUs) and adjoining municipal utilities and with out-of-state suppliers.

California continues to be the national leader in efficiency. While energy use per person in the rest of the nation has increased by 45 percent over the last 30 years, California's per capita use has remained relatively flat as a result of the state's energy efficiency measures. In the 2003 Energy Report, the CEC concluded that California could save an additional 30,000 gigawatt hours (GWh) of energy from energy efficiency programs over the coming decade. In 2004, the California Public Utilities Commission (CPUC) established aggressive energy savings goals and authorized a significant increase in energy efficiency funding. Meeting these goals will reduce the utilities' need for additional electricity supplies between 2004 and 2013 by more than half. The recent passage of SB 1037 (Kehoe) Chapter 366, Statutes of 2005, further reinforces the state's energy efficiency policies by requiring all utilities to meet their unmet resource needs first with energy efficiency and demand reduction resources that are cost-effective, reliable, and feasible.

Demand response programs are the most promising and cost-effective options for reducing peak demand on California's electricity system. The CPUC is currently considering proposals from the investor-owned utilities to purchase and install advanced meters for all their customers.

New metering technology is the primary platform for future voluntary and mandatory demand response policies.

Lastly, California's energy infrastructure may be unable to meet the state's energy delivery needs in the near future. The most critical infrastructure issue is the state's electricity transmission system, which has become progressively stressed in recent years. The systematic under-investment in transmission infrastructure is reducing system reliability and increasing operational costs.

Local Energy Supplies and Programs

Electrical service is provided to the Township 9 area by SMUD, which is the entity responsible for the generation, transmission, and distribution of electrical power to its 900 square mile service area. The service area includes most of Sacramento County and a small portion of Placer County. SMUD is a publicly-owned utility governed by a board of seven directors that make policy decisions and appoint the general manager, the individual responsible for the District's operations.

SMUD obtains its electricity from a variety of sources, including hydro-generation, co-generation plants, advanced and renewable technologies (such as wind, solar, and biomass/landfill gas power) and power purchased on the wholesale market.⁴¹

SMUD offers a variety of programs that serve to preserve natural resources and reduce pollution. Through SMUD's Greenergy program, members can choose to buy energy from natural resources of energy, such as the sun, wind, or methane gas. SMUD also offers incentives to its residential customers for purchasing and installing photo-voltaic solar panels. With regard to wind energy, the recent addition of eight wind turbines to SMUD's wind farm in Solano County produces up to 39 megawatts of power. SMUD owns additional land in the area with room for expansion to 200 megawatts pending approval by the Board of Directors.

With regard to hydroelectric power, SMUD's UARP, consisting of 11 reservoirs and eight powerhouses, generates enough electricity to meet about 20 percent of SMUD's customer demand. In a normal water year, the UARP provides roughly 1.8 billion kilowatt-hours of electricity, which is enough to power 180,000 homes. The UARP is able to provide operational flexibility, system reliability, and economical power.

The CEC and SMUD are also working together on research, development, and demonstration projects for renewable power generation under the Public Interest Energy Research (PIER) program. The program consists of a number of projects, most of which are developing new technologies that use the sun, wind, and biomass to generate electricity. Each project is helping to: (1) reduce California's dependency on non-renewable energy sources; (2) develop technologies and products that will create broad new renewable energy sources for California and the West; (3) develop resources that will allow SMUD and other electric utilities to increase their use of renewable generation; (4) provide technologies to help SMUD reduce its peak demand for electricity; and (5) make Sacramento a center for the development, testing, and implementation of new renewable generating technologies.

41 Sacramento Municipal Utilities District website, <<http://www.smud.org/about/index.html>> (June 28, 2006).

Existing Facilities

SMUD has a main overhead 21kV feeder along Richards Boulevard. There are also light wire circuits along North 5th Street on the west side and North 7th Street on the west side. Light wire circuits are also found north of Richards Boulevard on the eastern side of the project site. Several overhead and underground tap circuits are fed from both the North 5th and North 7th Street lines to serve existing facilities on the project site. Two lines are fed from the North 5th Street line and serve the west side of the project, while a third line feeds City Sump Pump 111 west of the project. Three additional lines are fed from the North 7th Street line and serve the east side of the project site.⁴²

Natural Gas

Regional Gas Supplies

The 2003 Energy Report recommended that the state reduce natural gas demand by increasing funding for natural gas efficiency programs. California has made progress in this area. The recently enacted SB 1037 also requires gas utilities to first meet their unmet resource needs with all available energy efficiency and demand reduction resources that are cost-effective, reliable, and feasible.

Another way to increase natural gas efficiency is to increase the role of combined heat and power facilities as a way to meet California's rising electricity supply needs.

In the natural gas sector, California has made infrastructure improvements that will increase the reliability and operational flexibility of the natural gas system, but must still address the need for additional pipeline capacity to meet peak demand.

California has improved its natural gas infrastructure by increasing intrastate pipeline capacity and in-state storage. Pipeline expansions completed over the last four years have also helped ensure that the state can access conventional natural gas supply basins outside of the state.

Existing infrastructure is both maintained and retained, and the need for additional pipeline capacity to meet customer demand on the coldest days in winter or when there are interstate pipeline disruptions must be continued.

Local Gas Supplies

Gas service is provided to the Township 9 area by PG&E. PG&E is responsible for the transmission and distribution of gas to much of northern and central California, serving approximately 15 million people throughout a 70,000 square mile service area from Eureka to Bakersfield.⁴³ Gas is derived from sources in California, Canada, the Permian, San Juan, and Anadarko Basins in the southwestern states, and from the Rocky Mountain area.⁴⁴

Existing Facilities

PG&E owns and operates gas transmission facilities which are located within North 7th Street.⁴⁵

42 Gary Shimizu, P.E., SMUD Distribution Services, Written communication, November 1, 2006.

43 Pacific Gas and Electric Company website, <<http://www.pge.com/>> (June 29, 2006).

44 California Gas Utilities, *California Gas Report*, 2004, p. 26.

45 Donny Kennedy, PG&E, Sacramento Land Services Division, Written communication, November 15, 2006.

REGULATORY SETTING

Federal Regulations

The Federal Energy Regulatory Commission regulates the transmission and sale of electricity in interstate commerce, licensing of hydroelectric projects, and oversight of related environmental matters.

State Regulations

The CPUC sets forth specific rules that relate to the design, installation, and management of California's public utilities, including electric, natural gas, water and transportation, and telecommunications. CPUC Decision #77187 and #78500 state that utilities must be underground if the developable lots are less than three acres in size. CPUC Decision #81620 states that lots over three acres (large lot subdivision) are not required to underground utilities. A formal waiver from the CPUC is required for an exemption from complying with these decisions.

CPUC Decision 95-08-038 governs the planning and construction of new transmission facilities, distribution facilities, and substations. The Decision requires permits for the construction of certain power line facilities or substations if the voltages would exceed 50 kilovolts or the substation would require the acquisition of land or an increase in voltage rating above 50 kilovolts. Distribution lines and substations with voltages less than 50 kilovolts do not need to comply with this Decision; however, the utility must obtain any applicable local permits required for the construction and operation of these projects.

Title 20 and Title 24, California Code of Regulations (CCR)

New buildings constructed in California must comply with the standards contained in Title 20, Energy Building Regulations, and Title 24, Energy Conservation Standards, of the CCR. Title 24 (AB 970) also contains energy efficiency standards for residential and nonresidential buildings based on a State mandate to reduce California's energy demand.

Warren-Alquist Energy Resources Conservation and Development Act

The State Energy Commission regulates energy resources by encouraging and coordinating research into energy supply and demand problems to reduce the rate of growth of energy consumption (Warren-Alquist Energy Resources Conservation and Development Act Government Code section 25000 *et seq.*).

Local Regulations

City of Sacramento General Plan

Goal A: Continue to improve and provide communication and utility services to all areas of the City.

Policies

1.

Continue to work closely with utility companies on long-range planning for newly developing areas.

2.

Support and encourage the utility companies to place utilities underground in new development areas.

IMPACTS AND MITIGATION MEASURES

Methods of Analysis

To determine whether implementation of the proposed project would result in impacts on electricity and natural gas supplies, the ability of the utility companies to provide electricity and natural gas service to the project site was assessed through conversations with SMUD and PG&E personnel. The availability of supply relative to the project's demand is evaluated in this section. In addition, the need for new infrastructure or expansion of existing energy infrastructure to serve the proposed project beyond what is already anticipated is analyzed in this section.

Standards of Significance

Based on the standards of significance included in the City of Sacramento Initial Study Checklist, a significant impact would occur if:

- The project would require or result in the construction of new or the expansion of existing facilities, the construction of which causes significant environmental effects.

Project-Specific Impacts and Mitigation Measures

6.10-10 The proposed project would increase the demand for electricity that could require the construction of new electrical production or transmission facilities.

Scenario A

Implementation of Scenario A would increase the use of electricity at the project site, to light, heat, and air condition the new buildings, parking areas, streets, sidewalks, trails, and residential units.

Scenario B

Implementation of Scenario B would also increase the use of electricity at the project site, to light, heat, and air condition the new buildings, parking areas, streets, sidewalks, trails, and residential units.

Analysis

SMUD has a main overhead 21kV feeder along Richards Boulevard. There are also light wire circuits along North 5th Street on the west side and North 7th Street on the west side. Light wire circuits are also found north of Richards Boulevard on the eastern side of the project site. Several overhead and underground tap circuits are fed from both the North 5th and North 7th Street lines to serve existing facilities on the project site. Two lines are fed from the North 5th Street line and serve the west side of the project, while a third line feeds City Sump Pump 111 west of the project. Three additional lines are fed from the North 7th Street line and serve the east side of the project site.⁴⁶

SMUD has indicated that there are no constraints to obtaining a reliable energy source to serve development in the project site.⁴⁷ In addition, the electricity demands created by the proposed

46 Gary Shimizu, P.E., SMUD Distribution Services, Written communication, November 1, 2006.

47 Gary Shimizu, P.E., SMUD Distribution Services, Written communication, November 1, 2006.

project are not substantial in relation to the total amount of energy supplied by SMUD in its service area, including the City of Sacramento, Sacramento County, and parts of Placer County. In 2003, 9,919,728 megawatt-hours of electricity usage was sold and only 15.4 MW of electricity per year is anticipated for use by the proposed project.⁴⁸ More specific projections of actual energy demand will be developed during the detailed design phase of the project. As part of the City's development review process, PG&E is provided sufficient opportunity to provide input on the project. PG&E must provide a detailed review of their capability to provide an adequate level of service to the project site. This would ensure an adequate level of service is provided.

Implementation of Title 20 and 24 of the CCR would reduce impacts associated with an increased demand for electricity by implementing energy efficient standards for residential and non-residential buildings. These could include, but are not necessarily limited to, building integrated solar electric features, thermal energy storage systems, and advanced energy saving architectural features in the buildings themselves. Proposed office uses under Scenario B would include lighting conservation efforts and other energy conservation measures. Lighting conservation efforts would include occupancy sensors to automatically turn off lights when not in use, lighting reflectors, electronic ballasts, and energy-efficient lamps. Conservation efforts are expected to include improved HVAC systems with microprocessor-controlled energy-management systems.

In addition, implementation of the Warren-Alquist Energy Resources Conservation and Development Act would also coordinate research and development into energy supply and demand problems to reduce the rate of growth of energy consumption. There is also adequate electrical supply, and new electrical facilities would be constructed as part of the proposed project.

The physical environmental impacts resulting from construction of the proposed project are comprehensively analyzed in the appropriate technical sections of this EIR. Further, as required by law, all utility connections would be constructed in accordance with all applicable Uniform Codes, City Ordinances, and Public Works standards to ensure an adequately sized and properly constructed electrical transmission and conveyance system. Implementation and extension of utility infrastructure would be designed and constructed prior to occupancy and in a manner that would minimize the potential for utility disruption. Because there is adequate electrical supply and new electrical facilities would be constructed as part of the proposed project prior to occupancy, the impacts would be considered ***less than significant***.

Mitigation Measure

None required.

6.10-11 The proposed project would increase the demand for natural gas that could require the construction of new gas production or transmission facilities.

Scenario A

Implementation of Scenario A would increase the use of natural gas at the project site for residential and commercial uses.

48 SMUD website, About SMUD, More Facts and Figures, For year ending December 31, 2003, Updated June 2004, <www.Smud.org>, (December 12, 2006).

Scenario B

Implementation of Scenario B would increase the current natural gas use at the project site for residential, commercial, and office uses.

Analysis

PG&E will install new distribution facilities as needed to serve buildout of the proposed project, according to CPUC rules. PG&E has indicated that an adequate supply of natural gas is currently available to serve the proposed project, and that the natural gas level of service provided to the surrounding area would not be impaired by the proposed project.⁴⁹ In addition, the natural gas demands created by the project are not substantial in relation to the total amount of energy supplied by PG&E in its northern and central California service area. In 2005, 844,068 million cubic feet (8.7×10^{14} Therms) of natural gas was recorded.⁵⁰

As discussed in Impact 6.10-10 (above), all new buildings are required to conform to the energy conservation standards specified in CCR Titles 20 and 24. Further, the project proposes a variety of additional energy conservation measures that could also be included into the project's design and/or operational features to decrease the amount of overall energy consumed by the project. These could include, but are not necessarily limited to, building integrated solar electric features, thermal energy storage systems, and advanced energy saving architectural features in the buildings themselves.

Proposed office uses under Scenario B would include lighting conservation efforts and other energy conservation measures. Lighting conservation efforts would include occupancy sensors to automatically turn off lights when not in use, lighting reflectors, electronic ballasts, and energy-efficient lamps. Conservation efforts are expected to include improved HVAC systems with microprocessor-controlled energy-management systems.

The project would require construction of new natural gas lines on the project site. Natural gas lines to serve the project site would be located underground and would be constructed in accordance with PG&E's policies and extension rules on file with the CPUC at the time contractual agreements are made. The natural gas demand projected for the proposed project would not exceed available or planned supply to natural gas resources as a result of the proposed project and natural gas supply facilities would be constructed as part of the proposed project.

The physical environmental impacts resulting from construction of the proposed project are comprehensively analyzed in the appropriate technical sections of this EIR. Further, as required by law, all utility connections would be constructed in accordance with all applicable Uniform Codes, City Ordinances, and Public Works standards to ensure an adequately sized and properly constructed electrical transmission and conveyance system. Implementation and extension of utility infrastructure would be constructed prior to occupancy and in a manner that would minimize the potential for utility disruption. Because the natural gas demand would not exceed available supply to serve the proposed project, and because infrastructure would be constructed as part of the proposed project prior to occupancy, impacts would be considered ***less than significant***.

49 Larry Schlaht, PG&E, Senior New Business Representative, Written communication to David Green, Moreno Trenching, October 28, 2006.

50 PG&E website, Our Business, Company Overview, <www.pgecorp.com>, (December 12, 2006).

Mitigation Measure

None required.

Cumulative Impacts and Mitigation Measures

The cumulative context for electricity is the SMUD service area. The cumulative context for natural gas is the City of Sacramento Service Area of PG&E.

6.10-12 The proposed project, in combination with other development in the City of Sacramento, could exceed the electrical or natural gas supply and transmission capabilities.

Scenario A and B

Currently there are multiple projects being considered for development in the City of Sacramento. All of these projects would create a significant electricity and natural gas demand above what current utility providers are experiencing. All new projects constructed in California are required to conform to the energy conservation standards specified in Titles 20 and 24 of the CCR, and many individual projects include other energy conservation measures in order to achieve green building status, either officially (as recognized by the Leadership in Energy and Environmental Design [LEED] Green Building Rating System) or unofficially (in order recognize sustainable building principles).

SMUD is a utility provider that obtains its electricity from a variety of sources, including hydro-generation, co-generation plants, advanced and renewable technologies (such as wind, solar, biomass/landfill gas power), and power purchased on the wholesale market. SMUD has stated that electricity would be available to supply energy to the City at full implementation of the City's General Plan Update over the next 25 years, and has also stated that sufficient energy could be provided to serve the proposed project.⁵¹ Because SMUD is able to meet all future projected demands, the cumulative impact related to the supply of electricity and the need for additional or expanded facilities is less than significant, and the proposed project's contribution to demand would not be cumulatively considerable.

With regard to natural gas, the proposed project would also result in permanent and continued use of this resource. Because PG&E's demand projections are continuously updated, and PG&E's system has ample capacity to ensure continued levels of service to all customers within the region, PG&E has stated that it can supply natural gas to the proposed project without jeopardizing other existing or projected service commitments.⁵² The cumulative impact related to the supply of natural gas and the need for additional or expanded facilities is less than significant, and the proposed project's contribution to demand would not be cumulatively considerable.

Future development in the region would increase residential, commercial, and office needs for electricity and natural gas. Development in previously undeveloped areas would require the extension of existing lines, and new transmission facilities and substations would be needed. The environmental impacts associated with the installation of new facilities would be analyzed by each development under separate environmental review as the utilities are extended.

51 Gary Shimizu, P.E., SMUD Distribution Services, Written communication, November 1, 2006.

52 Larry Schlaht, PG&E, Senior New Business Representative, Written communication to David Green, Moreno Trenching, October 28, 2006.

Although specific design and construction plans for cumulative projects in the region are unknown at this time, SMUD and PG&E would install new distribution facilities as needed to serve the buildout of the proposed project, according to CPUC rules. The same is true for any additional development within the City of Sacramento or in SMUD's service area. As part of the development review process, PG&E and SMUD receive sufficient opportunity to provide input on proposed projects to ensure their capability of providing an adequate level of service to the project site. In addition, because there is adequate electrical and natural gas supply and because new electrical and natural gas facilities would be constructed as part of the proposed project prior to occupancy the project's contribution to electricity and natural gas supply and transmission capacities would be less than considerable. This is a ***less-than-significant cumulative impact***.

Mitigation Measure

None required.

6.11 Transportation and Circulation

6.11 TRANSPORTATION AND CIRCULATION

INTRODUCTION

This chapter discusses the traffic and circulation impacts of the proposed Township 9 project, including automobile traffic (traffic generated by the project and its effects on peak hour operations of intersections) and other transportation system components (parking, bicycle and pedestrian movement, and transit).

Two separate proposed project scenarios were analyzed as described below in the Environmental Setting section. Both scenarios were studied in the same detail so that either scenario can be selected without further study. This transportation discussion is prepared by Dowling Associates, Inc.

ENVIRONMENTAL SETTING

The proposed project includes two development scenarios. Scenario A includes the development of approximately 2,981 dwelling units (apartments, condominiums, town homes, and live/work units) and approximately 146,194 gross square feet of neighborhood-serving retail and restaurant uses. Scenario B would develop approximately 839,628 gross square feet of office use (instead of residential) on the proposed lots fronting Richards Boulevard. Under Scenario B, the number of dwelling units would be reduced to approximately 2,350. The main access to the site would be provided along Richards Boulevard at 5th Street and 7th Street.

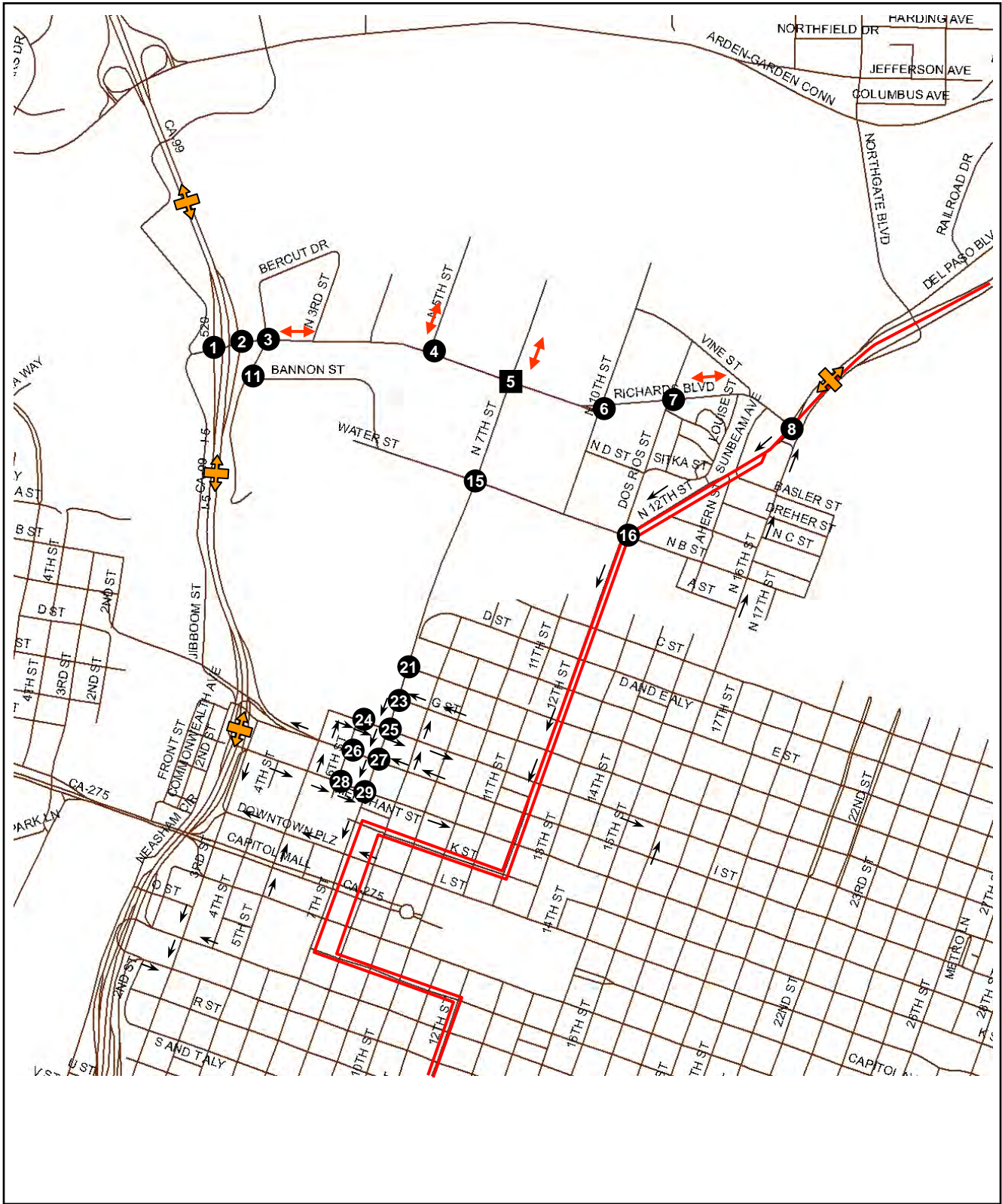
The existing roadway, transit, bicycle and pedestrian components of the transportation system within the study area are described below.

Existing Roadway Network

The existing roadway network is shown in Figure 6.11-1. The proposed project is located less than one mile from two regional highway facilities. To the west lies Interstate 5 (I-5), a major north-south freeway that spans the length of the West Coast and provides connection to other regional facilities such as Interstate 80 to the north and U.S. Route 50 to the south. It also provides access to Sacramento International Airport in the northern portion of the City and County as well as other Central Valley communities. To the west, State Route 160 (SR 160) provides access to North Sacramento, northeastern portions of the City and County, South Natomas via Northgate Boulevard, and Business Loop I-80. Access to both facilities is provided via Richards Boulevard.

Richards Boulevard is a 1.5-mile long roadway that runs from just west of I-5 east to terminate at SR 160. Richards Boulevard operates primarily as a four-lane arterial road and provides the main access to the project site.

N. 7th Street is a two-lane roadway that serves as the sole direct connection from the project site to downtown Sacramento. It spans from the American River south through downtown to terminate at Southside Park just north of U.S. 50. It operates as a southbound one-way street south of F Street.



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Township 9 Traffic Study



**Figure 6.11-1
ROADWAY NETWORK
EXISTING CONDITIONS**

N. 5th Street extends from the American River to Richards Boulevard; then continues from H Street in downtown Sacramento south to the Upper Land Park neighborhood. The discontinuous two-lane roadway forms the western border of the project site.

N. 10th Street is a discontinuous two-lane road that runs from the American River to North B Street.

Dos Rios Avenue is a north-south roadway that runs from Vine Street at the American River south to North B Street where it merges with N. 12th Street to operate as a southbound one-way road.

N. 12th Street operates as a southbound one-way arterial roadway from Richards Boulevard to just before reaching U.S. 50. Near the project site, it offers an alternative to N. 7th Street to access downtown and midtown Sacramento.

Bercut Drive is a discontinuous two-lane roadway that runs parallel east of I-5 from just north of Richards Boulevard to south of Bannon Street. As a part of a proposed development project, the Railyards, Bercut Drive will be extended south to the proposed 5th Street extension just north of I-5 northbound I Street onramp. This extension is assumed to be a part of the roadway network under cumulative conditions.

Bannon Street runs east-west from Bercut Drive to North B Street. It is proposed to be converted to eastbound one-way street and extended eastward to connect with North C Street in the long-term horizon. This extension is assumed to be a part of the roadway network under Year 2030 long-term conditions.

Downtown Sacramento is served by a grid street system. North-south streets have numbered street names and east-west streets have lettered street names. Many streets operate as one-way facilities and most major intersections in downtown are signal-controlled. In general, the one-way streets carry three travel lanes, with parking permitted along both curbs.

Existing Transit System

Sacramento Regional Transit District

The Sacramento Regional Transit District (RT) provides bus service near the project site. Three bus routes operates in the project area: Routes 11 (Truxel Road), Route 15 (Rio Linda to O Street), and Route 33 (Dos Rios). Route 11 provides weekday service between Natomas and the downtown area in 30-minute intervals during peak periods and one hour intervals during off-peak periods. It operates from about 6:00 am to 6:00 pm. Route 15 provides daily service between Watts/I-80 and downtown. Service is provided on 30-minute intervals from about 6:00 a.m. to 7:00 p.m. then hourly intervals until 10:00 p.m. on weekdays. Hourly service is provided on weekends from 7:00 a.m. to 10:00 p.m. on Saturdays and from 8:00 a.m. to 10:00 p.m. on Sundays. Route 33 provides service between Richards Boulevard to D Street and 12th Street on weekdays between 6:30 a.m. and 5:30 p.m. in 20-minute intervals.

RT also provides light rail service in the greater Sacramento area. There is currently no light rail station in the project vicinity; however, the proposed 13-mile Downtown/Natomas/Airport (DNA) corridor, which runs from downtown Sacramento to the Sacramento International Airport via Natomas and North Natomas, has planned for a Richards Boulevard station to be located between 5th and 7th Street adjacent to the project site. The transit service will open between

2014 and 2027 depending on funding availability and the Richards Boulevard station has been included in the first phase of the project, which may begin construction as early as 2012.

Amtrak

Amtrak's downtown depot at 4th and I Street is located approximately one mile southwest of the project site and provides regional train service. Amtrak operates daily scheduled passenger train service from the downtown station to Richmond-BART-Oakland-San Francisco-San Jose, the San Joaquin Valley, Los Angeles, and Portland-Seattle. Reno-Denver-Chicago service is also available. Connections can be made to locations throughout the United States and Canada.

Existing and Planned Bicycle and Pedestrian Facilities

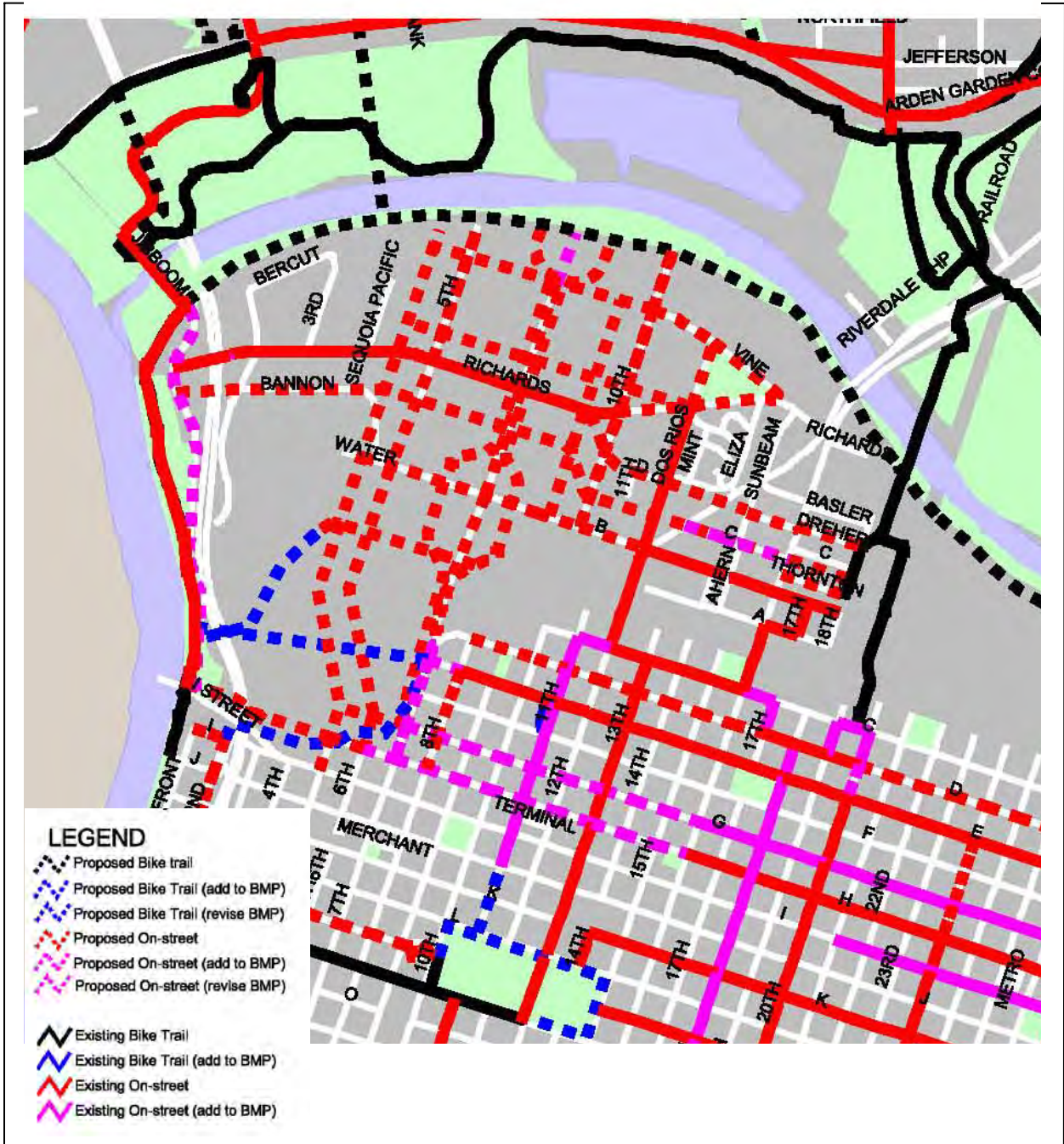
A Sacramento City / County Bicycle Task Force developed a 2010 Bikeway Master Plan for the region. The Master Plan, adopted in 1995, is a policy document that was prepared to coordinate and develop a bikeway system that will benefit and serve the recreational and transportation needs of the public. Officially designated bicycle facilities are classified as follows:

Class I	Off-street bike trails or paths which are physically separated from streets or roads used by motorized vehicles.
Class II	On-street bike lanes with signs, striped lane markings, and pavement legends.
Class III	On-street bike routes marked by signs and shared with motor vehicles and pedestrians. Optional four-inch edge lines painted on the pavement.

According to the Bikeway Master Plan map contained in the City of Sacramento Parks and Recreation Master Plan 2005-2010, existing bikeways may be found along the following roadways in the project area:

- Richards Boulevard between Jibbom and 10th Streets
- North 12th Street/Dos Rios Street between C and Vine Streets
- Water Street/North B Street
- E Street between 8th and 35th Streets
- G Street between 16th Street and Alhambra Boulevard
- H Street between 16th Street and Elvas Avenue
- Front Street between J Street and North Sacramento
- 11th Street between C and J Streets; and between N and W Street, then continue on Riverfront Drive to around 43rd Avenue

Additional bikeways were proposed to further enhance the already extensive network. Proposed new or extended bikeways near the project site include on-street bike lanes along 4th, 5th, 7th, 9th, 10th, Vine, Bannon and North B Streets as well as on several planned roadways. Off-street bike paths are proposed along the American River. Figure 6.11-2 shows the existing and proposed bikeway in the project area.



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Figure 6.11-2

Existing and Proposed Bikeway Network

Township 9 Traffic Study

Source: Sacramento Bikeway Master Plan

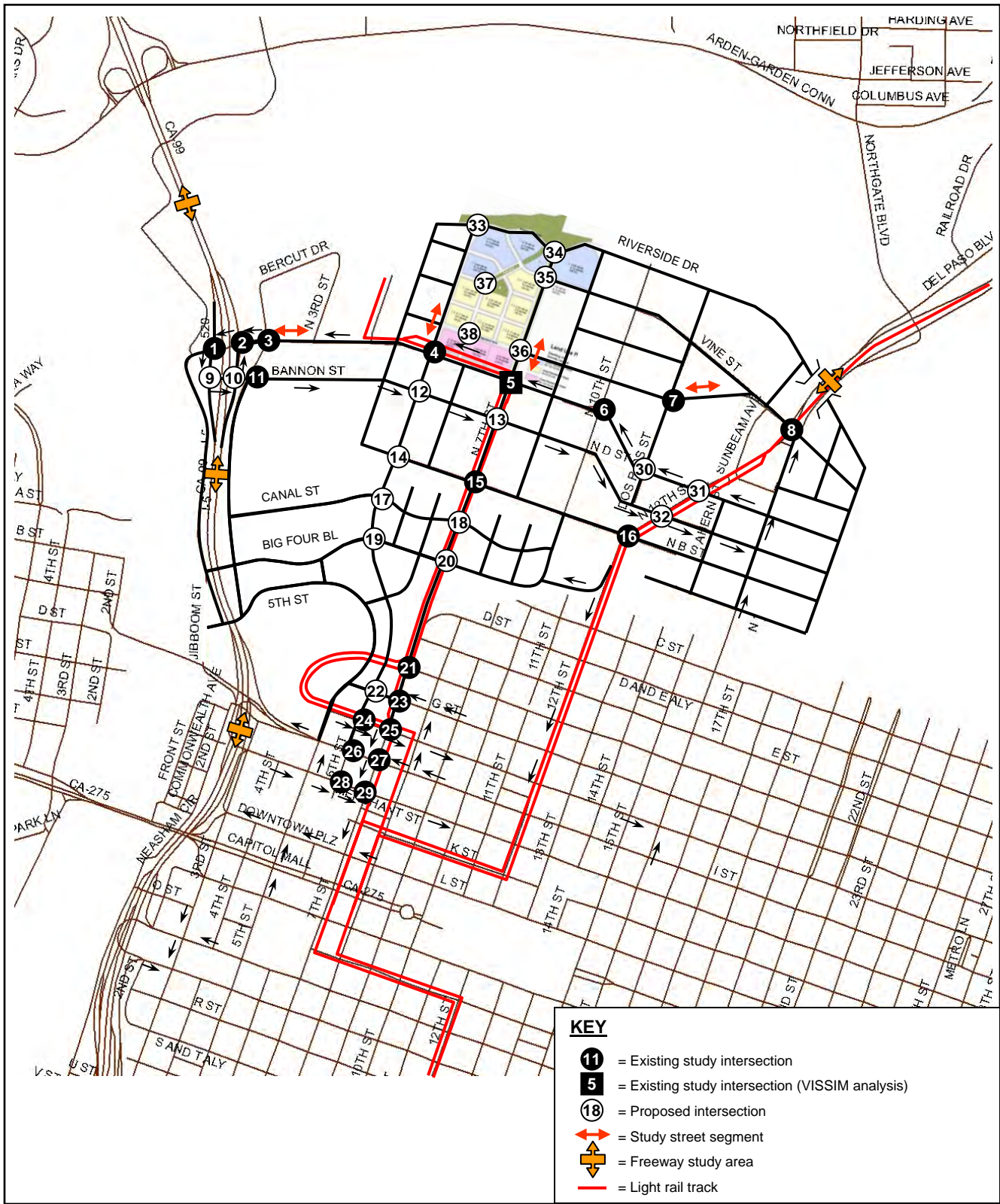
Sidewalks are provided along some portion of Richards Boulevard but not found along 5th Street and 7th Street in the project vicinity.

Study Area

A set of intersections, street and freeway mainline segments, freeway merge/diverge areas, and freeway ramps were selected for study based upon the anticipated volume and distributional patterns of project traffic and known locations of operational difficulty. This selection was made in collaboration with the City of Sacramento Development Engineering Division staff members. The following locations, shown in Figure 6.11-3, were studied:

Intersections:

- I-5 SB Ramps / Richards Boulevard
- I-5 NB Ramps / Richards Boulevard
- Bercut Drive / Richards Boulevard
- 5th Street / Richards Boulevard
- 7th Street / Richards Boulevard
- 10th Street / Richards Boulevard
- Dos Rios Avenue / Richards Boulevard
- 16th Street / Richards Boulevard / 12th Street
- I-5 Southbound ramps / Bannon Street (future)
- I-5 Northbound ramps / Bannon Street (future)
- Bercut Drive / Bannon Street
- 5th Street / Bannon Street (future)
- 7th Street / Bannon Street (future)
- 6th Street Extension / North B Street (future)
- 7th Street / North B Street
- 12th Street / Dos Rios Street / North B Street
- 6th Street Extension / Canal Street (future)
- 7th Street / Canal Street (future)
- 6th Street Extension / Big 4 Boulevard (future)
- 7th Street / Big 4 Boulevard (future)
- 7th Street / F Street
- 6th Street Extension / G Street (future)
- 7th Street / G Street
- 6th Street / H Street
- 7th Street / H Street



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Township 9 Traffic Study



**Figure 6.11-3
PROJECT SITE & STUDY INTERSECTIONS**

- 6th Street / I Street
- 7th Street / I Street
- 6th Street / J Street
- 7th Street / J Street
- Dos Rios Street / Richards Boulevard (future)
- 12th Street / Richards Boulevard (future)
- 12th Street / Bannon Street (future)
- N. 5th Street / “The Parkway” (future)
- N. 7th Street / “The Parkway” (future)
- 7th Street / Vine Street (future)
- 7th Street / Signature Boulevard (future)
- Zone 9 roundabout (future)
- Signature Boulevard / Zone 15 roundabout (future)

Street Segments:

- Richards Boulevard – east of Bercut Drive
- Richards Boulevard – east of Dos Rios Street
- N. 5th Street – north of Richards Boulevard
- N. 7th Street – north of Richards Boulevard

Freeway Segments:

- I-5 Northbound
 - North of J Street off-ramp
 - South of Richards Boulevard off-ramp
 - North of Richards Boulevard on-ramp
- I-5 Southbound
 - North of Richards Boulevard off-ramp
 - South of Richards Boulevard on-ramp
 - North of I Street on-ramp
- SR 160 Northbound at American River Bridge
- SR 160 Southbound at American River Bridge

Freeway Merge / Diverge / Weave:

- I-5 Northbound
 - P Street to J Street weave

- Richards Boulevard off-ramp
- Richards Boulevard on-ramp
- I-5 Southbound
 - Richards Boulevard off-ramp
 - Richards Boulevard on-ramp
 - I Street to Q Street weave

Freeway Ramps:

- I-5 Northbound
 - J Street off-ramp
 - Richards Boulevard off-ramp
- I-5 Southbound
 - Richards Boulevard off-ramp
 - J Street off-ramp

Existing Traffic Operations**Traffic Volumes**

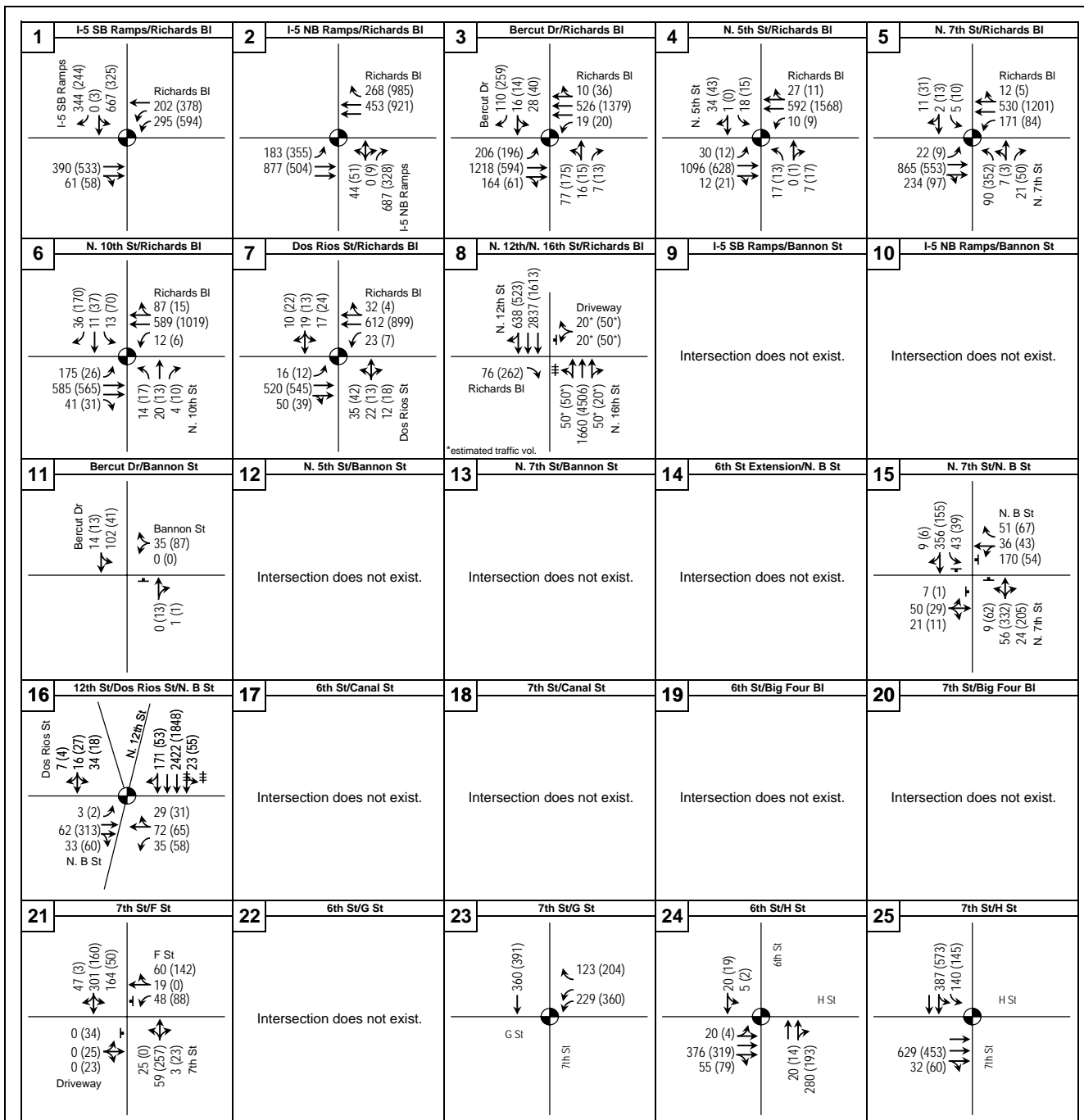
Turning traffic volumes were observed at the study intersections during the a.m. and p.m. commuter periods (7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) between September 2004 and June 2006. The existing traffic volumes, lane configurations, and traffic controls at study area intersections are shown in Figure 6.11-4.

Freeway mainline and ramp data were supplied by the California Department of Transportation (Caltrans). Caltrans data were supplemented by intersection and ramp volume counts conducted during the same period. Freeway traffic volumes and lane configurations are provided in Appendix N.

Levels of Service

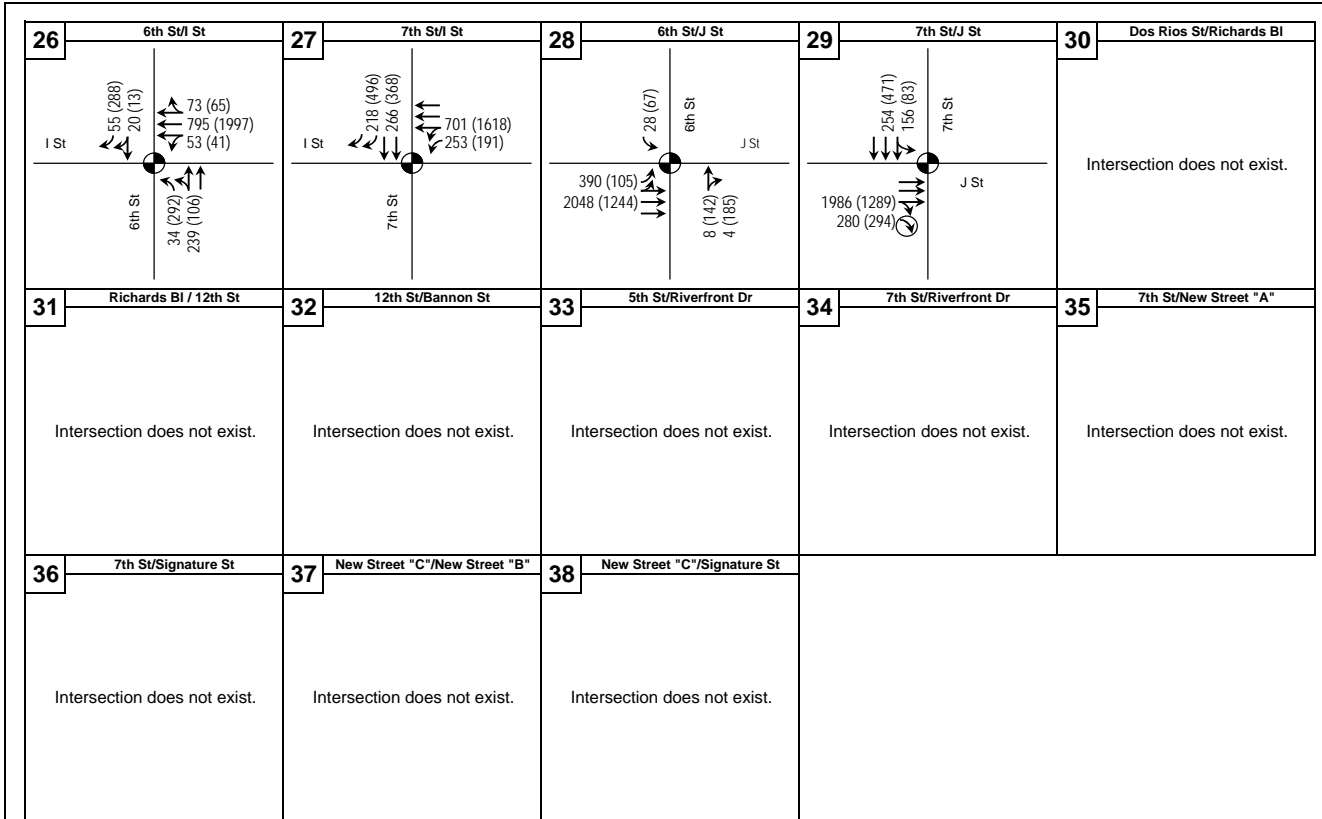
“Levels of service” describe the operating conditions experienced by motorists. Level of service is a qualitative measure of the effect of a number of factors, including speed and travel time, traffic interruptions, freedom to maneuver, driving comfort and convenience. Levels of service are designated "A" through "F" from best to worst, which cover the entire range of traffic operations that might occur. Level of Service (LOS) "A" through "E" generally represent traffic volumes at less than roadway capacity, while LOS "F" represents over capacity and/or forced flow conditions.

The City of Sacramento General Plan (October 1987) outlines the goals and policies that coordinate the transportation and circulation system with planned land uses. The General Plan (Goal D, Street and Road section) identifies LOS C as the goal for City's local and major street system except at freeway ramp intersections, where the goal is LOS D. In addition, the General Plan smart growth principles identify the need for a balanced transportation system, including walkability and improved bicycle infrastructure. The current LOS C goal is being reexamined as



KEY
 31 (27) = AM (PM) peak hour traffic volume
 ● = Signalized intersection
 ↕ = Intersection approach lane
 ⊕ = Lane provided during AM peak, only





KEY
 31 (27) = AM (PM) peak hour traffic volume
 = Signalized intersection
 = Intersection approach lane
 = Lane provided during AM peak, only



part of the upcoming General Plan update. The revised policy is expected to recognize alternative mode opportunities, support developments in infill areas and near transit stations.

The City's pedestrian friendly Street Standards (adopted in February 2004) provide guidelines on conceptual street standards to enhance and improve the pedestrian environment and encourage alternate mode use in the City of Sacramento. The key elements of the standards are listed below:

- Eliminate rolled curb
- Provide separated sidewalks on all streets
- Reduce widths of collector and arterial streets
- Reduce travel lane widths
- Add bike lanes to all new collector and arterial streets

Signalized Intersections Analysis

Signalized intersection analyses were conducted using the operational methodology outlined in the *Highway Capacity Manual* (Transportation Research Board, Washington, D.C., 2000, Chapters 10 and 16). This procedure calculates an average stopped delay per vehicle at a signalized intersection, and assigns a level of service designation based upon the delay. The method also provides a calculation of the volume-to-capacity (v/c) ratio of the critical movements at the intersection. Table 6.11-1 shows level of service criteria for signalized intersections.

TABLE 6.11-1		
LEVEL OF SERVICE CRITERIA – SIGNALIZED INTERSECTIONS		
Level of Service (LOS)	Average Delay (seconds/vehicle)	Description
A	≤ 10	Very Low Delay: This level of service occurs when progression is extremely favorable and most vehicles arrive during a green phase. Most vehicles do not stop at all.
B	> 10 and < 20	Minimal Delays: This level of service generally occurs with good progression, short cycle lengths, or both. More vehicles stop than at LOS A, causing higher levels of average delay.
C	> 20 and < 35	Acceptable Delay: Delay increases due to only fair progression, longer cycle lengths, or both. Individual cycle failures (to service all waiting vehicles) may begin to appear at this level of service. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.
D	> 35 and < 55	Approaching Unstable Operation/Significant Delays: The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume / capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	> 55 and < 80	Unstable Operation/Substantial Delays: These high delay values generally indicate poor progression, long cycle lengths, and high volume / capacity ratios. Individual cycle failures are frequent occurrences.
F	> 80	Excessive Delays: This level, considered unacceptable to most drivers, often occurs with over-saturation (that is, when arrival traffic volumes exceed the capacity of the intersection). It may also occur at nearly saturated conditions with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

Source: Transportation Research Board, *Highway Capacity Manual*, Washington, D.C., 2000, pages 10-16 and 16-2.

Unsignalized Intersections Analysis

Stop sign controlled intersections were analyzed utilizing the methodology outlined in the *Highway Capacity Manual* (Transportation Research Board, Washington, D.C., 2000, Chapters 10 and 17). This methodology determines the level of service by calculating an average total delay per vehicle for each controlled movement and for the intersection as a whole. A LOS designation is assigned based upon the average control delay of all movements. Table 6.11-2 presents the relationship of total delay to level of service for stop controlled intersections.

LEVEL OF SERVICE CRITERIA – STOP CONTROLLED INTERSECTIONS	
Level of Service	Average Control Delay (seconds/vehicle)
A	0 - 10
B	>10 - 15
C	>15 - 25
D	>25 - 35
E	>35 - 50
F	>50

Source: Transportation Research Board, *Highway Capacity Manual*, Washington, D.C., 2000, pages 10-16 and 16-2.

Intersections controlled by roundabouts were analyzed utilizing the methodology outlined in the *Roundabouts: An Informational Guide* (Federal Highway Administration, Washington, D.C., 2000). The guide recommends that roundabouts should be designed to operate at no more than 85 percent of their estimated capacity as the operation of the roundabout begins to deteriorate when this capacity is exceeded. For the purpose of this analysis, a volume-to-capacity (V/C) ratio of 0.85 or better represents LOS C or better.

Street Segment Analysis

Selected street segments were evaluated by comparing annual daily traffic volumes to the level of service criteria set forth in the City's Traffic Impact Guidelines. Table 6.11-3 shows level of service criteria for arterial roadways, local streets, and collector streets. The criteria for local and collector streets were based on the maximum daily traffic for those types of facilities listed in the Sacramento City Code. The maximum daily traffic in the Code was set as the threshold for LOS C traffic operations. The thresholds for other levels of service were based on volume-to-capacity ratios of 0.60 for LOS A, 0.70 for LOS B, 0.80 for LOS C, 0.90 for LOS D, and 1.00 for LOS E.

Freeway Ramp and Merge / Diverge Analysis

Freeway ramps and merge / diverge areas were analyzed using a methodology outlined in the *Highway Capacity Manual* (Transportation Research Board, Washington, D.C., 2000, Chapters 13 and 25). Freeway ramp operating conditions are dependent upon traffic volumes and the ramp characteristics. These characteristics include the length and type of acceleration/ deceleration lanes; free-flow speed of the ramps; number of lanes; grade; and types of facilities that the ramps interconnect. Table 6.11-4 shows the relationship of level of service to freeway density.

TABLE 6.11-3

LEVEL OF SERVICE CRITERIA – ROADWAYS

Facility Type	Number of Lanes	Maximum Volume for Given Service Level				
		A	B	C	D	E
Arterial, low access control	2	9,000	10,500	12,000	13,500	15,000
	4	18,000	21,000	24,000	27,000	30,000
	6	27,000	31,500	36,000	40,500	45,000
Arterial, moderate access control	2	10,800	12,600	14,400	16,200	18,000
	4	21,600	25,200	28,800	32,400	36,000
	6	32,400	37,800	43,200	48,600	54,000
Arterial, high access control	2	12,000	14,000	16,000	18,000	20,000
	4	24,000	28,000	32,000	36,000	40,000
	6	36,000	43,000	48,000	54,000	60,000
Local Street	2	3,000	3,500	4,000	4,500	5,000
Collector Street	2	5,250	6,125	7,000	7,875	8,750
Facility Type	Stops/Mile	Driveways		Speed		
Arterial, low access control	4+	Frequent		25-35 MPH		
Arterial, moderate access control	2-4	Limited		35-45 MPH		
Arterial, high access control	1-2	None		45-55 MPH		

Sources: Arterial volumes from City of Sacramento, *Traffic Impact Analysis Guidelines*, 1996.
Local and Collector Street volumes based on City of Sacramento *Design and Procedures Manual*, Section 15.

TABLE 6.11-4

LEVEL OF SERVICE CRITERIA – FREEWAY RAMP MERGE / DIVERGE AREAS

Level of Service	Maximum Density (passenger vehicles per mile per lane)
A	10
B	20
C	28
D	35
E	> 35
F	Demand exceeds capacity

Source: Transportation Research Board, *Highway Capacity Manual*, Washington, D.C., 2000, page 25-5.

As shown in Table 6.11-4, the basic criterion used to determine Freeway Ramp LOS is vehicle density in the merge or diverge area. Note that the 2000 Highway Capacity Manual¹ requires that several additional criteria be considered so that LOS F is automatically attained for a ramp if:

At an on-ramp, volume exceeds capacity ($V > C$) in:

1. The segment of a freeway downstream, or
2. The merge-area defined by the on-ramp and the two adjacent freeway lanes,

¹ See *Highway Capacity Manual*, Transportation Research Board, Washington, D.C., 2000, pages 13-22 and 13-23.

At an off-ramp, volume exceeds capacity ($V > C$) in:

1. The segment of a freeway upstream OR downstream,
2. The off-ramp itself, or
3. The diverge-area defined by the two adjacent freeway lanes approaching the ramp

Table 6.11-5 shows maximum service flow rates for freeway ramps, based upon information presented in the *Highway Capacity Manual* (Transportation Research Board, Washington, D.C., 2000, Chapters 13 and 25; 1985, Chapter 5). This methodology is used in cases where the freeway ramp configuration governs the operating condition.

Level of Service (LOS)	Service Flow Rates for Single Lane / Two Lane Ramps Ramp Design Speed (Mph)					Definition
	< 20	21-30	31-40	41-50	> 51	
A	(1)	(1)	(1)	(1)	800/ 1,550	Conditions of free flow; speed is controlled by driver's desires, speed limits, or physical conditions.
B	(1)	(1)	(1)	1,150/ 2,250	1,150/ 2,350	Conditions of stable flow; operating speeds beginning to be restricted; little or no restrictions on maneuverability from other vehicles.
C	(1)	(1)	1,400/ 2,600	1,600/ 3,100	1,700/ 3,350	Conditions of stable flow; speeds and maneuverability more closely restricted
D	(1)	1,550/ 2,900	1,700/ 3,200	1,950/ 3,850	2,050/ 4,150	Conditions approach unstable flow; tolerable speeds can be maintained, but temporary restrictions may cause extensive delays; little freedom to maneuver; comfort and convenience low.
E	1,800/ 3,200	1,900/ 3,500	2,000/ 3,800	2,100/ 4,100	2,200/ 4,400	Conditions approach capacity; unstable flow with stoppages of momentary duration; maneuverability severely limited.
F	Widely Variable					Forced flow conditions; stoppages for long periods; low operating speeds.

(1) Level of service not attainable due to restricted design speed.
Sources: Transportation Research Board, Highway Capacity Manual, Washington, D.C., 2000, page 25-5.
Transportation Research Board, Highway Capacity Manual, Washington, D.C., 1985, page 5-15.

The freeway ramps were also analyzed in terms of the expected queues versus the storage capacity. The length of a vehicle is assumed to be 25 feet long.

Existing Levels of Service

Intersections

The existing a.m. and p.m. peak hour operating conditions at the study area intersections are shown in Table 6.11-6. All but three study intersections currently operate at or above the City's level of service "C" goal. The I-5 southbound ramps and Richards Boulevard intersection operates at LOS E in the a.m. peak hour and the I-5 northbound ramps and Richards Boulevard intersection operates at LOS E in the p.m. peak hour. Detailed worksheets for intersection level of service and queuing are provided in Appendix N.

TABLE 6.11-6				
LEVELS OF SERVICE – EXISTING CONDITIONS				
Intersection	Traffic Control	Peak Hour	Existing	
			LOS¹	Delay²
1. I-5 SB Ramps & Richards Blvd	Signal	AM	E	64.1
		PM	C	23.3
2. I-5 NB Ramps & Richards Blvd	Signal	AM	B	15
		PM	E	56.8
3. Bercut Dr & Richards Blvd	Signal	AM	A	7.2
		PM	B	11.6
4. N 5th Street & Richards Blvd	Signal	AM	B	10.6
		PM	B	12.5
5. N 7th Street & Richards Blvd	Signal	AM	B	17.3
		PM	B	18.1
6. N 10th Street & Richards Blvd	Signal	AM	B	13.2
		PM	B	10.3
7. Dos Rios St & Richards Blvd.	Signal	AM	A	7.4
		PM	A	7.8
11. Bercut Dr & Bannon Street	Stop Sign	AM	A	0.1
		PM	A	0.8
15. N 7th Street & North B Street	Stop Sign	AM	C	24.9
		PM	C	24.9
16. 12th Street & North B Street	Signal	AM	C	25.9
		PM	C	23.9
21. 7th Street & F Street	Stop Sign	AM	A	4.7
		PM	A	5.9
23. 7th Street & G Street	Signal	AM	B	12.3
		PM	B	11.1
24. 6th Street & H Street	Signal	AM	A	4.5
		PM	A	8.9
25. 7th Street & H Street	Signal	AM	B	12.2
		PM	B	10.2
26. 6th Street & I Street	Signal	AM	B	13.2
		PM	C	27.4
27. 7th Street & I Street	Signal	AM	A	7.9
		PM	B	15.7
28. 6th Street & J Street	Signal	AM	A	9.5
		PM	B	15.1
29. 7th Street & J Street	Signal	AM	A	8.2
		PM	A	7.7
Notes: 1 LOS = Level of Service 2 Delay = Average delay in seconds				

Roadway Segment

The Richards Boulevard segments have four travel lanes and are classified as moderate access control arterial. The 5th Street and 7th Street segments have two travel lanes and are classified as low access control arterial. As shown in Table 6.11-7, all four study segments operate in the LOS A range under existing conditions.

Roadway Segment	Lanes	Existing Conditions		
		ADT	LOS	V/C
N. 5 th Street north of Richards Boulevard	2	1100	A	0.07
N. 7 th Street north of Richards Boulevard	2	710	A	0.05
Richards Boulevard east of Bercut Drive	4	20,820	A	0.58
Richards Boulevard east of Dos Rios Drive	4	14,970	A	0.42

Source: Dowling Associates, Inc., December 2006.
ADT = Averaged daily traffic
LOS = Level of service
V/C = Volume/Capacity

Freeway Mainline

Table 6.11-8 shows levels of service for freeway mainline study segments. Detailed calculations are provided in Appendix N. With the exception of I-5 northbound north of J Street off-ramp during the p.m. peak hour and southbound north of Richards Boulevard off-ramp in the a.m. peak hour, which operates in the LOS F range, analysis showed that the freeway mainline study segments operate acceptably. However, the analysis is based on the number of vehicles that travel through each freeway segment. During congested conditions, fewer vehicles are able to pass, resulting in low estimates of congestion. The analysis shows many segments are near capacity (v/c are close to 1.00), so the analysis of future conditions would identify segments that are likely to be impacted.

Location	AM Peak Hour			PM Peak Hour		
	Volume	V/C ¹	LOS ²	Volume	V/C ¹	LOS ²
Northbound I-5						
North of J Street off-ramp	5,994	0.99	E	6,073	1.01	F
South of Richards Blvd off-ramp	6,478	0.68	C	8,255	0.87	F ³
North of Richards Blvd on-ramp	6,198	0.65	C	9,216	0.97	F ³
Southbound I-5						
North of Richards Blvd off-ramp	9,977	1.05	F	6,952	0.73	C
South of Richards Blvd on-ramp	9,322	0.98	E	7,032	0.74	C
North of I Street on-ramp	7,259	0.90	E	5,741	0.71	F ³
Northbound SR 160						
At the American River Bridge	1,680	0.27	A	4,556	0.73	C
Southbound SR 160						
At the American River Bridge	3,475	0.56	C	2,136	0.34	B

Source: Dowling Associates, Inc., 2006.
¹ V/C = Volume / Capacity
² LOS = Level of Service
³ Queue extends from downstream bottleneck

Freeway Interchange

Table 6.11-9 provides a summary of traffic operations at study area interchanges. Detail calculations are provided in Appendix N. The analysis showed that the Richards Boulevard off-ramp on southbound I-5 operates at LOS F during the a.m. peak hour. All other interchanges currently operate at acceptable levels.

Ramp	AM Peak Hour			PM Peak Hour		
	LOS ¹	Density ² (Flow)	Volume	LOS ¹	Density ² (Flow)	Volume
Northbound I-5						
P Street to J Street weave	C	23.82	7,782	B	18.08	6,534
Richards Boulevard off-ramp	C	20.44	731	D	31.20	379
Richards Boulevard on-ramp	C	(492)	451	D	(1462)	1,340
Southbound I-5						
Richards Boulevard off-ramp	F	23.85	1.02	B	16.62	0.73
Richards Boulevard on-ramp	C	(388)	356	C	(711)	652
I Street to Q Street weave	C	20.86	7,547	B	19.00	6,788
Notes: ¹ LOS = Level of Service ² Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp. Bold values show substandard traffic operations. Source: Dowling Associates, Inc., 2006.						

Freeway Ramp Queue

The I-5 southbound to Richards Boulevard off-ramp has inadequate storage capacities during the a.m. peak hour and the queue extend onto the freeway:

REGULATORY SETTING

Roadway operations are regulated by agencies with jurisdiction of a particular roadway. In the study area, the interstate freeways are under the jurisdiction of Caltrans. The non-freeway roadways are under the jurisdiction of the City of Sacramento and governed by the policies and standards in the City of Sacramento General Plan, the Richards Boulevard Area Plan, the Railyards/Richards Boulevard Area Infrastructure Financing Plan and the Richards/Railyards Facility Element (City of Sacramento, 1997). Currently there is an effort underway to update the General Plan and the Railyards/Richards Infrastructure Financing Plan for the Richards Boulevard Area Plan will be updated in the coming years. For more details of the thresholds used in this document for the several jurisdictions, please see Standard of Significant section below.

IMPACTS AND MITIGATION MEASURES

An analysis was performed to determine the potential traffic impacts of the proposed project under the following conditions:

- Baseline Conditions
- Near-Term Conditions (Year 2013)

- Long-Term Conditions (Year 2030)

The baseline analysis considers potential transportation issues that may arise as a result of considering other approved or most foreseeable projects in the study area. The near term analysis identified transportation issues that may arise by the year 2013 as an interim year. The long term condition assumed a fully built-out condition with the implementation of the Facility Element and other improvements.

The transportation infrastructure for the project, methods of analysis, standards of significance, and traffic impacts and mitigation measures are summarized below.

Transportation Infrastructure

Baseline Transportation Systems

The transportation systems expected to be in place for baseline conditions without the project and with the project are shown in Figures 6.11-5 and 6.11-6, respectively. The project traffic impacts are discussed starting on page 6.11-37 under the heading Baseline Conditions. The transportation system for baseline conditions without the project includes those projects that have already been approved and funded prior to the issuance of the Notice of Preparation for the proposed project.

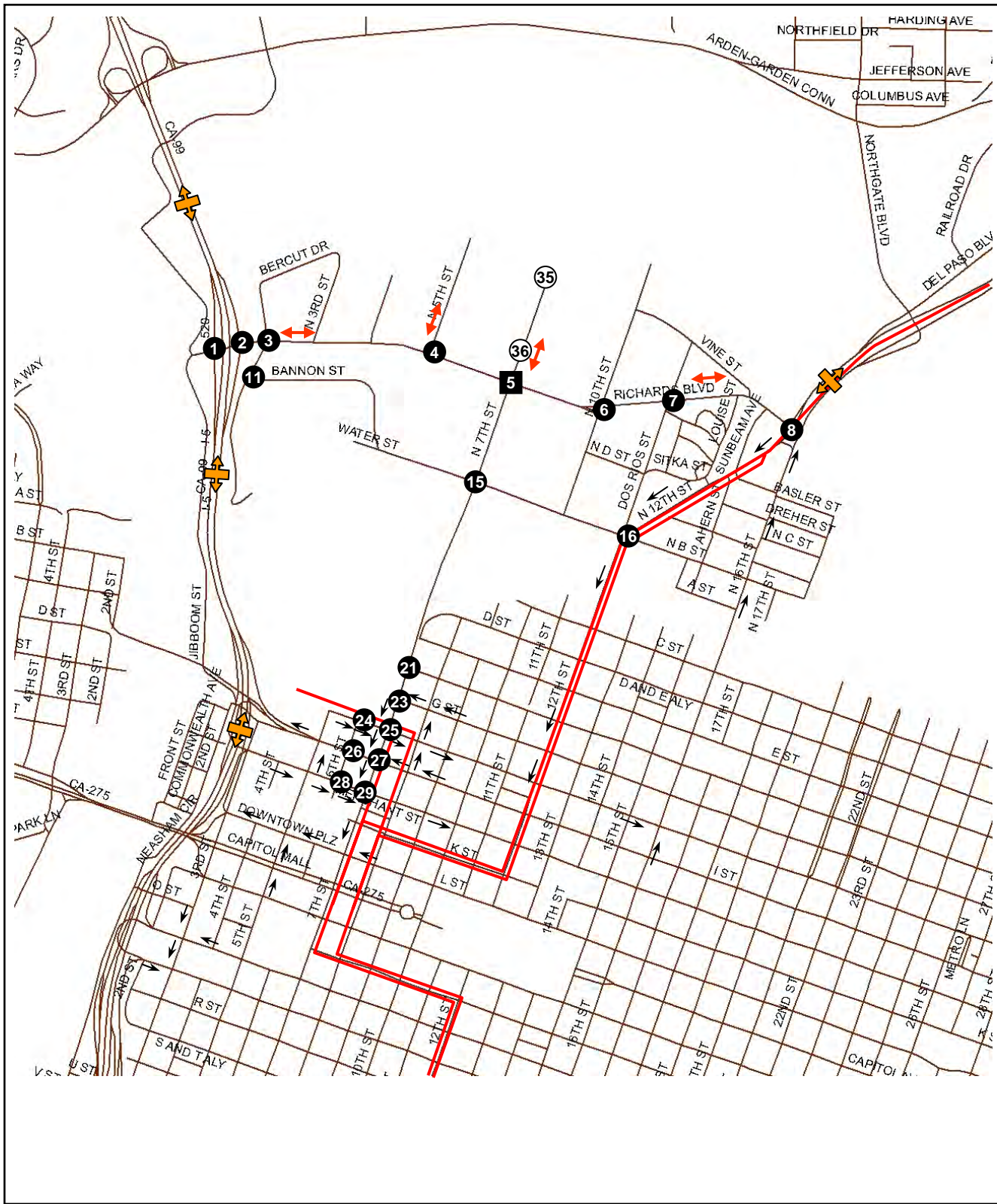
Expansion of the roadway system for baseline conditions includes:

- Installation of a traffic signal and access modifications at the Richards Boulevard & 12th Street intersection.
- Reduction from three eastbound lanes to two eastbound lanes along H Street between 5th Street and 8th Street to accommodate the addition of LRT tracks which was implemented during the preparation of this traffic study
- Addition of two southbound right-turn lanes on 5th Street at the I Street intersection.
- Conversion of 3rd Street from one-way southbound to two-way operations between L Street and Capital Avenue.
- Addition of a third right-turn lane southbound on 3rd Street at the P Street intersection during the p.m. peak hour (by prohibiting parking).

For a list of development projects included, refer to the Baseline Conditions section of this chapter.

In addition, the LRT line to the existing Amtrak Depot would have the following characteristics in the project area:

- Extension of a northbound single track in mixed flow in the left lane along 8th Street from K Street to H Street. This project was implemented during the preparation of this traffic study
- Extension of a southbound single track in mixed flow in the left lane along 7th Street from H Street to K Street. This project was implemented during the preparation of this traffic study.

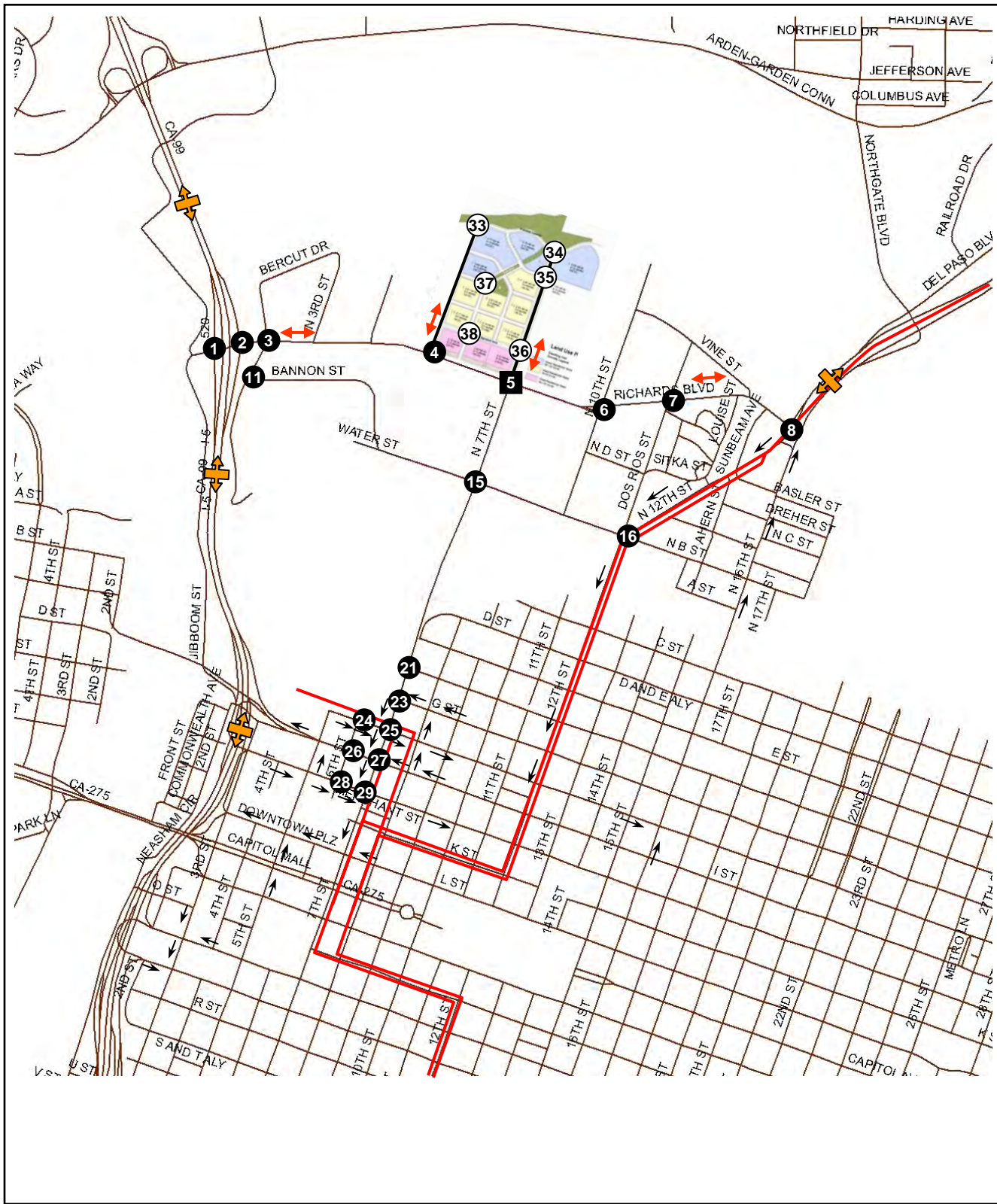


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Township 9 Traffic Study



Figure 6.11-5
ROADWAY NETWORK
BASELINE CONDITIONS



Dowling Associates, Inc.
 Township 9 Traffic Study



Figure 6.11-6
 ROADWAY NETWORK
 BASELINE PLUS PROJECT

- Extension of a single track on separate right-of-way serving westbound LRT travel on H Street from 8th Street to 7th Street and two directions of travel along a single track on separate right-of-way between 7th Street and the Depot. This project was implemented during the preparation of this traffic study
- A 15-minute headways was provided along the new Amtrak extension.

Near Term (2013) Transportation Systems

The transportation systems expected to be in place for 2013 near term conditions without the project and with the project are shown in Figures 6.11-7 and 6.11-8, respectively. The transportation system for near term conditions without the project includes projects that have funding allocated for implementation by 2013 in the MTP (Metropolitan Transportation Plan) and the Railyards Project transportation systems with mitigation measures in place. Land uses for 2013 conditions include those contained in the 2013 SACMET model and the Railyards Project.

Expansion of the roadway system for near term conditions includes the following modifications beyond those considered for baseline conditions:

- Expansion of the north ramps at the I-5/Richards Boulevard interchange to provide an additional southbound lane at the southbound ramp intersection with Richards Boulevard
- and an additional right-turn lane at the Richards Boulevard westbound approach to the intersection with the I-5 northbound ramps.
- Installation of a traffic signal at the 7th Street & F Street intersection to accommodate extension of the LRT line.

With the implementation of the Railyards Project located south of the proposed project site, according to the Railyard application submitted to the City of Sacramento in the year 2006 the following changes to the transportation system were assumed to occur for 2013 conditions:

- Expansion of 7th Street as a four-lane roadway from F Street to Richards Boulevard.
- Conversion of the one-way southbound section of 7th Street to two-way between G Street and H Street.
- Removal of the Jibboom Street connection to I Street.
- Construction of new and extended roadways including Canal Street, Big Four Boulevard, 5th Street, 6th Street and other connecting roads.

The Railyards Specific Plan, Sacramento Intermodal Transportation Facility and Project Level Area Development Specific Notice of Preparation (NOP) was issued March 10th, 2006. The proposal submitted to the city in the year of 2006 along with the NOP was analyzed and the initial traffic study is in progress and has already set a list mitigation measures that are needed and required to be implemented by the interim year 2013. These mitigation measures include the following:

- At the Richards Boulevard/I-5 SB off-ramp intersection, provide a southbound channelization to allow free right-turn movement; and optimize the signal timing.



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Township 9 Traffic Study



Figure 6.11-7
ROADWAY NETWORK
NEAR-TERM (2013) NO PROJECT



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Township 9 Traffic Study



**Figure 6.11-8
ROADWAY NETWORK
NEAR-TERM (2013) PLUS PROJECT**

- At the Richards Boulevard / I-5 NB on-ramp intersection, modify signal phasing to provide 38.5 seconds for the left and through movements and 57.8 seconds for the right-turn movement at I-5 northbound off-ramp, 49.5 seconds for the westbound movements, 62.2 seconds for the eastbound through and 32 seconds for the eastbound left-turn movements on Richards Boulevard.
- At the Richards Boulevard / Bercut Drive intersection, add one additional eastbound lane to provide one left-turn lane, two through lanes, and one left-turn lane; add a northbound lane to provide two left-turn lanes and one combination through-right lane; and optimize the signal timing.
- At the Dos Rios Street / Richard Boulevard intersection, modify the cycle length to 120 seconds during the PM peak hour and coordinate signal timing with adjacent intersections.
- At the Bercut Drive / Bannon Street intersection, install a traffic signal; add a southbound left-turn lane to provide one left-turn lane and one through lane; and optimize signal timing.
- At the 6th Street / North B Street intersection, add eastbound right-turn to provide one through lane and one right-turn lane; modify signal phasing to allow northbound right-turn overlap, change cycle length to 100 seconds and coordinate progression with adjacent intersections.
- At the 10th Street / North B Street intersection, install a traffic signal and add a southbound lane to provide one left-turn lane and one right-turn lane; and optimize signal timing.
- At the 16th Street / North B Street intersection, add an eastbound left-turn lane to provide two left-turn lanes and one combination left-through lane; remove one westbound lane west of the intersection; provide split phasing for east-west movements; and optimize signal timing.
- At the Bercut Drive / Big Four Boulevard intersection, modify p.m. peak hour signal phasing to provide 47 seconds phase time for the northbound and southbound movements on Bercut Drive, 22 seconds for the eastbound through and right-turn movements, 43.5 seconds for the westbound through and right-turn movements, 31 seconds for the westbound left and 9.5 seconds for the eastbound left-turn movement. Also change the southbound left-turn from protected to permitted phasing.
- At the 6th Street / Big Four Boulevard intersection, restripe the eastbound lanes to provide one right-turn lane, one combination right-through lane, one through lane, and one left-turn lane; restripe the westbound lanes to provide one right-turn lane, one through lane, one combination left-through lane and one left-turn lane; modify the signal phasing to provide split phasing on the eastbound and westbound approaches; and optimize signal timing.
- At the 7th Street / Big Four Boulevard intersection, modify signal phasing to provide 32.5 seconds of phase time for the eastbound movements, 21 seconds for northbound left-turn, 67.5 seconds for northbound through, and 46.5 seconds for the southbound movement.

- At the 7th Street / F Street intersection, add one northbound lane to provide one combination through-right lane and one combination left-through lane and optimize signal timing.
- At the 5th Street / G Street intersection, add one northbound left-turn lane and one northbound through lane to provide one right-turn lane, two through lanes and one left-turn lane; and optimize signal timing.
- At the 6th Street / G Street intersection, add one westbound left-turn lane to provide one right-turn lane, one through lane and one left-turn lane; and optimize signal timing.
- At the 7th Street / G Street intersection, add one northbound left-turn lane to provide one through lane and one left-turn lane; add one southbound right-turn lane to provide one right-turn lane and two through lanes; add one eastbound left-turn lane to provide one right-turn lane and one left lane; add one westbound through lane to provide one right-turn lane, two through lanes and one left lane and prohibit parking on westbound G Street; and optimize signal timing.
- At the 5th Street / H Street intersection, add one northbound through lane to provide one combination through-right lane and one combination left-through lane; add one southbound through lane to provide one combination through-right lane and one combination left-through lane; add one eastbound through lane to provide one combination through-right lane and one combination left-through lane; and optimize signal timing.
- At the 6th Street / H Street intersection, restripe southbound lanes to provide one left-turn lane and two through lanes; restripe eastbound lanes to provide one left-turn lane, one combination left-through lane, and one combination through-right lane; and optimize signal timing.
- At the 16th Street / H Street intersection, restripe eastbound lanes to provide two left-turn lanes and one through lane and optimize signal timing.
- At the 6th Street / I Street intersection, convert the combination left-through lane to an exclusive through lane to provide one left-turn lane and two through lanes; add one westbound through lane to provide one combination left-through lane, two through lanes and one combination through-right lane during the peak periods by prohibiting parking along the north side of I Street; and optimize signal timing.
- At the 7th Street / I Street intersection, modify signal phasing to provide 63 seconds phase time to the westbound I Street movements and 37 seconds to the southbound 7th Street movements during the PM peak hour.
- At the 3rd Street / J Street intersection, convert one southbound left-turn lane to a through lane to provide two through lanes and one left-turn lane; convert the eastbound combination through-right lane to an exclusive right-turn lane to provide one combination left-through lane, two through lanes, and one left-turn lane; and optimize signal timing.
- At the 6th Street / J Street intersection, modify the traffic signal phase splits during the a.m. (p.m.) peak periods by decreasing the phase time for the eastbound J Street approach to 71 (24) seconds and increase the northbound and southbound movements phase time to 29 (26) seconds.

- At the 7th Street / J Street intersection, add one eastbound right-turn lane to provide one right-turn, three through lanes during the peak periods by prohibiting parking along the south side of J Street; and optimize signal timing.
- At the 3rd Street / L Street intersection, convert one northbound through lane to a left-turn lane to provide one through lane and two left-turn lanes; convert southbound combination through-right lane to an exclusive right-turn lane to provide two through lanes and one right-turn lane; and optimize signal timing.
- At the 5th Street / Capitol Mall intersection, modify the traffic signal phase splits during the a.m. peak period by decreasing the phase time for the northbound 5th Street approach to 21.5 seconds and the westbound Capitol Mall approach to 20.5 seconds, and increase the eastbound through movement phase time to 48.5 seconds and the eastbound left-turn phase time to 28 seconds. During the p.m. peak period, modify the traffic signal phase splits by setting the westbound the northbound movements phase time to 22 seconds and increase the eastbound left-turn phase time to 26 seconds and eastbound through movement to 48 seconds. Also decrease the pedestrian walk time to 5 seconds for all approaches while increase the flash don't walk time to 12 seconds on the westbound and northbound approaches and 15 seconds on the eastbound approach.

A LRT extension from H Street to Richards Boulevard was considered to be in place for 2013 and with the following characteristics:

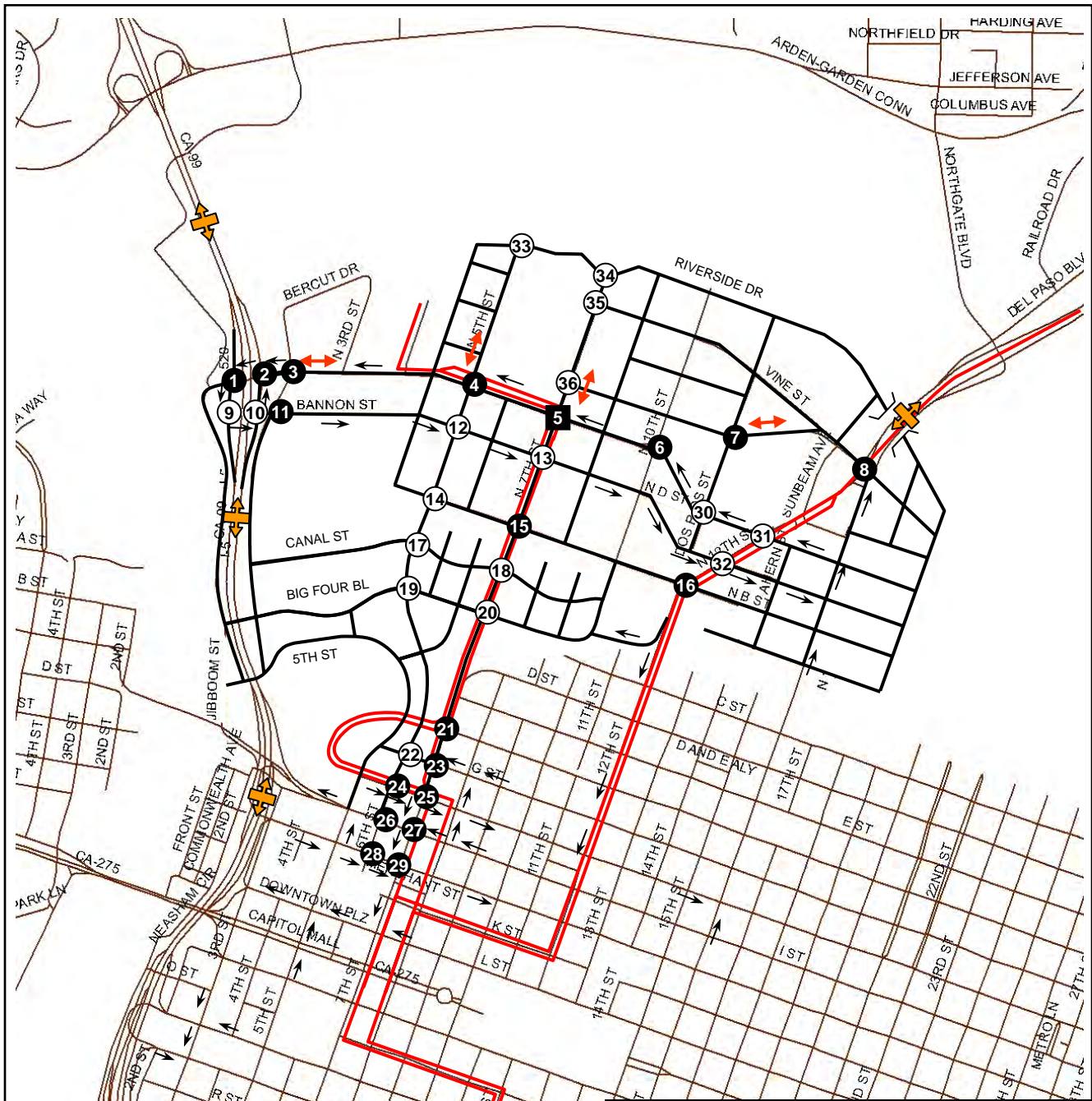
- A single track would head north on an exclusive alignment west of 7th Street from H Street to F Street, where the tracks would cross the intersection under signal control and become a dual track mixed use line. The alignment would continue to the north to the Richards LRT station, where the tracks would end east of 5th Street.
- The LRT line to the existing depot and the 7th Street line north of H Street would each be served at 30 minute headways. No LRT service would be provided between the existing depot and the N. 7th Street line.

Long-Term (Year 2030) Transportation Systems

The transportation systems expected to be in place for 2030 long term conditions without the project and with the project are shown in Figures 6.11-9 and Figure 6.11-10, respectively. The transportation system for long term conditions without the project includes projects specified in the Facility Element of the Richards Boulevard Area Plan that have funding allocated for implementation by 2030 and the Railyards Program transportation systems with mitigation measures in place. Land uses included those contained in the 2027 SACMET model and the Railyards Programmatic Plan Area.

Expansion of the roadway system for 2030 conditions includes the following modifications beyond those considered for near term conditions:

- Creation of a one-way street pair with Richards Boulevard heading westbound and Bannon Street heading eastbound between I-5 and 16th Street.
- Development of a split-diamond interchange at I-5 and the Richards Boulevard/Bannon Street one-way pair.



KEY

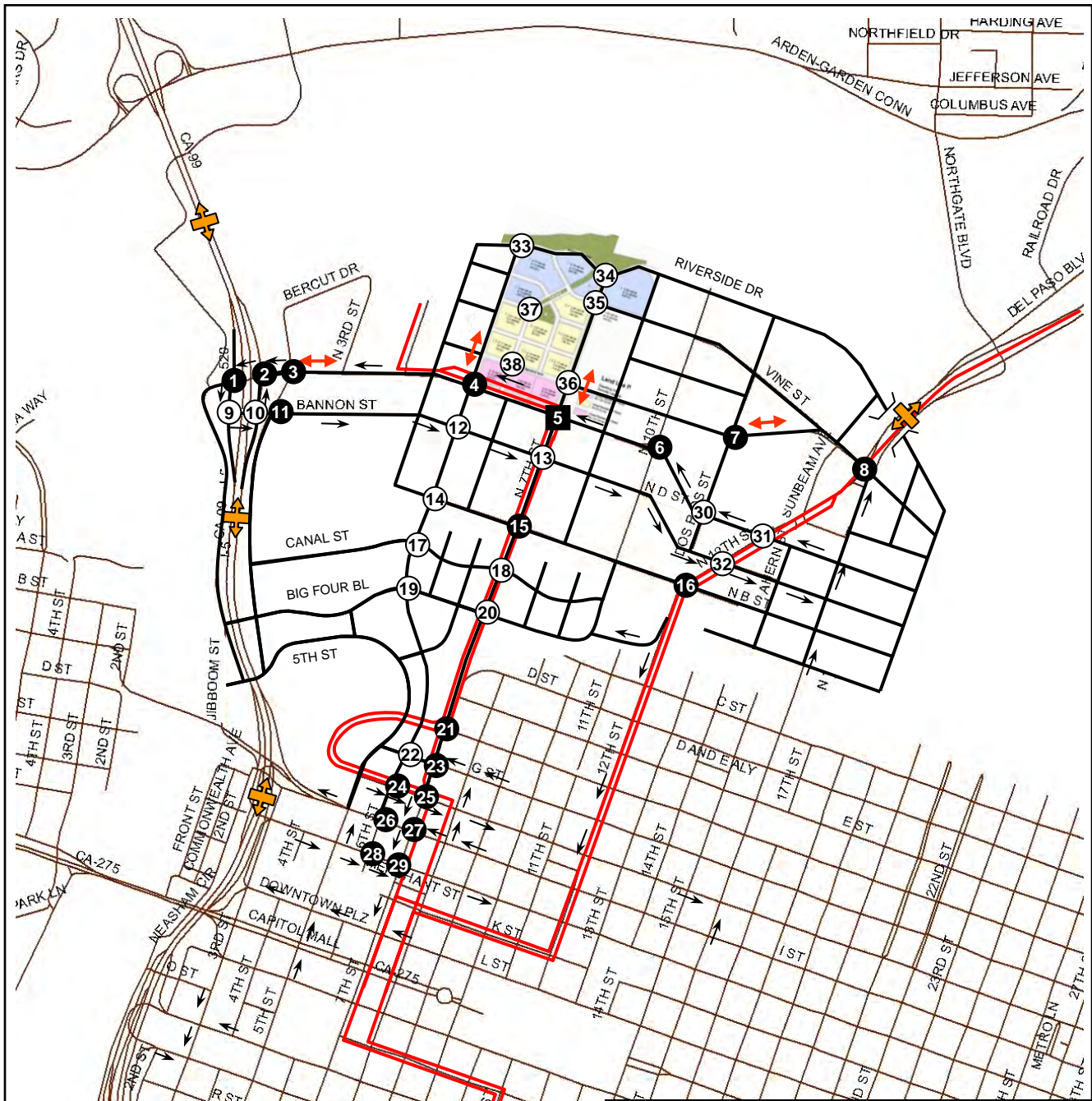
- 11 = Existing study intersection
- 5 = Existing study intersection (VISSIM analysis)
- 18 = Proposed intersection
- ↔ = Study street segment
- + = Freeway study area
- = Light rail track

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**Figure 6.11-9
ROADWAY NETWORK
LONG-TERM (2030) NO PROJECT**



KEY

- 11 = Existing study intersection
- 5 = Existing study intersection (VISSIM analysis)
- 18 = Proposed intersection
- ↔ = Study street segment
- + = Freeway study area
- = Light rail track

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Figure 6.11-10
ROADWAY NETWORK
LONG-TERM (2030) PLUS PROJECT

- Connection of North B Street to Richards Boulevard along the west end.
- Conversion of 12th Street to two-way operations between North B Street and the existing Richards Boulevard intersection.
- Conversion of the existing Richards Boulevard & 12th Street intersection to right-in-right-out access to Vine Street (formerly Richards Boulevard).
- Conversion of the existing Sunbeam/Sproule Avenue & 12th Street intersection to right-in-right-out access to Sunbeam Avenue and Sproule Avenue.
- Expansion of the roadway system in the Richards Boulevard Area to provide a grid network with a connection across SR 160 south of the American River.
- Expansion of the SR 160 Bridge across the American River to four lanes in each direction.
- Elimination of the Dos Rios Street connection to North B Street at 20th Street.
- Implementation of the Westside Access Improvements described as Alternative 2 in the Feasibility Study: West Side Access to the Sacramento Depot (David Evans and Associates, Inc. 2005).
- Construction of new and extended roadways in addition to those described under Near Term transportation system including Canal Road, Big Four Boulevard, and other local streets south of North B Street.

The Railyards Specific Plan, Sacramento Intermodal Transportation Facility and Project Level Area Development Notice of Preparation (NOP) was issued March 10th, 2006. The proposal submitted to the city in the year of 2006 along with the NOP was analyzed and the initial traffic study is in progress and has already set a list mitigation measures that are needed and required to be implemented by 2030. These mitigation measures include the following:

- At the Richards Boulevard / I-5 SB off-ramp intersection, restripe the westbound approach to provide two left-turn lanes and two thru lanes and optimize the signal timing.
- At the Richards Boulevard / I-5 NB on-ramp intersection, add one additional northbound through lane to provide two through lanes and one left-turn lane and optimize the signal timing.
- At the Richards Boulevard / Bercut Drive intersection, add one additional northbound left-turn lane to provide two left-turn lanes and one through lane and optimize the signal timing.
- At the N 5th Street / Richards Boulevard intersection, change the signal cycle length to 100 seconds and coordinate signals with adjacent intersections.
- At the 10th Street and Richards Boulevard intersections, change the signal cycle length to 100 seconds and coordinate signals with adjacent intersections.
- At the I-5 Southbound on-ramp / Bannon Street intersection, restripe the southbound approach to provide three left-turn lanes and two through lanes; provide eastbound right-turn channelization to allow a free right-turn movement; add one additional eastbound through lane to provide two through lanes and one channelized right-turn lane; and optimize signal timing.

- At the I-5 Northbound off-ramp / Bannon Street intersection, add one additional northbound right-turn lane and provide channelization to result in three right-lane lanes and one through lane; add two additional eastbound through lanes to provide five through lanes and one left-turn lane; and optimize signal timing.
- At the Bercut Drive / Bannon Street intersection, add one northbound through lane to provide one through lane and one combination through-right lane; add one additional southbound left-turn lane to provide two left-turn lanes and one through lane; add one exclusive eastbound right-turn lane to provide one right-turn lane, four through lanes and one left-turn lane; and optimize signal timing.
- At the 5th Street / Bannon Street intersection, add one northbound right-turn lane and optimize signal timing.
- At the 7th Street / Bannon Street intersection, provide right-turn channelization on the northbound approach to allow a free right-turn movement; restripe the eastbound approach to provide one exclusive right-turn lane, three through lanes and one left-turn lane; and optimize signal timing.
- At the 12th Street / Bannon Street intersection, add two southbound through lanes to provide five through lanes and two left-turn lanes and optimize signal timing.
- At the 7th Street / North B Street intersection, add one northbound right-turn lane to provide one right-turn lane, two through lanes and one left-turn lane; add one westbound left-turn lane to provide one right-turn lane, two through lanes and two left-turn lanes; and optimize signal timing.
- At the 10th Street / North B Street intersection, add an eastbound left-turn lane to provide one left-turn lane, two through lanes and one right-turn lane; and optimize signal timing.
- At the 12th Street / North B Street intersection, add one southbound through lanes to provide one right-turn lane, four through lanes and one combination left-through lane; add two additional eastbound left-turn lanes and one eastbound right-turn lane to provide one right-turn lane, two through lanes, and three left-turn lanes; add one westbound through lane to provide one combination right-through lane, one through lane and one right-turn lane; and optimize signal timing.
- At the 6th Street / Canal Street intersection, add an eastbound right-turn lane to provide one left-turn lane, one through lane and one right-turn lane; and optimize signal timing.
- At the Bercut Drive / Big Four Boulevard intersection, restripe the southbound lanes to provide one combination right-through-left lane and one left-turn lane; modify the signal phasing to provide split phase on the southbound approach; and optimize signal timing.
- At the 7th Street / Big Four Boulevard intersection, add one northbound right-turn lane to provide one right-turn lane, two through lanes, and one left-turn lane; add one southbound right-turn to provide one combination right-through lane, one through lane and one left-turn lane; and optimize signal timing.
- At the 3rd Street / I Street intersection, modify the traffic signal phase splits during the a.m. (p.m.) peak period by providing 53 (63.5) seconds to westbound movements, 47 (36.5) seconds to the northbound through movement, 36 (25) seconds to northbound left-turn and eastbound right-turn movements; and 11 (11.5) seconds to the southbound through movement; provide split phase for westbound movements and right-turn overlap for the eastbound approach.

- At the 5th Street / J Street intersection, convert the combination left-through lane to an exclusive left-turn lane to provide one right-turn, three through lanes and two left-turn lanes; and optimize signal timing.
- At the 3rd Street / P Street intersection, add a southbound right-turn lane to provide one through lane, one combination through-right lane and two left-turn lanes during the peak periods by prohibiting parking along the west side of 3rd Street; and optimize signal timing. Also, during the p.m. peak period, increase the cycle length to 100 seconds.
- At the 12th Street / Richards Boulevard intersection, add one westbound left-turn lane to provide two left-turn lanes, two through lanes and one right-turn lane; add one southbound lane to provide five through lanes and one right-turn lane.

In addition, the Downtown/Natomas/Airport (DNA) light rail line is assumed to be in place and would have the following characteristics in the proposed project area, these assumptions are based on the November 15, 2006 Draft Environmental Report (Downtown/Natomas/Airport Draft Environmental Statement/Report, November 15th, 2006):

- The DNA LRT line will be extended through the Sacramento Intermodal Transportation Facility on a dual-track alignment that would extend north to Richards Boulevard and cross the American River on a single track.
- 15-minute headways would be provided along N. 7th Street.

Methods of Analysis

Trip Generation

Trip generation for the proposed project scenarios is based upon information compiled by the Institute of Transportation Engineers (*Trip Generation, Seventh Edition, 2003* and *Trip Generation Handbook, 2004*). Table 6.11-10 shows the number of trips that would be generated by the proposed project scenarios. In summary, Scenario A has the potential to generate about 22,603 new external trips on an average day. Of the external trips, approximately 1,503 external trips would occur during the weekday morning peak hour and 2,009 external trips during the weekday evening peak hour. Scenario B has the potential to generate about 26,140 new external trips on an average day of which 2,327 would occur during the morning peak hour and 2,746 during the evening peak hour.

The proposed project area was subdivided into seventeen (17) zones for the purposes of developing trip generation estimates and assigning project trips to the roadways as shown in Figure 6.11-11. Zone 2 and 9 were identified as open space and was assumed not to generate automobile traffic in the a.m. and p.m. peak hour periods.

The external trips were derived by adjusting the Institute of Transportation Engineers (ITE) trip generation estimates. ITE trip generation estimates are based on empirical data collected at *suburban* locations throughout the United States. Because of the availability of existing and future bus and light rail services and the mix-used nature of the project, adjustments to the ITE trip generation estimates were made to account for higher transit ridership and the interaction of land uses within the proposed project. Adjustments for the higher use of transit were based on information contained in the *Pre-Census Travel Behavior Report: Analysis of the 2000 SACOG Household Travel Survey* (DKS, 2001).

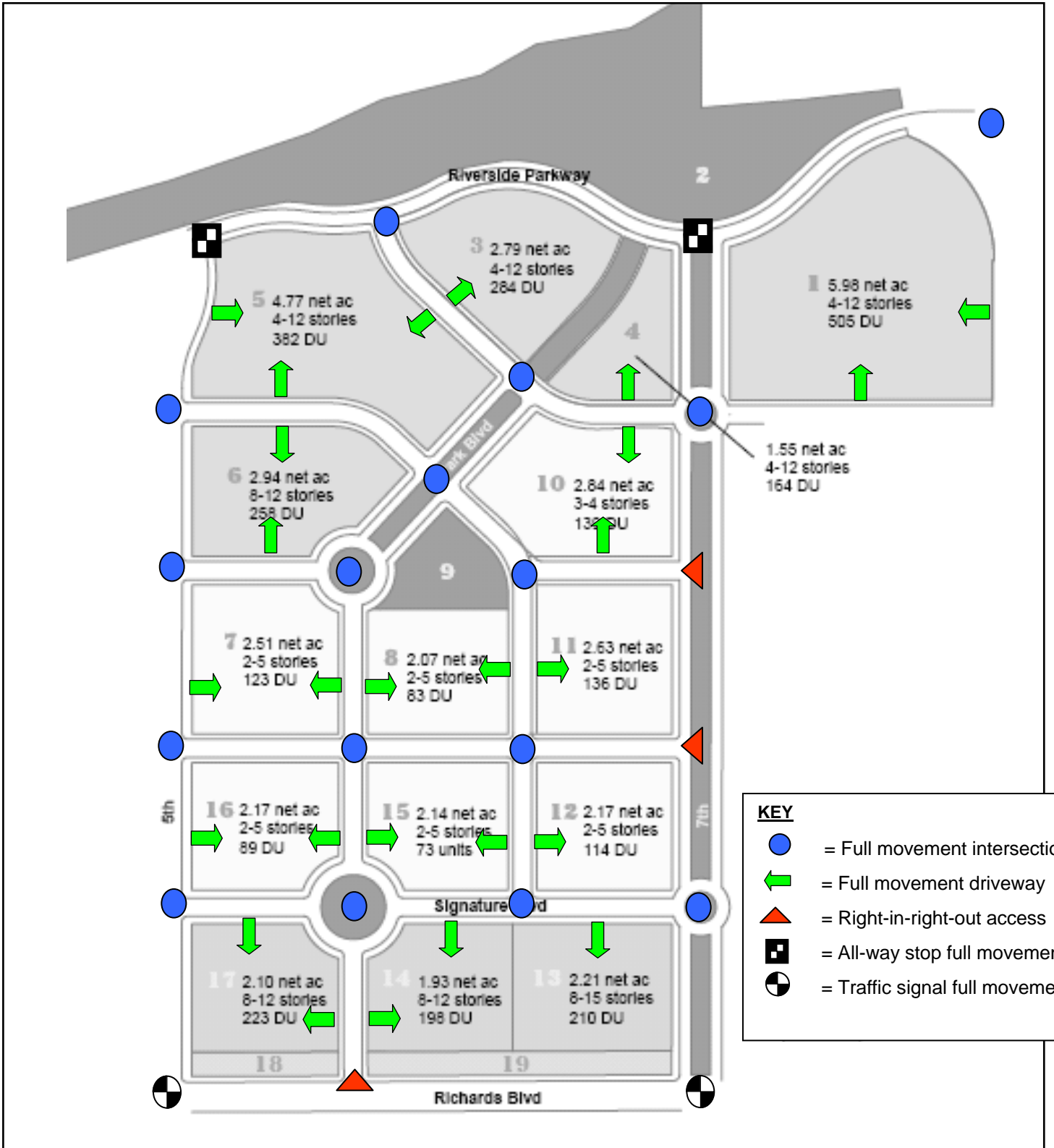


Figure 6.11-11
 Project Zones & Access Points

TABLE 6.11-10

TRIP GENERATION

Land Use	Amount		Trips Generated						
			Weekday	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Scenario A: Residential									
Retail	116	KSF	7,487	104	67	171	332	359	691
Restaurant (High-Turnover Sit Down)	30	KSF	3,815	180	166	346	200	128	328
Residential Condominium/Townhouse ¹	463	Units	2,362	30	146	176	141	70	211
Highrise Condominium/Townhouse ²	1,418	Units	5,570	84	356	440	309	189	498
Live/Work ⁵	16	Units	120	4	8	12	5	5	10
Highrise Apartment ³	355	Units	1,594	27	80	107	77	49	126
Apartment ⁴	729	Units	4,532	72	289	361	272	147	419
Total Project Trips			25,480	501	1,112	1,613	1,336	947	2,283
Transit Adjustments									
Retail (-1.8%)			-135	-2	-1	-3	-6	-6	-12
Restaurant (-1.8%)			-69	-3	-3	-6	-4	-2	-6
Residential (Daily -3.1%, a.m. -3.7%, p.m. -3.6%)									
Residential Condominium/Townhouse			-73	-1	-5	-7	-5	-3	-8
Highrise Condominium/Townhouse			-173	-3	-13	-16	-11	-7	-18
Live/Work			-4	0	0	0	0	0	0
Highrise Apartment			-49	-1	-3	-4	-3	-2	-5
Apartment			-140	-3	-11	-13	-10	-5	-15
Total Transit Adjustments			-643	-13	-36	-49	-39	-25	-64
Internal Trips			-2,234	-30	-30	-61	-105	-105	-210
New External Trips			22,603	458	1,046	1,503	1,192	817	2,009
Transit Trips									
Retail (2.2%)			249	6	5	11	12	11	22
Residential (Daily 4.3%, a.m. 4.8%, p.m. 4.9%)			610	11	43	53	39	23	62
Total Transit Trips			859	17	48	64	51	34	84
Scenario B: Office									
Retail	116	KSF	7,487	104	67	171	332	359	691
Restaurant (High-Turnover Sit Down)	30	KSF	3,815	180	166	346	200	128	328
Residential Condominium/Townhouse ¹	462	KSF	2,357	30	146	176	141	70	211
Highrise Condominium/Townhouse ²	1,038	Units	4,137	63	267	330	228	140	368
Live/Work ⁵	16	Units	120	4	8	12	5	5	10
Highrise Apartment ³	103	Units	571	8	23	31	27	18	45
Apartment ⁴	731	Units	4,544	72	290	362	273	147	420
Office	840	KSF	6,866	906	123	1,029	173	846	1,019
Total Project Trips			29,897	1,367	1,090	2,457	1,379	1,713	3,092
Transit Adjustments									
Retail (-1.8%)			-135	-2	-1	-3	-6	-6	-12
Restaurant (-1.8%)			-69	-3	-3	-6	-4	-2	-6
Residential (Daily -3.1%, a.m. -3.7%, p.m. -3.6%)									
Residential Condominium/Townhouse			-73	-1	-5	-7	-5	-3	-8
Highrise Condominium/Townhouse			-128	-2	-10	-12	-8	-5	-13
Live/Work			-4	0	0	0	0	0	0
Highrise Apartment			-18	0	-1	-1	-1	-1	-2
Apartment			-141	-3	-11	-13	-10	-5	-15
Office (-5.6%)			-384	-51	-7	-58	-10	-48	-57
Total Transit Adjustments			-568	-11	-31	-42	-34	-22	-56
Internal Trips			-3,189	-44	-44	-88	-145	-145	-290
New External Trips			26,140	1,312	1,015	2,327	1,200	1,546	2,746

TABLE 6.11-10

TRIP GENERATION

Land Use	Amount	Trips Generated							
		Weekday	AM Peak Hour			PM Peak Hour			
			In	Out	Total	In	Out	Total	
Transit Trips									
Retail (2.2%)		249	6	5	11	12	11	22	
Office (6.8%)		467	62	8	70	12	57	69	
Residential (Daily 4.3%, a.m. 4.8%, p.m. 4.9%)		504	9	36	44	33	19	52	
Total Transit Trips		1,220	77	49	125	57	87	143	
Notes:									
¹ Residential Condominium/Townhouse (ITE 230) trip generation rates are used for Zone 7,8,11,12,15, and 16.									
² Highrise Condominium/Townhouse (ITE 232) trip generation rates are used for Zone 1,3,4,5,6,10,13,14, and 17.									
³ Highrise Apartment (ITE 222) trip generation rates are used for Zone 6,13,14, and 17.									
⁴ Apartment (ITE 230) trip generation rates are used for Zone 1,3,4,5,7,8,10,11,12,15, and 16.									
⁵ Live/Work trip generation rates are derived from field survey conducted by Dowling Associates at live/work developments in Oakland and Emeryville, CA									
Source: Dowling Associates, Inc. 2006									

After the adjustments were made for transit, an adjustment was made to account for internal trips between different types of land uses within the project site. The internal trip adjustments were performed using procedures recommended by the Institute of Transportation Engineers for multi-use developments (*Trip Generation Handbook*). Internal trips are trips that would occur between different land uses on the same site without accessing the external street system.

No pass-by trips were assumed for retail uses due to the project's somewhat isolated location. Nonetheless, this assumption may lean towards conservative as vehicles on Richards Boulevard may be attracted to the site. Details of the adjustments made to the ITE trip generation estimates are provided in Appendix N.

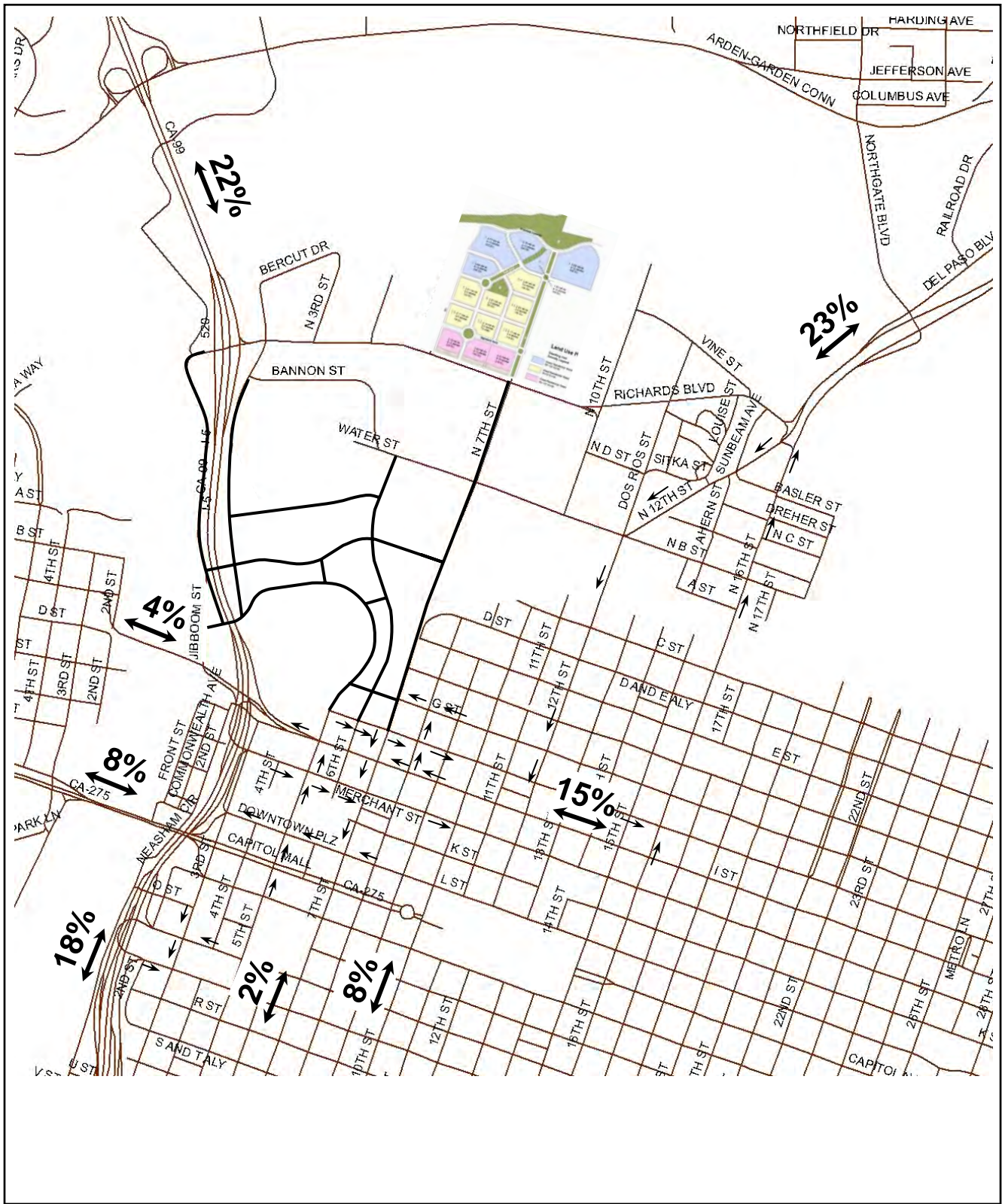
Trip Distribution

The distribution of trips associated with the project site was derived from the SACMET 2027 travel demand model, observations of travel patterns near the site, and knowledge of the proposed access locations associated with the project. From a selected zone assignment of traffic, the distribution of inbound and outbound trips was estimated. Figure 6.11-12 shows the estimated trip distribution percentages for the project. Assigned traffic volumes are shown in Appendix N.

Standards of Significance

In accordance with CEQA, the effects of a project are evaluated to determine if they will result in a significant adverse impact on the environment. For the purposes of this analysis, an impact is considered significant if the proposed project would have the effects described below.

The standards of significance in this analysis are based upon the current practice of the appropriate regulatory agencies. For most areas related to transportation and circulation, the standards of the City of Sacramento have been used. For traffic flow on the freeway system and associated interchanges, the standards of Caltrans have been used.



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Figure 6.11-12
TRIP DISTRIBUTION

Intersections

According to City of Sacramento Traffic Impact Guidelines, a significant traffic impact occurs at a signalized or unsignalized intersection (except for freeway ramp/arterial intersections within North Natomas) when:

- The traffic generated by the project degrades peak period level of service (LOS) from A, B, or C (without the project) to D, E, or F (with the project); or,
- The level of service (without project) is D, E, or F and project generated traffic increases the average vehicle delay by 5 seconds or more.

These standards have been developed consistent with a goal set forth in the City of Sacramento, General Plan Update (1988). Specifically, Section 5-11 – Goal D, states to “Work towards achieving a Level of Service C on the City’s local and major street system.”

Street Segments

According to City of Sacramento Traffic Impact Guidelines, a significant traffic impact occurs at a roadway segment when:

- The traffic generated by the project degrades peak period level of service (LOS) from A, B, or C (without the project) to D, E, or F (with the project); or,
- The level of service (without project) is D, E, or F and project generated traffic increases the volume/capacity ratio by 0.02 or more.

Freeway Ramps and Mainline

Caltrans considers the following to be significant impacts:

- Off-ramps with vehicle queues that extend into the ramp’s deceleration area or onto the freeway.
- Project traffic increases that cause any ramp’s merge / diverge level of service to be worse than the freeway’s level of service.
- Project traffic increases that cause the freeway level of service to deteriorate beyond level of service “E.”
- The expected queue at a ramp is greater than the storage capacity.

Transit System

For the purposes of this analysis and according to the City of Sacramento Traffic Impact Guidelines, impacts to the transit system are considered significant if the proposed project would:

- Increase ridership, when added to the existing or future ridership, would exceed available or planned system capacity. Capacity is defined as the total number of passengers the system of buses and light rail vehicles can carry during the peak hours of operations.

Bikeways

For the purposes of this analysis and according to the City of Sacramento Traffic Impact Guidelines, impacts to bikeways are considered significant if the proposed project would:

- Hinder or eliminate an existing designated bikeway, or interfered with implementation of a proposed bikeway; or
- Result in unsafe conditions for bicyclists, including unsafe bicycle/pedestrian or bicycle/motor vehicle conflicts.

Pedestrian Circulation

For the purposes of this analysis and according to the City of Sacramento Traffic Impact Guidelines, impacts to pedestrian circulation are considered significant if the proposed project would:

- Result in unsafe conditions or create a hindrance for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle access.

Traffic Circulation and Safety

For the purposes of this analysis and according to the City of Sacramento Traffic Impact Guidelines, impacts to traffic circulation and safety are considered significant if the proposed project would:

- Not comply with City design standards or normal traffic engineering practices.

Parking

For the purposes of this analysis and according to the City of Sacramento Traffic Impact Guidelines, impacts to parking are considered significant if the proposed project would:

- Result in parking demand that exceeds the available or planned parking supply. However, the impact would not be significant if the project is consistent with the parking requirements stipulated in the City Code.

BASELINE CONDITIONS

The analysis of baseline conditions considers the potential traffic impacts of the proposed project in the context of other projects in the study vicinity that have already been approved. The following is a list of projects that have been approved and may potentially affect traffic conditions:

- Crocker Art Museum Expansion
- 301 Capitol Mall
- 601 Capitol Mall
- Metro Place Office / Residential
- 15th & L Street Hotel
- CalPERS Headquarters Expansion

- Sutter Medical Center and the Trinity Cathedral
- CADA East End Gateway Residential
- Capitol West Side Projects
- Discovery Center
- Continental Plaza

Full development of the proposed project is assumed to occur “instantaneously.” Therefore, traffic volumes generated by the proposed project were added to the baseline traffic volumes based on the described trip generation and distribution procedures. The resulting traffic volumes were used to analyze intersection and freeway levels of service. Traffic volumes for baseline conditions are shown in Appendix N.

Baseline Conditions Impacts and Mitigation Measures

6.11-1 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate. This is considered a significant impact.

The intersection operations under baseline conditions are summarized in Table 6.11-11 and Table 6.11-12. The detailed worksheets for intersection level of service and queuing are provided in Appendix N. A number of intersections would operate at substandard levels. The intersections that would be significantly impacted by the proposed project under Scenario A and Scenario B are listed below:

- a) I-5 Southbound Ramps / Richards Boulevard (AM and PM peak hours)
- b) I-5 Northbound Ramps / Richards Boulevard (AM and PM peak hours)
- c) Bercut Drive / Richards Boulevard (AM peak hour)
- d) N. 5th Street / Richards Boulevard (AM peak hour – Scenario B only, PM peak hour – both scenarios)
- e) N. 7th Street / Richards Boulevard (AM and PM peak hours)
- f) Dos Rios Street / North F Street (PM peak hour)
- g) 12th/16th Street / Richards Boulevard (AM and PM peak hours)
- h) 7th Street / North B Street (AM and PM peak hours)
- i) 12th Street / North B Street (AM peak hour)
- j) 7th Street / F Street (PM peak hour)
- k) 7th Street / G Street (PM peak hour)
- l) 7th Street / Signature Street (PM peak hour)

TABLE 6.11-11

INTERSECTION LEVELS OF SERVICE – BASELINE CONDITIONS

Intersection	Traffic Control	Peak Hour	No Project		Scenario A: Residential		Scenario B: Office		Mitigated			
			LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	Scenario A: Residential		Scenario B: Office	
				V/C ³		V/C ³		V/C ³	V/C ³	LOS ¹	Delay ²	LOS ¹
1. I-5 SB Ramps & Richards Blvd	Signal	AM	F	276.2	F	307.9	F	403.6	E	56.4	E	77.9
		PM	D	43.2	F	115.1	F	148.1	D	37.8	D	49.5
2. I-5 NB Ramps & Richards Blvd	Signal	AM	E	78	F	91	F	134.4	E	57.4	F	104.1
		PM	F	154.9	F	199.7	F	177.8	D	40.4	D	43.2
3. Bercut Dr & Richards Blvd	Signal	AM	C	24.8	D	40.8	F	85.2	C	24	A	8.1
		PM	B	17.7	B	18.4	C	21.4	B	18.2	C	20.4
4. N 5th Street & Richards Blvd	Signal	AM	B	12.4	B	19.8	D	42.2	B	13.2	C	21.0
		PM	B	16.6	F	103.8	F	133.2	C	24.9	E	84.9
5. N 7th Street & Richards Blvd	Signal	AM	E	69.9	F	177.5	F	221.9	F	130.7	F	167.1
		PM	F	127.3	F	293.2	F	383	F	141.8	F	185.5
6. N 10th Street & Richards Blvd	Signal	AM	B	15.1	B	14.7	B	15.4	B	13.3	B	13.6
		PM	B	11.9	B	12.3	B	12.7	B	14.1	B	16.7
7. Dos Rios St & Richards Blvd	Signal	AM	B	16.2	B	18.3	C	20.8	B	15.1	B	17.4
		PM	C	22.9	D	38.3	E	61.6	B	15.2	C	20.4
8. 12th/N 16th St/ Richards Blvd	Signal	AM	F	80.6	F	107.5	F	126.4	F	107.2	F	126.2
		PM	F	181.2	F	212.6	F	248.7	F	204.2	F	240.5
11. Bercut Dr & Bannon Street	Stop Sign	AM	A	0.1	A	0.1	A	0.1	A	0.1	A	0.1
		PM	A	0.8	A	0.8	A	0.8	A	0.8	A	0.8
15. N 7th Street & North B Street	Stop Sign	AM	D	25.3	F	105.3	F	135.2	B	16	B	19.1
		PM	F	72.5	F	202.3	F	241.7	C	26.2	C	31.1
16. 12th Street & North B Street	Signal	AM	C	34	D	39	E	55.1	D	40.1	E	56.3
		PM	C	23.5	C	27.4	C	28.9	C	27.2	C	28.7
21. 7th Street & F Street	Stop Sign	AM	A	5.6	A	6	A	6.6	B	10.7	A	6
		PM	B	11.4	D	30	E	43.2	B	13.1	B	15.1
23. 7th Street & G Street	Signal	AM	B	14.2	C	25	C	26.2	B	19.5	A	9.7
		PM	B	17.6	D	48.5	F	89.6	A	8.5	B	12.8
24. 6th Street & H Street	Signal	AM	A	3.3	A	3.1	A	3.1	A	3.3	A	3.3
		PM	B	11.6	B	11.5	B	11.4	B	11.6	B	11.7
25. 7th Street & H Street	Signal	AM	B	13.9	B	13.9	B	13.9	A	7.9	A	8.1
		PM	B	10.5	B	10.8	B	10.6	A	7.8	A	7.3
26. 6th Street & I Street	Signal	AM	B	13.5	B	15	B	15	B	15.2	B	15.2
		PM	C	28.4	C	29.2	C	29.7	C	25	C	24.7

TABLE 6.11-11

INTERSECTION LEVELS OF SERVICE – BASELINE CONDITIONS

Mitigated																
Intersection	Traffic Control	Peak Hour	No Project		Scenario A: Residential		Scenario B: Office		Scenario A: Residential		Scenario B: Office					
			LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³				
27. 7th Street & I Street	Signal	AM	A	6.6	A	5.9	A	5.9	A	9.4	A	9.6				
		PM	B	17.5	B	18.8	B	19.9	B	18.5	C	21				
28. 6th Street & J Street	Signal	AM	B	10.8	B	10.8	B	10.8	B	10.8	B	10.8				
		PM	B	17.2	B	17.2	B	17.2	A	8.9	A	9.4				
29. 7th Street & J Street	Signal	AM	A	8.9	A	9.7	A	9.7	B	11.6	B	11.5				
		PM	A	9.6	B	10	A	9.1	A	7.2	A	7.9				
33. 5th Street & Riverfront Drive	Stop	AM	N/A	N/A	A	7.7	A	7.7	A	7.7	A	7.7				
		PM	N/A	N/A	A	8.1	A	8	A	8.1	A	8				
34. 7th Street & Riverfront Drive	Stop	AM	N/A	N/A	A	7.3	A	7.3	A	7.3	A	7.3				
		PM	N/A	N/A	A	8.1	A	8	A	8.1	A	8				
35. 7th Street & New Street "A"	Stop (No Project)/	AM	A	1.6	See Table 6.11-11				See Table 6.11-12							
	Roundabout (Project)	PM	B	10.1												
36. Signature Street & 7th Street	Stop (No Project)/	AM	A	1.5					See Table 6.11-11				B	15.6	C	20.4
	Roundabout (Project)/ Signal (Mitigation)	PM	E	42.2									D	40.1	D	46.7

Note:
 1 LOS = Level of Service
 2 Delay = delay in seconds
 3 V/C = volume/capacity ratio – for roundabout

TABLE 6.11-12

BASELINE WITH PROPOSED PROJECT

Baseline with Scenario A: Residential

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.52	Yes	0.21	Yes	0.00	Yes	0.12	Yes	0.00	Yes	0.13	Yes	0.48	Yes	0.39	Yes
	PM	0.39	Yes	0.53	Yes	0.00	Yes	0.11	Yes								
36. Signature Street & 7th Street	AM	0.50	Yes	0.11	Yes	0.42	Yes	0.24	Yes	0.45	Yes	0.16	Yes	0.51	Yes	0.35	Yes
	PM	0.34	Yes	0.57	Yes	0.92	NO	0.35	Yes								
37. New Street "C" & New Street "B"	AM	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.05	Yes	0.04	Yes	0.01	Yes	0.05	Yes	0.07	Yes	0.00	Yes	0.07	Yes	0.06	Yes
	PM	0.08	Yes	0.04	Yes	0.01	Yes	0.11	Yes								

Baseline with Scenario B: Office

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.54	Yes	0.22	Yes	0.00	Yes	0.12	Yes	0.00	Yes	0.13	Yes	0.50	Yes	0.40	Yes
	PM	0.40	Yes	0.54	Yes	0.00	Yes	0.11	Yes								
36. Signature Street & 7th Street	AM	0.59	Yes	0.13	Yes	0.49	Yes	0.19	Yes	0.46	Yes	0.21	Yes	0.65	Yes	0.35	Yes
	PM	0.34	Yes	0.57	Yes	0.95	NO	1.08	NO								
37. New Street "C" & New Street "B"	AM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.05	Yes	0.04	Yes	0.01	Yes	0.20	Yes	0.07	Yes	0.00	Yes	0.13	Yes	0.14	Yes
	PM	0.18	Yes	0.09	Yes	0.01	Yes	0.11	Yes								

7th Street & Signature

At the 7th Street/Signature Street intersection, the proposed one-lane roundabout would result in a significant impact due to insufficient capacity. However, even with added capacity (i.e. a two-lane roundabout), the southbound vehicle queue at the 7th Street and Richards Boulevard intersection would exceed the storage capacity of 7th Street between Richards Boulevard and the roundabout. A vehicle queue that would extend into the roundabout would result in blockage of traffic heading north on 7th Street and produce vehicle queues that in turn would block the 7th Street and Richards Boulevard intersection. Therefore, the use of roundabout at this location is not recommended and replace it with a traffic signal will be more appropriate from traffic operation point of view. For more details, please see Mitigation Measure 6.11-1i below.

Mitigation Measures (Baseline Plus Project)

- 6.11-1 a) *At the I-5 southbound ramps / Richards Boulevard intersection, under both Scenario A and Scenario B, the City shall install, or cause to be installed, one southbound left-turn lane to provide two left-turn lanes and one combination through-right lane; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.*

The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.

*With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS E (56.4 seconds delay) in the a.m. peak hour and LOS D (37.8 seconds delay) in the p.m. peak hour; thus reducing the impact to a **less-than-significant level**; the level of service under Scenario B would be reduced to LOS E (77.9 seconds delay) in the a.m. peak hour and LOS D (49.5 seconds delay) in the p.m. peak hour; thus reducing the impact to a **less-than-significant level** in the a.m. peak hour but the impact in the p.m. peak hour would remain **significant and unavoidable**. To fully mitigate the impact would require widening of the freeway ramp to provide an additional lane to the west. However, the freeway ramp is not under the jurisdiction of the City but is subject to Caltrans' jurisdiction. In addition, to implement this mitigation measure would require acquisition of additional right of way for a new lane to the west. Finally, this improvement is not included in any of Caltrans' funding mechanisms. Because this mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is not an established funding mechanism available for contribution, this mitigation measure is considered infeasible and the*

impact is considered **significant and unavoidable**. These results are shown in Table 6.11-13.

- b) At the I-5 northbound ramps / Richards Boulevard intersection, under both Scenario A and Scenario B, the City shall install, or cause to be installed, one westbound right-turn lane to provide two right-turn lanes and two through lanes; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.

The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.

With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS E (57.4 seconds delay) in the a.m. peak hour and LOS D (40.4 seconds delay) in the p.m. peak hour, thus reducing the impact to a **less-than-significant level**; the level of service under Scenario B would be reduced to LOS F (104.1 seconds delay) in the a.m. peak hour and LOS D (43.2 seconds delay) in the p.m. peak hour, thus the impact is less than significant in the p.m. peak hour but remains **significant and unavoidable** in the a.m. peak hour. To fully mitigate the impact would require widening of the freeway ramp to provide an additional lane to the east. The freeway ramp is not under the jurisdiction of the City but is subject to Caltrans jurisdiction. To implement this mitigation measure, acquisition of an additional lane of right of way would be required and is not currently available. Because this mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is no established funding mechanism available for contribution, this mitigation measure is considered infeasible and the impact is considered, significant and unavoidable. These results are shown in Table 6.11-13.

- c) At the Bercut Drive / Richards Boulevard intersection, under Scenario A, the City shall increase the cycle length to 120 seconds and modify signal phasing. The applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard. Under Scenario B, the City shall install, or cause to be installed, one eastbound through lane to provide one left-turn lane, two through lanes and one combination through-right lane; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata,

TABLE 6.11-13

BASELINE WITH PROPOSED PROJECT (MITIGATED)

Baseline with Scenario A: Residential

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.52	Yes	0.21	Yes	0.00	Yes	0.12	Yes	0.00	Yes	0.13	Yes	0.48	Yes	0.39	Yes
	PM	0.39	Yes	0.53	Yes	0.00	Yes	0.11	Yes								
37. New Street "C" & New Street "B"	AM	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.05	Yes	0.04	Yes	0.01	Yes	0.05	Yes	0.07	Yes	0.00	Yes	0.07	Yes	0.06	Yes
	PM	0.08	Yes	0.04	Yes	0.01	Yes	0.11	Yes								

Baseline with Scenario B: Office

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.54	Yes	0.22	Yes	0.00	Yes	0.12	Yes	0.00	Yes	0.13	Yes	0.50	Yes	0.40	Yes
	PM	0.40	Yes	0.54	Yes	0.00	Yes	0.11	Yes								
37. New Street "C" & New Street "B"	AM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.05	Yes	0.04	Yes	0.01	Yes	0.20	Yes	0.07	Yes	0.00	Yes	0.13	Yes	0.14	Yes
	PM	0.18	Yes	0.09	Yes	0.01	Yes	0.11	Yes								

on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.

The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.

With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS C (24.1 seconds delay) in the a.m. peak hour and LOS B (18.2 seconds delay) in the p.m. peak hour, thus reducing the impact to a **less-than-significant level**; the level of service under Scenario B would be reduced to LOS A (8.1 seconds delay) in the a.m. peak hour and LOS C (20.4 seconds delay) in the p.m. peak hour, thus reducing the impact to a **less-than-significant level**. These results are shown in Table 6.11-13.

- d) At the N. 5th Street / Richards Boulevard intersection, under both Scenario A and Scenario B, the applicant shall dedicate right-of-way and construct an eastbound left-turn lane to provide two left-turn lanes, one through lane and one combination through-right lane; and optimize signal timing. The applicant shall also dedicate sufficient right-of-way and construct an expanded intersection at this location to the City of Sacramento Street Standards.

With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (13.2 seconds delay) in the a.m. peak hour and LOS C (24.9 seconds delay) in the p.m. peak hour, thus reducing the impact to a **less-than-significant level**; the level of service under Scenario B would be reduced to LOS C (21 seconds delay) in the a.m. peak hour and LOS F (84.9 seconds delay) in the p.m. peak hour; thus the impact would remain **significant and unavoidable**. To fully mitigate the impact under Scenario B would require further widening of Richards Boulevard, which would create secondary impacts to adjacent properties through the acquisition of additional right of way for a new vehicle travel lane (typically 12 feet); this right of way is currently unavailable. These results are shown in Table 6.11-13.

- e) At the N. 7th Street / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would require the applicant to install one southbound through lane to provide one left-turn lane, two through lanes, and one right-turn lane and install one northbound left-turn lane and one through lane to provide two left-turn lanes, two through lanes and one right-turn lane. With these improvements, the intersection would operate at LOS D (36 seconds delay) in the a.m. peak hour and LOS E (59.9 seconds delay) in the p.m. peak hour under Scenario A; Scenario B would produce LOS D (43 seconds delay) in the a.m. peak hour and LOS E (76.4 seconds delay) in the p.m. peak hour.

However, a review of the intersection reveals that there is insufficient right-of-way for the northbound improvements. Implementation of these northbound lanes would require the acquisition of right of way from the adjacent properties which are not controlled by the applicant.

Therefore, the applicant shall dedicate sufficient right-of-way for a future expanded intersection to the City of Sacramento Street Standards and shall construct modifications to 7th Street for the southbound approach at Richards Boulevard as required to accommodate the mitigation described above. These modifications to the southbound approach would include providing two additional southbound lanes to provide one left-turn lane one through lane and two right-turn lanes. With these improvements, the intersection would operate at LOS F (131 seconds delay) in the a.m. peak hour and LOS F (142 seconds delay) in the p.m. peak hour under Scenario A; Scenario B would produce LOS F (167 seconds delay) in the a.m. peak hour and LOS F (186 seconds delay) in the p.m. peak hour. These results are shown in Table 6.11-13. The project impact would remain **significant and unavoidable**.

- f) At the Dos Rios Street / Richards Boulevard intersection, under both Scenario A and Scenario B, the City shall increase the cycle length to 75 seconds and optimize the signal timing in the p.m. peak hour. The applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard.

With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (15.2 seconds delay) and the level of service under Scenario B would be reduced LOS C (20.4 seconds delay) in the p.m. peak hour, thus reducing the impact to a **less-than-significant level** during both a.m. and p.m. peak hours. These results are shown in Table 6.11-13.

- g) At the 12th / 16th Streets / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening of the roadways which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth policies. Additionally, it requires the acquisition of right-of-way from adjacent properties to provide additional vehicle travel lanes (typically 12 feet per lane) for increase vehicle capacity as well as the possible relocation of light rail along N. 12th Street. These improvements would create secondary impacts to adjacent properties and are beyond the capability of the project. Hence, the impact would remain **significant and unavoidable**.
- h) At the 7th Street / North B Street intersection, under both Scenario A and Scenario B, the City shall install, or cause to be installed, a traffic signal, add a northbound left-turn lane to provide one left-turn lane and one combination through-right lane; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis,

based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.

The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.

With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (16 seconds delay) in the a.m. peak hour and LOS C (26.2 seconds delay) in the p.m. peak hour; thus reducing the impact to a **less-than-significant level**; the level of service under Scenario B would be reduced to LOS B (19.1 seconds delay) in the a.m. peak hour and LOS C (31.2 seconds delay) in the p.m. peak hour, thus reducing the impact to a **less-than-significant level**. These results are shown in Table 6.11-13.

- i) At the 12th Street / North B Street intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening of the roadways to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth policies. Additionally, the right of way is unavailable and would require acquisition from adjacent properties as well as possible relocation of light rail along N. 12th Street. These improvements would create secondary impacts to adjacent properties and are beyond the capability of the project. Hence, the impact would remain **significant and unavoidable**.
- j) At the 7th Street / F Street intersection, under both Scenario A and Scenario B, the City install or cause to install a traffic signal, add a southbound left-turn lane to provide one left-turn lane and one combination through-right lane; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.

The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.

With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (10.7 seconds delay) in the a.m. peak hour and LOS B (13.1 seconds delay) in the p.m. peak hour, thus reducing the impact to a **less-than-significant level**; the level of service under Scenario B would be reduced to LOS A (6 seconds delay) in the a.m. peak hour and LOS B (15.1 seconds delay) in the p.m. peak hour, thus reducing the impact to a **less-than-significant level**. These results are shown in Table 6.11-13.

- k) At the 7th Street / G Street intersection, under both Scenario A and Scenario B, the City shall install, or cause to be installed, a southbound through lane to provide two through lanes; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.

The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.

With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (19.5 seconds delay) in the a.m. peak hour and LOS A (8.5 seconds delay) in the p.m. peak hour, thus reducing the impact to a **less-than-significant level**; the level of service under Scenario B would be reduced to LOS A (9.7 seconds delay) in the a.m. peak hour and LOS B (12.8 seconds delay) in the p.m. peak hour, thus reducing the impact to a **less-than-significant level**. These results are shown in Table 6.11-13.

- l) At the 7th / Signature Street intersection, prior to occupancy of Lots 1, 3, 4, 8, 9, and 11, the applicant shall install a traffic signal under Scenario A and Scenario B and shall add one lane each from the north, east and west approaches to provide one northbound left-turn lane, one through lane and one right-turn lane; one southbound combination left-through-right lane; one eastbound right-turn lane and one combination left-through-right lane; and one westbound left-turn lane and one combination left-through-right lane. The applicant shall be required to dedicate right-of-way and construct the traffic signal at this intersection subject to future reimbursement if found appropriate in the updated finance plan.

With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (15.6 seconds delay) in the a.m. peak hour and LOS D (40.1 seconds delay) in the p.m. peak hour, thus the impact would remain **significant and unavoidable**; the level of service under Scenario B would be reduced to LOS C (20.4 seconds delay) in the a.m. peak hour and

LOS D (46.7 seconds delay) in the p.m. peak hour, thus the impact would remain **significant and unavoidable**. These results are shown in Table 6.11-13. To fully mitigate the project impact would require further widening of 7th Street north of Signature Street, which would be inconsistent with the goals and objectives of the project to create a pedestrian-friendly street that features a linear park and interpretive walkway down the median of 7th Street, with landscaping and amenities to encourage street life.

6.11-2 The proposed project would add traffic to the study roadway segments that result in substandard levels of service. This is considered a *significant impact*.

As shown in Table 6.11-14, the proposed project would result in additional traffic to all the study roadway segments and would degrade the operations to substandard levels on the following segments under both Scenario A and Scenario B and are considered *significant impacts*:

Roadway Segment	Lanes	Baseline No Project			Scenario A: Residential			Scenario B: Office		
		ADT	LOS	V/C	ADT	LOS	V/C	ADT	LOS	V/C
N. 5 th Street north of Richards Boulevard	2	1,100	A	0.07	7,800	A	0.52	9,740	B	0.65
N. 7 th Street north of Richards Boulevard	2	11,900	C	0.79	22,300	F	1.49	26,340	F	1.76
Richards Boulevard east of Bercut Drive	4	33,760	E	0.94	41,520	F	1.15	44,730	F	1.24
Richards Boulevard east of Dos Rios Drive	4	25,100	B	0.70	29,710	D	0.83	31,420	D	0.87

Source: Dowling Associates, Inc., December 2006.
ADT = Averaged daily traffic
LOS = Level of service
V/C = Volume/Capacity

- a) North 7th Street north of Richards Boulevard would operate in the LOS F range;
- b) Richards Boulevard east of Bercut Drive would also operate in the LOS F range;
- c) Richards Boulevard east of Dos Rios Street would operate at LOS D.

Mitigation Measures (Baseline Plus Project)

- 6.11-2 a) *Widening of 7th Street to provide two travel lanes per direction between Richards Boulevard and Signature Street would reduce the project impact of Scenario A to **less than significant**; while the project impact of Scenario B would be lessened but remain **significant and unavoidable**.*

After implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS C (v/c of 0.74) and the level of service under Scenario B would be reduced to LOS D (v/c of 0.88). These results are shown in Appendix N. To fully mitigate the project impact under Scenario B, it would required to further widening of 7th Street for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane), which would be inconsistent with the goals and objectives of the project to create a pedestrian-friendly street that features a linear park and interpretive walkway

down the median of 7th Street, with landscaping and amenities to encourage street life.

- b, c) *No feasible mitigation measures were identified that would reduce the impact of the proposed project on the Richards Boulevard roadway segments. Mitigation would require increasing the number of travel lanes for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane), which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it would require the acquisition of right-of-way for the additional lanes from properties not owned by the project. The impacts of proposed project on roadway segments would remain **significant and unavoidable**.*

6.11-3 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E and are considered significant impacts.

Freeway mainline operating conditions for baseline conditions are summarized in Table 6.11-15. The proposed project under both Scenario A and Scenario B would add traffic to the following freeway segments that would operate at LOS F without the project and are considered significant impacts:

- a) Northbound I-5 north of J Street off-ramp (AM and PM peak hours)
- b) Northbound I-5 north of Richards Boulevard on-ramp (PM peak hour)
- c) Southbound I-5 north of Richards Boulevard off-ramp (AM peak hour)
- d) Southbound I-5 north of Richards Boulevard on-ramp (AM peak hour)

Mitigation Measures (Baseline Plus Project)

- 6.11-3 *The Traffic Study found that the impacted freeway mainline segments currently operate at LOS "F" in the Baseline Condition during the PM Peak Hour without the Project, and would continue to operate at LOS "F" in both the "Near Term Cumulative Condition (2013)" and "Long Term Cumulative Condition (2030)" both without and with the Project. Freeway mainline improvements are within the exclusive jurisdiction of Caltrans which can and should propose and adopt appropriate improvement plans that would reduce freeway mainline impacts pursuant to Public Resources Code Section 21081 and CEQA Guideline Section 15091.*

The City consulted with Caltrans prior to the preparation of this Draft EIR concerning possible mitigation measures to address impacts to the identified freeway mainline segments. The discussion focused on (1) identifying any Caltrans approved or adopted capital improvement projects that would improve access to and from Sacramento's downtown and improve the existing LOS F on the freeway mainline segments to LOS "E" or better in the Near Term (2013) and Long Term (2030), and (2) proportional share mitigation impact funding contributions to those projects as a means of addressing impacts to the highways from the Project and various other pending developments in the area.

TABLE 6.11-15

FREEWAY MAINLINE OPERATIONS – BASELINE CONDITIONS

Location	Without Project						Scenario A: Residential						Scenario B: Office					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²
Northbound I-5																		
North of J Street off-ramp	6,396	1.06	F	6,229	1.03	F	6,443	1.07	F	6,349	1.05	F	6,545	1.09	F	6,351	1.05	F
South of Richards Blvd off-ramp	7,271	0.76	D	8,710	0.91	E	7,333	0.77	D	8,868	0.93	E	7,460	0.78	D	8,872	0.93	E
North of Richards Blvd on-ramp	6,373	0.67	C	9,831	1.03	F	6,603	0.69	C	10,011	1.05	F	6,596	0.69	C	10,171	1.07	F
Southbound I-5																		
North of Richards Blvd off-ramp	10,677	1.12	F	7,353	0.77	D	10,777	1.13	F	7,615	0.80	D	10,967	1.15	F	7,617	0.80	D
South of Richards Blvd on-ramp	9,579	1.00	F	7,667	0.80	D	9,704	1.02	F	7,762	0.81	D	9,701	1.02	F	7,888	0.83	D
North of I Street on-ramp	7,305	0.91	E	6,076	0.76	D	7,397	0.92	E	6,146	0.76	D	7,395	0.92	E	6,234	0.78	D
Northbound SR 160																		
At the American River Bridge	1,900	0.30	A	5,402	0.87	D	2,141	0.34	B	5,590	0.90	D	2,133	0.34	B	5,758	0.92	E
Southbound SR 160																		
At the American River Bridge	4,059	0.65	C	2,326	0.37	B	4,164	0.67	C	2,599	0.42	B	4,361	0.70	C	2,602	0.42	B

Source: Dowling Associates, Inc., 2006.
¹ V/C = Volume / Capacity
² LOS = Level of Service
 Note: **Bold** values show substandard traffic operations.

Caltrans indicated that they have developed general cost estimates for the following projects. Though these projects are designed to address regional transportation needs that extend far beyond the downtown area, Caltrans believes they would serve to mitigate impacts from pending downtown developments and are viable:

- I-5 American River Bridge widening - two structures. Add one standard lane and re-establish standard shoulders to each structure: \$134 million.*
- I-5 HOV lanes - Garden Highway to I-80 HOV lanes with direct connectors: \$300 million.*
- I-5 HOV lanes - U.S. 50 Interchange to Elk Grove Blvd: \$200 million.*

No preliminary improvement plans have been prepared for these proposed freeway improvements, and it is unclear what the cost estimates are based on or include.

These proposed freeway improvement projects are included in Sacramento Area Council of Governments (SACOG) existing Metropolitan Transportation Plan (MTP) for preliminary engineering and environmental only. The MTP is a long-range plan which is based on growth and travel demand projections coupled with financial projections. The MTP lists hundreds of locally and regionally important projects. It is updated every three years, at which time projects can be added or deleted. SACOG uses the plan to help prioritize projects and guide regional transportation project funding decisions. The projects included in the MTP have not gone through the environmental review process and are not guaranteed for funding or construction.

Given the status of the improvement projects identified by Caltrans and the information available at this time, the City has concluded that there is currently insufficient information and certainty on which to base a feasible and viable mitigation measure to address the Project's impacts on the identified freeway mainline segments. The proposed freeway improvement projects are not currently approved and funded. There is no fee or other funding mechanism currently in place for future funding. Furthermore, the City cannot determine either the cost of the proposed freeway improvement projects or the Project's fair share proportional contribution to the improvement projects with sufficient certainty to enable the City to develop a fee-based mitigation measure that would satisfy the legal requirements for fee-based mitigation under both CEQA (see CEQA Guidelines 15126.4) and constitutional principles that call for a nexus and rough proportionality between a project's impacts and the fee-based mitigation measure. Finally, the prospects of the proposed freeway improvements ever being constructed remains uncertain due to funding priorities and on-going policy developments that may favor other approaches to addressing freeway congestion.

Widening the freeway mainline right of way would create adverse impacts by requiring the removal of historic buildings in the Old Sacramento District, and potentially the Crocker Art Museum, which are already situated adjacent to the existing freeway right of way; would potentially require modifications to the flood wall/levee that protects Downtown Sacramento; and would create further physical barriers between people living and working in Downtown Sacramento and the Sacramento River and the Old Sacramento District. Such new impacts from widening the freeway would not be capable of mitigation to a less than significant level and would violate City policies concerning: the preservation of the Old

Sacramento District; promoting ease of pedestrian access between Downtown Sacramento and the Sacramento River; promoting ease of pedestrian access between Downtown Sacramento and the Old Sacramento District; and protecting the integrity of Sacramento's flood control system.

*Consequently, the City has been unable to identify any feasible mitigation measures that could reduce or avoid the impact of the Project on the freeway mainline segments to a less than significant level. The California Environmental Quality Act (Pub. Resources Code, §21000 et seq.) defines "feasible" for these purposes as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors (Pub. Resources Code, §21061.1). Therefore, the impacts of the proposed project on the three I-5 freeway segments would remain **significant and unavoidable**.*

6.11-4 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline. These are considered *significant impacts*.

Freeway interchange operations under baseline conditions are summarized in Table 6.11-16. The project under Scenario A and Scenario B would add traffic to freeway ramps and weaving areas and cause the interchange levels of service to be worse than freeway mainline levels of service at the following locations:

- a) Northbound I-5 Richards Boulevard on-ramp (PM peak hour)
- b) Southbound I-5 Richards Boulevard off-ramp (AM peak hour)

Mitigation Measures (Baseline Plus Project)

6.11-4 *No feasible mitigation measures were identified that would reduce the impact of the project on I-5 freeway ramps. Widening the freeway may reduce the impact but would require acquisition of right-of-way which is not under the control of the applicant. The freeway interchanges are not under the jurisdiction of the City but are subject to Caltrans' jurisdiction. Finally, no improvement is included in any of Caltrans' funding mechanisms. Because mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is not an established funding mechanism available for contribution, this mitigation measure is considered infeasible and the impact is considered significant and unavoidable. Therefore, the impacts of the proposed project on freeway ramps would remain **significant and unavoidable**.*

6.11-5 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B at the following locations and are considered *significant impacts*.

- a) Northbound I-5 Richards Boulevard off-ramp (AM peak hour)
- b) Southbound I-5 Richards Boulevard off-ramp (AM and PM hours)

TABLE 6.11-16

FREEWAY INTERCHANGE OPERATIONS – BASELINE CONDITIONS

Ramp	Without Project						Scenario A: Residential						Scenario B: Office					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	LOS ¹	Den ² (Flow)	Vol ³	LOS ¹	Den ² (Flow)	Vol ³	LOS ¹	Den ² (Flow)	Vol ³	LOS ¹	Den ² (Flow)	Vol ³	LOS ¹	Den ² (Flow)	Vol ³	LOS ¹	Den ² (Flow)	Vol ³
Northbound I-5																		
P Street to J St weave	C	25.74	8,314	B	19.05	6,800	C	26.08	8,396	B	19.85	7,014	C	26.69	8,550	B	19.85	7,016
Richards Blvd off-ramp	C	26.67	1,412	D	34.30	610	C	27.21	1,474	E	35.79	768	D	28.30	1,601	E	35.83	772
Richards Blvd on-ramp	C	(561)	514	E	(1888)	1,731	C	(812)	744	F	(2085)	1,911	C	(804)	737	F	(2259)	2,071
Southbound I-5																		
Richards Blvd off-ramp	F	25.52	1,531	B	17.57	791	F	25.76	1,632	B	18.20	1,053	F	26.21	1,820	B	18.20	1,055
Richards Blvd on-ramp	C	(472)	433	C	(1205)	1105	C	(610)	559	C	(1309)	1,200	C	(604)	554	D	(1447)	1,326
I St to Q St weave	C	21.04	7,602	C	20.18	7151	C	21.77	7,790	C	20.77	7,298	C	21.75	7,785	C	21.24	7,429
Source: Dowling Associates, Inc., 2006. ¹ LOS = Level of Service ² Den = Density; Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp. ³ Vol = Volume Note: Bold values show substandard traffic operations.																		

Mitigation Measures (Baseline)

6.11-5 *No feasible mitigation measures were identified that would reduce the impact of the freeway ramp queues. The freeway ramp is not under the jurisdiction of the City but is subject to Caltrans' jurisdiction. In addition, to implement this mitigation measure would require acquisition of additional right of way for a new lane (typically 12 feet per lane). Finally, this improvement is not included in any of Caltrans' funding mechanisms. Because mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is not an established funding mechanism available for contribution, mitigation is considered infeasible and the impact is considered significant and unavoidable. The impacts of the project on freeway ramp queues would remain **significant and unavoidable**.*

6.11-6 The proposed project would increase demand on the public transit system. This is considered a *potentially-significant impact*.

The proposed project would increase demand for transit service under both scenarios. Scenario B would generate a higher demand during the peak hours than Scenario A. Scenario A is estimated to generate approximately 64 transit trips during the a.m. peak hour and approximately 84 trips during the p.m. peak hour; while Scenario B is estimated to generate 125 a.m. peak hour trips and 145 p.m. peak hour trips.

As RT buses would provide the only directly transit link to the project site under the baseline conditions, the demand would focus on the three RT bus routes, which offer connecting services to light rail and Amtrak trains. With 11 buses operating during each peak hour, the project would add 13 riders per bus during the p.m. peak hour under Scenario B, the period with the highest transit demand. While RT may be able to accommodate the increased ridership, the project may result in potentially significant impact.

Mitigation Measures (Baseline)

Compliance with Mitigation Measure 6.11-6 would help to reduce the project's impact to **a less-than-significant level**.

6.11-6 *The City shall coordinate with RT to modify its bus routes and/or frequencies to better serve the needs of the proposed project. In particular, RT may increase the frequency of Route 33, which is a neighborhood shuttle service that operates between the Richards Boulevard district and the downtown area.*

6.11-7 The proposed project may interfere with the implementation of proposed bikeways. This is considered a *potentially-significant impact*.

The implementation of following proposed bikeways, identified in the City of Sacramento Bikeway Master Plan, may be interfered by the proposed project under both Scenario A and Scenario B:

- a) Proposed on-street bikeway along 5th Street north of Richards Boulevard;
- b) Along the proposed Signature Street;
- c) Along Vine Street within the project site

In the Township 9 Design Guidelines (Carter Burgess, September 2006), bike lanes are identified along Richards Boulevard and N. 7th Street in the immediate vicinity of the project site. Along 7th Street, the bikeways are shown as 5-foot wide. No bicycle facility is shown on-site or along N. 5th Street. The lack of bikeways on-site may impede connectivity and interfere with the proposed bikeways.

Mitigation Measures (Baseline Plus Project)

Compliance with Mitigation Measure 6.11-7 would reduce the project's impact to **a less-than-significant level**.

6.11-7 *The project applicant shall include on-site bikeway facilities to achieve the intent of the Bikeway Master Plan subject to review and approval of Development Service, Development Engineering Division. All bikeways shall meet the City's design standards and ensure that all roadway designs would not result in unsafe conditions for bicyclists.*

6.11-8 The proposed project would increase the number of pedestrians on the roadway system and some proposed project design elements could result in unsafe conditions for pedestrians. This is considered a potentially-significant impact.

The Township 9 Design Guidelines illustrate a pedestrian way (interpretive walkway) in the median of 7th Street along the eastern border of the project site. The walkway would pass through the center of the gateway roundabouts at Signature Street and at New Street "A". Standard practice is to design roundabouts in a manner that provides for pedestrian and bicycle flow along the perimeter of roundabouts on a separate pathway.

Mitigation Measures (Baseline)

Compliance with Mitigation Measure 6.11-8 and Mitigation Measure 6.11-1(i) (Install traffic signal at 7th Street and Signature Street) would reduce the project's impact to **a less-than-significant level**.

6.11-8 *Pedestrian walkways shall be designed in compliance with the City's design standards and shall comply with the guidelines contained in Roundabouts: An Informational Guide (FHWA 2000) and/or be designed to the satisfaction of the city traffic engineer. Walkways shall be designed around the outside of the roundabouts rather than through the center unless otherwise accepted by the city traffic engineer after the applicant has technically demonstrated the safety and ADA accessibility of the 'traffic plaza'. Additionally, by installing a traffic signal at 7th Street and Signature Street to replace the proposed roundabout at this intersection, all new pedestrian cross walks will be designed to City of Sacramento Street Standards.*

6.11-9 The proposed project does not comply with City design guidelines or normal traffic engineering practices with regard to the design of the secondary roundabouts. This is considered a potentially-significant impact.

The Township 9 Design Guidelines illustrate gateway roundabouts at 7th Street & Signature Street and at 7th Street & New Street "A." Secondary roundabouts are shown at the intersections of New Street "C" & Signature Street and New Street "C" & New Street "B." The conceptual layouts of these intersections do not satisfy the standards of modern roundabouts.

Significant departures from standard roundabout design concepts include the introduction of design elements that would attract pedestrians to the center of the intersection, crosswalks across the traffic circle, and the lack of splitter islands that would provide positive direction of vehicles along a one-way counter-clockwise travel pattern through the intersection.

Mitigation Measures (Baseline)

Compliance with Mitigation Measure 6.11-9a and Mitigation Measure 6.11-9b would reduce the project's impact to **a less-than-significant level**.

- 6.11-9 a) *The gateway roundabout on 7th Street at New Street "A" shall be designed in compliance with the guidelines contained in Roundabouts: An Informational Guide (FHWA 2000) or the applicant shall provide sufficient technical data to the city traffic engineer in order to demonstrate the safety and ADA accessibility of the proposed 'traffic plaza'. This intersection will carry a significant volume of automobile traffic (from an estimated low of 995 vehicles during the a.m. peak hour under Baseline with Scenario A conditions to an estimated high of 1450 vehicles during the p.m. peak hour under Long Term Year 2030 with Scenario B conditions) and shall be designed according to standard design practice for high-volume roadways and/or to the satisfaction of the City Traffic Engineer.*
- b) *The intersections on New Street "C" where roundabouts are identified in the Township 9 Design Guidelines shall be designed in compliance with City's requirements for traffic circles or to the satisfaction of the city traffic engineer. The automobile traffic volumes at these intersections are expected to be low and should be well-served by traffic circles.*

6.11-10 The proposed project is required to provide sufficient vehicle and bicycle parking to comply with the City's zoning code requirements. This is considered a less-than-significant impact.

Table 6.11-17 summarizes the total parking requirement under the City's Zoning Code Section 17.64.020. It is assumed that the proposed project lies within the Central City district. The parking requirements were calculated according to the following:

- 1 vehicle space per 450 gross square feet of office space
- 1 vehicle space per 400 gross square feet of retail space for the first 9,600 square feet and 1 space per 250 square feet thereof
- 1 vehicle space per multi-family dwelling units plus 1 visitor space per 15 dwelling units
- 1 vehicle space per three (3) restaurant seats
- 1 bicycle parking space per 20 off-street vehicle parking spaces

Scenario A would be required to provide 3,890 vehicle parking spaces, while Scenario B would be required to provide 4,590 vehicle parking spaces. The project proposed to supply up to 4,134 spaces under Scenario A and 5,389 spaces under Scenario B. In both cases, the proposed supply exceeds the city requirement hence complying with City codes.

Project Level Area	Amount	Unit	Code Requirement	Proposed
Scenario A: All Residential				
Retail	116	ksf	450	
Restaurant (High-Turnover Sit Down)	780	seat	260	
Multifamily Residential	2981	d.u.	3,180	
Total Vehicle Parking			3,890	4,134
Total Bicycle Parking			195	
Scenario B: Office				
Retail	116	ksf	450	
Restaurant (High-Turnover Sit Down)	780	seat	260	
Multifamily Residential	1888	d.u.	2,014	
Office	840	ksf	1,866	
Total Vehicle Parking			4,590	5,389
Total Bicycle Parking			230	

Source: Dowling Associates, Inc. 2006

Further, the City's Zoning Code Section 17.64.050 also requires new and expanded developments to provide bicycle parking based on the number of required vehicle parking spaces. This results in a requirement of 195 and 230 bicycle parking spaces under Scenario A and Scenario B, respectively, of which 50 percent shall be Class I facility. It is unclear if any bicycle parking facility will be provided as a part of the proposed project. Therefore, the impact is considered ***potentially significant***.

Mitigation Measures (Baseline Plus Project)

6.11-10 *The project applicant shall provide sufficient on-site bicycle parking spaces to comply with the City's Zoning Code requirement. Implementation of this mitigation measure would reduce the impact to **less-than-significant**.*

6.11-11 The proposed project would increase parking demand during special events at the riverfront pavilion. This is considered a **potentially-significant impact.**

Special events at the proposed riverfront pavilion generally take place after weekday P.M. peak hour or on weekends. This study did not analyze the full parking impacts that special event traffic may generate. Nonetheless, it is anticipated that the parking demand would likely exceed available supply. Hence, it is considered a **potentially-significant impact**.

Mitigation Measures (Baseline Plus Project)

6.11-11 *The project applicant shall develop a traffic management program for special events, which is to be approved by City Traffic Engineer. The program shall include ways to mitigate the adverse impacts of special event traffic on parking in the project vicinity. The traffic management plan shall identify the amount of vehicle parking necessary for the event, where parking can be temporarily located for the event, and how event traffic will circulate to enter and exit the site. The traffic management plan shall provide all mitigation measures necessary for the event. With implementation of*

such traffic management program, the proposed project impact would be reduced to a less-than-significant level.

CUMULATIVE CONDITIONS

Cumulative condition analyses were performed to determine the potential impacts of the proposed project in the near term (Year 2013) and the long term (Year 2030). The near term condition includes roadway improvements as described in the Transportation Infrastructure section that were assumed to be implemented as well as potential developments in the study area that were projected to be completed by Year 2013.

The project impacts on bicycle facilities, pedestrian, on-site circulation, and parking under cumulative conditions are estimated to be the same as those under baseline conditions. Therefore, they are not presented again in this section.

Near Term (Year 2013 Plus Project) Impacts and Mitigation Measures

6.11-12 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate. This is considered a significant impact.

The intersection operations under near term conditions are summarized in Table 6.11-18 and Table 6.11-19. The detailed worksheets for intersection level of service and queuing are provided in Appendix N.

The proposed would increase traffic volumes at study area intersections and would cause significant impacts under near term plus project conditions at the following intersections:

- a) I-5 Southbound Ramps / Richards Boulevard (AM and PM peak hours)
- b) I-5 Northbound Ramps / Richards Boulevard (AM and PM peak hours for Scenario B only)
- c) Bercut Drive / Richards Boulevard (PM peak hour)
- d) N. 5th Street / Richards Boulevard (PM peak hour)
- e) N. 7th Street / Richards Boulevard (AM and PM peak hours)
- f) 12th/16th Street / Richards Boulevard (AM and PM peak hours)
- g) 7TH Street / North B Street (AM and PM peak hours)
- h) 12th Street / North B Street (AM and PM peak hours)
- i) 7th Street / Big Four Boulevard (PM peak hour)
- j) 7th Street / F Street (AM and PM peak hours)
- k) 6th Street / G Street (AM and PM peak hours)

TABLE 6.11-18

INTERSECTION LEVELS OF SERVICE – YEAR 2013 NEAR TERM CONDITIONS

Mitigated												
Intersection	Traffic Control	Peak Hour	No Project		Scenario A: Residential		Scenario B: Office		Scenario A: Residential		Scenario B: Office	
			LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³
1. I-5 SB Ramps & Richards Blvd	Signal	AM	E	71	F	82.6	F	100	F	82.5	F	109.6
		PM	E	74.4	F	95.6	F	99.2	F	99.0	F	99.2
2. I-5 NB Ramps & Richards Blvd	Signal	AM	D	54.6	E	56	F	101.6	E	56.0	F	98.7
		PM	C	27.1	C	33.8	E	60.5	C	31.1	E	60.5
3. Bercut Dr & Richard Blvd	Signal	AM	C	20.4	B	19.7	C	28.9	B	19.7	C	21.4
		PM	E	68.7	F	82.1	F	87	E	78.5	F	87
4. N 5th Street & Richard Blvd	Signal	AM	A	4.2	B	15.3	C	25.1	B	15.7	C	20.5
		PM	A	5.1	E	67.1	D	46.7	C	34.3	D	49.7
5. N 7th Street & Richard Blvd	Signal	AM	E	79.9	F	165.9	F	223.1	E	57.3	F	106.9
		PM	F	88	F	188.8	F	226.1	E	63.8	F	87.4
6. N 10th Street & Richard Blvd	Signal	AM	B	19.9	B	16.9	B	19.4	B	17.2	B	17.2
		PM	B	16.6	B	18.3	B	17	B	17.5	B	19.1
7. Dos Rios St & N F Street	Signal	AM	B	14.4	B	10.7	B	14.1	B	10.6	B	11
		PM	B	13	B	15.6	B	13.6	B	14.3	B	12.8
8. 12th/N 16th St/Vine St	Signal	AM	F	147.8	F	191	F	203.8	F	191	F	203.8
		PM	F	264.1	F	288.1	F	316	F	288	F	298.4
11. Bercut Dr & Bannon Street	Signal	AM	B	10.7	B	10.6	B	10.6	B	10.6	B	10.6
		PM	C	20.1	B	19.7	C	20.2	C	20.2	C	20.2
14. 6th Street Extension & North B Street	Signal	AM	C	28.2	C	27.3	C	22.9	C	23.5	C	23.1
		PM	C	30.7	C	29.6	C	30.5	C	31.4	C	30.6
15. N 7th Street & North B Street	Signal	AM	D	51.4	E	77.8	E	73.3	E	69	E	72.8
		PM	E	57.7	E	74.5	F	94.5	E	75.8	F	93.6

TABLE 6.11-18

INTERSECTION LEVELS OF SERVICE – YEAR 2013 NEAR TERM CONDITIONS

Mitigated												
Intersection	Traffic Control	Peak Hour	No Project		Scenario A: Residential		Scenario B: Office		Scenario A: Residential		Scenario B: Office	
			LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³
16. 12th Street & North B Street	Signal	AM	F	80	F	99.7	F	137	F	99.7	F	137
		PM	F	236.4	F	253.4	F	275.8	F	253.2	F	275.3
17. 6th Street & Canal Street	Signal	AM	B	16.6	B	16.3	B	15	B	16.1	B	14.2
		PM	B	16.8	B	17.4	B	17.2	B	15.4	B	17.2
19. 6th Street & Big Four Blvd	Signal	AM	C	31.9	C	30.6	C	29.9	C	34.2	C	34.6
		PM	E	74.5	E	77.7	E	72.1	E	73.5	E	73.6
20. 7th Street & Big Four Blvd	Signal	AM	A	9.9	A	9.2	A	8.4	B	12.3	A	8.5
		PM	D	50.4	E	70.1	F	82	E	67.3	F	82
21. 7th Street & F Street	Signal	AM	F	108.9	F	156.2	F	189.7	F	159.3	F	189.6
		PM	F	247.4	F	326.1	F	338.3	F	315.9	F	338.6
22. 6th Street & G Street	Signal	AM	D	41.9	D	48.2	D	52.5	D	45.7	E	59.5
		PM	F	246.5	F	263.1	F	482.3	F	294.7	F	324.8
23. 7th Street & G Street	Signal	AM	C	29.1	C	32.1	C	33.7	C	33.3	D	35.4
		PM	D	45.4	E	73.1	E	72.5	E	63.6	E	66.7
24. 6th Street & H Street	Signal	AM	F	120.3	F	115.1	F	128.3	F	115.4	F	127.5
		PM	F	110.6	F	123	F	120.2	F	125.3	F	120.6
25. 7th Street & H Street	Signal	AM	A	9.3	B	15.1	B	14	B	12.2	B	12.2
		PM	E	58.4	F	86	F	91.8	F	90.5	F	92.6
26. 6th Street & I Street	Signal	AM	B	18.8	C	24	C	22.6	C	23.1	C	25.9
		PM	F	155.5	F	198.1	F	225.9	F	192.1	F	222.1
27. 7th Street & I Street	Signal	AM	A	7.8	A	7.7	A	7.7	A	7.9	A	7.7
		PM	C	22.3	C	22	B	18.8	B	18.1	B	18.8

TABLE 6.11-18

INTERSECTION LEVELS OF SERVICE – YEAR 2013 NEAR TERM CONDITIONS

Mitigated																
Intersection	Traffic Control	Peak Hour	No Project		Scenario A: Residential		Scenario B: Office		Scenario A: Residential		Scenario B: Office					
			LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³				
28. 6th Street & J Street	Signal	AM	D	55	E	55.4	E	55.6	E	55.7	E	55.2				
		PM	E	56.6	E	70.7	E	74.8	E	70.7	E	74.9				
29. 7th Street & J Street	Signal	AM	B	17.3	B	18.7	B	17.9	B	18.4	B	19.4				
		PM	B	18.5	B	19.1	C	22.1	C	21.4	C	25.4				
33. 5th Street & Riverfront Drive	Stop	AM	N/A	N/A	A	7.6	A	7.7	A	7.6	A	7.7				
		PM	N/A	N/A	A	8	A	8	A	8	A	8				
34. 7th Street & Riverfront Drive	Stop	AM	N/A	N/A	A	8	A	7.7	A	8	A	7.7				
		PM	N/A	N/A	A	8	A	8	A	8	A	8				
35. 7th Street & New Street "A"	Stop	AM	A	1.8	See Table 6.11-19				See Table 6.11-20							
		PM	B	10.2												
36. Signature Street & 7th Street	Stop	AM	A	1.7					See Table 6.11-19				B	13.5	B	16.6
		PM	F	57									C	31.2	D	39.3

Note:
1 LOS = Level of Service
2 Delay = delay in seconds
3 V/C = volume/capacity ratio – for roundabout

TABLE 6.11-19

NEAR TERM (YEAR 2013) WITH PROPOSED PROJECT

Near Term with Scenario A: Residential

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.52	Yes	0.22	Yes	0.00	Yes	0.11	Yes	0.00	Yes	0.13	Yes	0.49	Yes	0.40	Yes
	PM	0.28	Yes	0.54	Yes	0.00	Yes	0.09	Yes								
36. Signature Street & 7th Street	AM	0.51	Yes	0.12	Yes	0.41	Yes	0.22	Yes	0.45	Yes	0.16	Yes	0.51	Yes	0.36	Yes
	PM	0.70	Yes	0.60	Yes	0.93	NO	0.33	Yes								
37. New Street "C" & New Street "B"	AM	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.04	Yes	0.03	Yes	0.03	Yes	0.05	Yes	0.06	Yes	0.00	Yes	0.08	Yes	0.05	Yes
	PM	0.06	Yes	0.03	Yes	0.02	Yes	0.12	Yes								

Near Term with Scenario B: Office

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.53	Yes	0.23	Yes	0.00	Yes	0.10	Yes	0.00	Yes	0.13	Yes	0.50	Yes	0.41	Yes
	PM	0.29	Yes	0.55	Yes	0.00	Yes	0.10	Yes								
36. Signature Street & 7th Street	AM	0.61	Yes	0.15	Yes	0.48	Yes	0.18	Yes	0.46	Yes	0.23	Yes	0.65	Yes	0.36	Yes
	PM	0.70	Yes	0.60	Yes	0.96	NO	1.04	NO								
37. New Street "C" & New Street "B"	AM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.04	Yes	0.03	Yes	0.02	Yes	0.22	Yes	0.06	Yes	0.00	Yes	0.16	Yes	0.11	Yes
	PM	0.14	Yes	0.07	Yes	0.02	Yes	0.11	Yes								

TABLE 6.11-20

NEAR TERM (YEAR 2013) WITH PROPOSED PROJECT (MITIGATED)

Near Term with Scenario A: Residential

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.52	Yes	0.22	Yes	0.00	Yes	0.11	Yes	0.00	Yes	0.13	Yes	0.49	Yes	0.40	Yes
	PM	0.28	Yes	0.54	Yes	0.00	Yes	0.09	Yes								
37. New Street "C" & New Street "B"	AM	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.04	Yes	0.03	Yes	0.03	Yes	0.05	Yes	0.06	Yes	0.00	Yes	0.08	Yes	0.05	Yes
	PM	0.06	Yes	0.03	Yes	0.02	Yes	0.12	Yes								

Near Term with Scenario B: Office

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.53	Yes	0.23	Yes	0.00	Yes	0.10	Yes	0.00	Yes	0.13	Yes	0.50	Yes	0.41	Yes
	PM	0.29	Yes	0.55	Yes	0.00	Yes	0.10	Yes								
37. New Street "C" & New Street "B"	AM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.04	Yes	0.03	Yes	0.02	Yes	0.22	Yes	0.06	Yes	0.00	Yes	0.16	Yes	0.11	Yes
	PM	0.14	Yes	0.07	Yes	0.02	Yes	0.11	Yes								

- l) 7th Street / G Street (PM peak hour)
- m) 6th Street / H Street (AM peak hour for Scenario B only; PM peak hour for both scenarios)
- n) 7th Street / H Street (PM peak hour)
- o) 6th Street / I Street (PM peak hour)
- p) 6th Street / J Street (PM peak hour)
- q) 7th Street / Signature Street (PM peak hour) (see discussion below)

7th Street and Signature Street Intersection

As described under Baseline Condition Impact 6.11-1(l), the proposed roundabout at the 7th Street and Signature Street intersection is deemed infeasible and it is recommended to be replaced by a traffic signal prior to the occupancy of lots 1, 2, 3, 4, 8, 9, 10, and 11. Additionally, the construction of a new north-south street (North 8th Street) mid-block between North 7th Street and North 10th Street along the old Southern Pacific railroad right-of-way, as an access to the future development of Continental Plaza Phase III and IV, would reduce the amount of traffic on 7th Street. If North 8th Street is to be constructed with signalized access to Richards Boulevard, the level of service under Scenario A would be reduced to LOS B (15.5 seconds delay) in the a.m. peak hour and LOS C (31.5 seconds delay) in the p.m. peak hour; and the level of service under Scenario B would be reduced to LOS C (20.4 seconds delay) in the a.m. peak hour and LOS C (33 seconds delay) in the p.m. peak hour. These results are shown in Appendix N. The City anticipates that North 8th Street may be constructed at a future date, however the actual construction remains uncertain due to the fact that available right-of-way does not exist and Continental Plaza's current PUD does not include this access but rather assumes access via North 7th Street. This EIR does not assume construction of North 8th Street for purposes of analysis; the impact therefore remains significant.

Mitigation Measures (2013 Plus Project)

- 6.11-12 a) *At the I-5 southbound ramps / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening of the freeway ramp to add an additional lane (typically 12 feet) to the west and acquisition of right-of-way, which is beyond the capability of the project. However, the applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard. Hence, the impact would remain **significant and unavoidable**.*
- b) *At the I-5 northbound ramps / Richards Boulevard intersection, optimizing signal timing would lessen the project impact; however, to fully mitigate the project impact would require widening of the freeway on-ramp and acquisition of right-of-way, which is beyond the capability of the project. Therefore, the project impact would remain **significant and unavoidable** under Scenario B. The applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard.*

- c) *At the Bercut Drive / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would require further widening of Richards Boulevard which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additional lanes (typically 12 feet per lane) would increase the capacity of the intersection but would require the acquisition of right-of-way from adjacent properties. This is beyond the capability of the project because the property is not controlled by the applicant and the right of way is not available; hence the impact would remain **significant and unavoidable**.*
- d) *At the N. 5th Street / Richards Boulevard intersection, under both Scenario A and Scenario B, optimize signal timing would lessen the project impact to **less-than-significant level** under Scenario A, but the impact under Scenario B would remain **significant and unavoidable**. To fully mitigate the impact would require widening of Richards Boulevard which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. The applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard and dedicate sufficient right-of-way for a future expanded intersection to City of Sacramento Standards.*
- e) *At the N. 7th Street / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigation of the impact would require adding one northbound left-turn and one through lanes to provide two left-turn lanes, two through lanes and one right-turn lane; add one southbound through lane to provide one left-turn lane, two through lane and one right-turn lane; add one eastbound left-turn and one through lanes to provide two left-turn lanes, two through lanes and one right-turn lane; add one westbound left-turn lane to provide two left-turn lanes, one through lane, and one combination through-right lane; and optimize signal timing. The applicant shall dedicate right-of-way along his property for the intersection modifications described above and dedicate sufficient right-of-way for an expanded intersection to the City of Sacramento Standards. The applicant shall pay a fair share contribution to fund acquisition of right-of-way by the City from other properties as required for the construction of the improvements described above, and in the event right-of-way is not made available, provide funding for future modifications to the intersection.*

*With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS E (57.3 seconds delay) in the a.m. peak hour and LOS E (63.8 seconds delay) in the p.m. peak hour, thus reducing the impact to **less than significant** during both a.m. and p.m. peak hours; and the level of service under Scenario B would be reduced to LOS F (106.9 seconds delay) in the a.m. peak hour and LOS F (87.4 seconds delay) in the p.m. peak hour, thus the impact would be **less than significant** during the p.m. peak hour but would remain **significant and unavoidable** during the a.m. peak hour. These results are shown in Table 6.11-20. To fully mitigate the impact would require widening of Richards Boulevard and 7th Street which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane)*

to increase vehicle capacity, which is not controlled by the applicant of this project.

- f) *At the 12th / 16th Streets / Richards Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would entail widening of 12th Street, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity and/or relocation of light rail. These improvements are beyond the control of the project applicant; therefore, the impact would remain **significant and unavoidable**.*
- g) *At the 7th Street / North B Street intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening of the roadways, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant; hence the impact would remain **significant and unavoidable**.*
- h) *At the 12th Street / North B Street intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening of 12th Street which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity and/or relocation of light rail. These improvements are beyond the capability of the project and beyond the control of the project applicant; hence the impact would remain **significant and unavoidable**.*
- i) *At the 7th Street / Big Four Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would entail widening of 7th Street, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant; hence the impact would remain **significant and unavoidable**.*
- j) *At the 7th Street / F Street intersection, under both Scenario A and Scenario B, mitigating project impact would entail widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*

- k) *At the 6th Street / G Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*
- l) *At the 7th Street / G Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way (typically 12 feet per lane). Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*
- m) *At the 6th Street / H Street intersection, under both Scenario A and Scenario B, mitigating project impact would entail widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*
- n) *At the 7th Street / H Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*
- o) *At the 6th Street / I Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the typical road width found in downtown and necessitate acquisition of right-of-way (typically 12 feet per lane) to allow more vehicle capacity. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*
- p) *At the 6th Street / J Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadway beyond the road width found in downtown and necessitate acquisition of right-of-way (typically 12 feet per lane) to allow more vehicle capacity. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*
- q) *At the 7th / Signature Street intersection, under both Scenario A and Scenario B, with implementation of Mitigation Measure 6.11-1(l), the level of service under Scenario A would be reduced to LOS B (13.5 seconds delay) in the a.m. peak hour and LOS C (31.2 seconds delay) in the p.m. peak hour thus reducing the*

impact to **less-than-significant**; and the level of service under Scenario B would be reduced to LOS B (16.6 seconds delay) in the a.m. peak hour and LOS D (39.3 seconds delay) in the p.m. peak hour thus remaining **significant and unavoidable**.

6.11-13 The proposed project would add traffic to the study roadway segments. This is considered a significant impact.

As shown in Table 6.11-21, the proposed project would result in additional traffic to all the study roadway segments and would degrade the operations to substandard levels on the following segments and are considered **significant impacts**:

- a) North 7th Street north of Richards Boulevard would operate in the LOS F range under both scenarios;
- b) Richards Boulevard east of Bercut Drive would also operate in the LOS F range under both scenarios;
- c) Richards Boulevard east of Dos Rios Street would operate at LOS E under Scenario A and LOS F under Scenario B.

TABLE 6.11- 21

ROADWAY LEVELS OF SERVICE FOR PROJECT SCENARIOS – YEAR 2013 NEAR TERM CONDITIONS

Roadway Segment	Lanes	Year 2013 No Project			Residential Scenario			Office Scenario		
		ADT	LOS	V/C	ADT	LOS	V/C	ADT	LOS	V/C
N. 5 th Street north of Richards Boulevard	2	1,260	A	0.08	8,290	A	0.55	10,510	C	0.70
N. 7 th Street north of Richards Boulevard	2	12,560	D	0.84	22,590	F	1.51	26,440	F	1.76
Richards Boulevard east of Bercut Drive	4	37,180	F	1.03	41,600	F	1.16	43,220	F	1.20
Richards Boulevard east of Dos Rios Drive	4	30,220	D	0.84	34,870	E	0.97	36,580	F	1.02

Notes:
ADT = Averaged daily traffic
LOS = Level of service
V/C = Volume/Capacity
Source: Dowling Associates, Inc., December 2005.

The construction of a new north-south street (North 8th Street), mid-block between North 7th Street and North 10th Street along the old Southern Pacific railroad right-of-way as an access to the future development of Continental Plaza Phase III and IV, would reduce the amount of traffic on 7th Street. If North 8th Street were constructed with signalized access to Richards Boulevard, Scenario A would produce LOS A (v/c of 0.42) and Scenario B would produce LOS A (v/c of 0.55). These results are shown in Appendix N. The City anticipates that North 8th Street may be constructed at a future date; however, the actual construction remains uncertain due to the fact that available right-of-way does not exist and Continental Plaza's current PUD does not include this access but rather assumes access via North 7th Street. This EIR does not assume construction of North 8th Street for purposes of analysis; the impact therefore remains significant.

Mitigation Measures (2013 Plus Project)

- 6.11-13 a) *Implementation of Mitigation Measure 6.11-2(a) would reduce the project impact of Scenario A to **less-than-significant**; while the project impact of Scenario B would be lessened but remain **significant and unavoidable**. Further widening 7th Street in order to fully mitigate the impact of Scenario B is infeasible because it would create an unfriendly pedestrian environment which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. After implementation of this mitigation measure, Scenario A would produce LOS C (v/c of 0.75) and Scenario B would produce LOS D (v/c of 0.88). These results are shown in Appendix N.*
- b, c) *No feasible mitigation measures were identified that would reduce the impact of the proposed project on the Richards Boulevard roadway segments. Mitigation would require increasing the number of travel lanes, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it would require acquisition of right-of-way to add vehicle lanes (typically 12 feet per lane) to increase vehicle capacity from properties not owned by the applicant. Therefore, the impacts of proposed project on roadway segments would remain **significant and unavoidable**.*

6.11-14 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E under near term conditions. These are considered *significant impacts*.

Freeway mainline operating conditions for near term conditions are summarized in Table 6.11-22. The proposed project under both Scenario A and Scenario B would add traffic to the following freeway segments that would operate at LOS F without the project and are considered ***significant impacts***.

- a) Northbound I-5 North of Richards Boulevard on-ramp (PM peak hour)
- b) Southbound I-5 North of Richards Boulevard off-ramp (AM peak hour)
- c) Northbound SR 160 at the American Bridge (PM peak hour)

Mitigation Measures (2013 Plus Project)

6.11-14 *The Traffic Study found that the impacted freeway mainline segments currently operate at LOS "F" in the Baseline Condition during the PM Peak Hour without the Project, and would continue to operate at LOS "F" in both the "Near Term Cumulative Condition (2013)" and "Long Term Cumulative Condition (2030)" both without and with the Project. Freeway mainline improvements are within the exclusive jurisdiction of Caltrans which can and should propose and adopt appropriate improvement plans that would reduce freeway mainline impacts pursuant to Public Resources Code Section 21081 and CEQA Guideline Section 15091.*

TABLE 6.11-22

FREEWAY MAINLINE OPERATIONS – NEAR TERM (YEAR 2013) CONDITIONS

Location	Without Project						Scenario A: Residential						Scenario B: Office						
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			
	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ₂ ²	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²	
Northbound I-5																			
North of J Street off-ramp	6,676	1.11	F	7,638	1.27	F	6,676	1.11	F	7,638	1.27	F	6,676	1.11	F	7,638	1.27	F	
South of Richards Blvd off-ramp	7,375	0.77	D	10,162	1.07	F	7,375	0.77	D	10,162	1.07	F	7,375	0.77	D	10,162	1.07	F	
North of Richards Blvd on-ramp	6,767	0.71	C	12,084	1.27	F	6,997	0.73	C	12,264	1.29	F	6,990	0.73	C	12,424	1.30	F	
Southbound I-5																			
North of Richards Blvd off-ramp	12,173	1.28	F	8,243	0.86	D	12,274	1.29	F	8,505	0.89	D	12,462	1.31	F	8,507	0.89	D	
South of Richards Blvd on-ramp	10,454	1.10	F	8,149	0.85	D	10,454	1.10	F	8,149	0.85	D	10,454	1.10	F	8,149	0.85	D	
North of I Street on-ramp	8,208	1.02	F	6,644	0.83	D	8,208	1.02	F	6,644	0.83	D	8,208	1.02	F	6,644	0.83	D	
Northbound SR 160																			
At the American River Bridge	2,488	0.40	B	6,916	1.11	F	2,729	0.44	B	7,104	1.14	F	2,721	0.44	B	7,272	1.17	F	
Southbound SR 160																			
At the American River Bridge	5,093	0.82	D	3,778	0.61	C	5,198	0.83	D	4,051	0.65	C	5,395	0.86	D	4,054	0.65	C	

Source: Dowling Associates, Inc., 2006.

¹ V/C = Volume / Capacity² LOS = Level of ServiceNote: **Bold** values show substandard traffic operations.

The City consulted with Caltrans prior to the preparation of this Draft EIR concerning possible mitigation measures to address impacts to the identified freeway mainline segments. The discussion focused on (1) identifying any Caltrans approved or adopted capital improvement projects that would improve access to and from Sacramento's downtown and improve the existing LOS F on the freeway mainline segments to LOS "E" or better in the Near Term (2013) and Long Term (2030), and (2) proportional share mitigation impact funding contributions to those projects as a means of addressing impacts to the highways from the Project and various other pending developments in the area.

Caltrans indicated that they have developed general cost estimates for the following projects. Though these projects are designed to address regional transportation needs that extend far beyond the downtown area, Caltrans believes they would serve to mitigate impacts from pending downtown developments and are viable:

- I-5 American River Bridge widening - two structures. Add one standard lane and re-establish standard shoulders to each structure: \$134 million.
- I-5 HOV lanes - Garden Highway to I-80 HOV lanes with direct connectors: \$300 million.
- I-5 HOV lanes - U.S. 50 Interchange to Elk Grove Blvd: \$200 million.

No preliminary improvement plans have been prepared for these proposed freeway improvements, and it is unclear what the cost estimates are based on or include.

These proposed freeway improvement projects are included in Sacramento Area Council of Governments (SACOG) existing Metropolitan Transportation Plan (MTP) for preliminary engineering and environmental only. The MTP is a long-range plan which is based on growth and travel demand projections coupled with financial projections. The MTP lists hundreds of locally and regionally important projects. It is updated every three years, at which time projects can be added or deleted. SACOG uses the plan to help prioritize projects and guide regional transportation project funding decisions. The projects included in the MTP have not gone through the environmental review process and are not guaranteed for funding or construction.

Given the status of the improvement projects identified by Caltrans and the information available at this time, the City has concluded that there is currently insufficient information and certainty on which to base a feasible and viable mitigation measure to address the Project's impacts on the identified freeway mainline segments. The proposed freeway improvement projects are not currently approved and funded. There is no fee or other funding mechanism currently in place for future funding. Furthermore, the City cannot determine either the cost of the proposed freeway improvement projects or the Project's fair share proportional contribution to the improvement projects with sufficient certainty to enable the City to develop a fee-based mitigation measure that would satisfy the legal requirements for fee-based mitigation under both CEQA (see CEQA Guidelines 15126.4) and constitutional principles that call for a nexus and rough proportionality between a project's impacts and the fee-based mitigation measure. Finally, the prospects of the proposed freeway improvements ever being constructed remains uncertain due to

funding priorities and on-going policy developments that may favor other approaches to addressing freeway congestion.

Widening the freeway mainline right of way would create adverse impacts by requiring the removal of historic buildings in the Old Sacramento District, and potentially the Crocker Art Museum, which are already situated adjacent to the existing freeway right of way; would potentially require modifications to the flood wall/levee that protects Downtown Sacramento; and would create further physical barriers between people living and working in Downtown Sacramento and the Sacramento River and the Old Sacramento District. Such new impacts from widening the freeway would not be capable of mitigation to a less than significant level and would violate City policies concerning: the preservation of the Old Sacramento District; promoting ease of pedestrian access between Downtown Sacramento and the Sacramento River; promoting ease of pedestrian access between Downtown Sacramento and the Old Sacramento District; and protecting the integrity of Sacramento's flood control system.

*Consequently, the City has been unable to identify any feasible mitigation measures that could reduce or avoid the impact of the Project on the freeway mainline segments to a less than significant level. The California Environmental Quality Act (Pub. Resources Code, §21000 et seq.) defines "feasible" for these purposes as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors (Pub. Resources Code, §21061.1). Therefore, the impacts of the proposed Project on the freeway segments would remain **significant and unavoidable**.*

6.11-15 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline under both Scenario A and Scenario B. These are considered *significant impacts*.

Freeway interchange operations under near term conditions are summarized in Table 6.11-23. The project would add traffic to freeway ramps and weaving areas and cause the interchange levels of service to be worse than freeway mainline levels of service at the following locations:

- a) Northbound I-5 Richards Boulevard on-ramp (PM peak hour under both scenarios)
- b) Southbound I-5 Richards Boulevard off-ramp (AM peak hour under Scenario A)

Mitigation Measures (2013)

6.11-15 *No feasible mitigation measures were identified that would reduce the impact of the project on I-5 freeway ramps. The freeway ramp is not under the jurisdiction of the City but is subject to Caltrans' jurisdiction. Finally, improvements to this interchange are not included in any of Caltrans' funding mechanisms. Because mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is no established funding mechanism available for contribution, mitigation is considered infeasible and the impact is considered **significant and unavoidable**.*

TABLE 6.11-23

FREEWAY INTERCHANGE OPERATIONS – NEAR TERM (YEAR 2013) CONDITIONS

Ramp	Without Project						Scenario A: Residential						Scenario B: Office					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	LOS ¹	Den ² (Flow)	Vol ³	LOS ¹	Den ² (Flow)	Vol ³	LOS ¹	Den ² (Flow)	Vol ³	LOS ¹	Den ² (Flow)	Vol ³	LOS ¹	Den ² (Flow)	Vol ³	LOS ¹	Den ² (Flow)	Vol ³
Northbound I-5																		
P Street to J St weave	D	30.12	9,162	C	26.80	8,913	D	30.64	9,244	D	28.09	9,127	D	31.63	9,398	D	28.10	9,129
Richards Blvd off-ramp	C	27.06	1,421	F	42.19	970	C	27.06	1,421	F	42.19	970	C	27.06	1,421	F	42.19	970
Richards Blvd on-ramp	C	(887)	813	F	(3155)	2,892	C	(1138)	1,043	F	(3351)	3,072	C	(1130)	1,036	F	(3526)	3,232
Southbound I-5																		
Richards Blvd off-ramp	F	29.34	2,352	C	20.33	2,043	F	29.10	2,251	B	19.70	1,781	F	29.79	2,540	C	20.33	2,045
Richards Blvd on-ramp	C	(580)	532	E	(1840)	1,687	C	(580)	532	E	(1840)	1,687	C	(580)	532	E	(1840)	1,687
I St to Q St weave	C	26.78	8,955	C	27.80	8,715	C	25.72	8,767	C	26.91	8,568	C	26.75	8,950	D	28.60	8,846

Note: **Bold** values show substandard traffic operations.

¹ LOS = Level of Service

² Den = Density; Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp.

³ Vol = Volume

Source: Dowling Associates, Inc., 2006.

6.11-16 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B at the following locations and are considered *significant impacts*.

- a) Northbound I-5 Richards Boulevard off-ramp (AM peak hour)
- b) Southbound I-5 Richards Boulevard off-ramp (AM and PM hours)

Mitigation Measures (2013 Plus Project)

6.11-16 *No feasible mitigation measures were identified that would reduce the impact of the freeway ramp queues. The freeway off-ramps are not under the jurisdiction of the City but are subject to Caltrans' jurisdiction. Finally, ramp improvements are not included in any of Caltrans' funding mechanisms. Because freeway mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is no established funding mechanism available for contribution, mitigation is considered infeasible and the impact is considered **significant and unavoidable**.*

6.11-17 The proposed project would increase demand on the public transit system. This is considered a *potentially-significant impact*.

The proposed project would increase demand for transit service under both scenarios. Scenario B would generate a higher demand during the peak hours than Scenario A. Scenario A is estimated to generate approximately 64 transit trips during the a.m. peak hour and approximately 84 trips during the p.m. peak hour; while Scenario B is estimated to generate 125 a.m. peak hour trips and 145 p.m. peak hour trips.

As RT buses would provide the only directly transit link to the project site under the baseline conditions, the demand would focus on the three RT bus routes, which offer connecting services to light rail and Amtrak trains. With 11 buses operating during each peak hour, the project would add 13 riders per bus during the p.m. peak hour under Scenario B, the period with the highest transit demand. While RT may be able to accommodate the increased ridership, the project may result in potentially significant impact.

Mitigation Measures (2013)

Compliance with Mitigation Measure 6.11-5 would help to reduce the project's impact to **a less-than-significant level**.

6.11-17 *The City shall coordinate with RT to modify its bus routes and/or frequencies to better serve the needs of the proposed project and to help fund any necessary improvements. In particular, RT may increase the frequency of Route 33, which is a neighborhood shuttle service that operates between the Richards Boulevard district and the downtown area.*

Long Term (Year 2030) Impacts and Mitigation Measures

6.11-18 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate. This is considered a *significant impact*.

The intersection operations under long term conditions are summarized in Table 6.11-24 and Table 6.11-25. The detailed worksheets for intersection level of service and queuing are provided in Appendix N.

The proposed project would increase traffic volumes at study area intersections and would cause significant impacts under long term plus project conditions at the following intersections:

- a) I-5 Northbound Ramps / Richards Boulevard (PM peak hour)
- b) Bercut Drive / Richards Boulevard (PM peak hour)
- c) N. 5th Street / Richards Boulevard (PM peak hour for Scenario B only)
- d) N. 7th Street / Richards Boulevard (AM and PM peak hours)
- e) N. 5th Street / Bannon Street (PM peak hour for Scenario B only)
- f) 7th Street / North B Street (PM peak hour for Scenario B only)
- g) 6th Street / Big Four Boulevard (AM and PM peak hours)
- h) 7th Street / Big Four Boulevard (AM and PM peak hours)
- i) 7th Street / F Street (AM and PM peak hours)
- j) 6th Street / G Street (AM and PM peak hours)
- k) 7th Street / G Street (AM peak hour for Scenario B only)
- l) 6th Street / H Street (AM and PM peak hours)
- m) 7th Street / Big Four Boulevard (AM and PM peak hours)
- n) 7th Street / F Street (AM and PM peak hours)
- o) 6th Street / G Street (AM and PM peak hours)
- p) 7th Street / G Street (AM peak hour for Scenario B only)
- q) 6th Street / H Street (AM and PM peak hours)
- r) 6th Street / I Street (AM and PM peak hours)
- s) 6th Street / J Street (PM peak hours)

TABLE 6.11-24

INTERSECTION LEVELS OF SERVICE – LONG TERM (YEAR 2030) CONDITIONS

									Mitigated			
Intersection	Traffic Control	Peak Hour	No Project		Scenario A: Residential		Scenario B: Office		Scenario A: Residential		Scenario B: Office	
			LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
				V/C ³		V/C ³		V/C ³		V/C ³		V/C ³
1. I-5 SB Ramps & Richards Blvd	Signal	AM	B	17.7	B	18.8	C	24.3	B	19.3	C	24.2
		PM	C	26.9	C	30	C	30.3	C	29.4	C	29.5
2. I-5 NB Ramps & Richards Blvd	Signal	AM	A	6.2	A	5.8	A	6	A	5.8	A	5.9
		PM	D	50.1	E	68.4	F	85.4	E	68.8	F	85.6
3. Bercut Dr & Richard Blvd	Signal	AM	B	13.3	B	13	B	13.1	B	12.7	B	12.5
		PM	D	36.7	D	49.9	E	58.5	C	21.1	C	24.8
4. N 5th Street & Richard Blvd	Signal	AM	C	24.4	C	24.3	C	23.7	C	24.7	C	24.1
		PM	C	28	C	31.2	D	35.3	C	33.5	C	21.3
5. N 7th Street & Richard Blvd	Signal	AM	C	25.1	D	36.9	D	48.9	D	36.3	D	48.5
		PM	C	21.5	D	37.6	E	68.5	C	26.3	D	45.4
6. N 10th Street & Richard Blvd	Signal	AM	C	25.8	C	25.5	C	24.9	C	25.5	C	24.9
		PM	C	28.5	C	28.4	C	28.4	C	28.4	C	30
7. Dos Rios St & N F Street	Signal	AM	C	24	C	26	C	28.4	C	25.4	C	27.7
		PM	C	24.3	C	28.6	C	28.9	C	28.9	C	28.9
9. I-5 SB Ramps & Bannon Street	Signal	AM	B	12.6	B	12.8	B	12.8	B	12.8	B	12.8
		PM	B	15.7	B	15.5	B	15.5	B	15.5	B	15.5
10. I-5 NB Ramps & Bannon Street	Signal	AM	C	25.5	C	26.9	C	28.2	C	26.9	C	28.2
		PM	C	24.7	C	22.2	C	21.1	C	22.2	C	22.5
11. Bercut Dr & Bannon Street	Signal	AM	B	13	B	12.9	B	13.2	B	13	B	13.3
		PM	B	17.5	B	16.5	B	16.3	B	16.4	B	16.5
12. N 5th Street & Bannon Street	Signal	AM	B	11.9	B	14.3	B	17.7	B	13.1	B	17.4
		PM	C	22.9	D	35.3	C	34.7	C	34.8	C	34.6

TABLE 6.11-24

INTERSECTION LEVELS OF SERVICE – LONG TERM (YEAR 2030) CONDITIONS

									Mitigated			
Intersection	Traffic Control	Peak Hour	No Project		Scenario A: Residential		Scenario B: Office		Scenario A: Residential		Scenario B: Office	
			LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²	LOS ¹	Delay ²
				V/C ³		V/C ³		V/C ³		V/C ³		V/C ³
13. N 7th Street & Bannon Street	Signal	AM	B	10.3	B	10.7	B	10.3	B	10.8	B	11.3
		PM	B	11.6	B	13.6	B	15.2	B	14.2	B	13.5
14. 6th Street Extension & North B Street	Signal	AM	B	17.4	B	16.7	B	15	B	16.3	B	15.1
		PM	B	19.2	B	19.2	C	23	C	20.2	C	22.2
15. N 7th Street & North B Street	Signal	AM	B	16.1	B	18.5	C	20.1	B	17.9	B	19.7
		PM	C	24.1	C	30.5	D	47.6	C	30.9	D	44.9
16. 12th Street & North B Street	Signal	AM	F	119.7	F	119.1	F	118.6	F	120.5	F	118.7
		PM	F	106.8	F	106.2	F	107.6	F	106.2	F	107.6
17. 6th Street & Canal Street	Signal	AM	B	17.5	B	16.9	B	15	B	17.6	B	16.9
		PM	C	23.2	C	24.3	C	22.9	C	23.5	C	22.8
18. 7th Street & Canal Street	Signal	AM	B	14.8	B	14.2	B	15.7	B	14.1	C	20.6
		PM	B	16	B	19.6	B	19	B	19.0	C	20
19. 6th Street & Big Four Blvd	Signal	AM	D	43.4	D	50.1	D	49.7	D	50.1	D	52.3
		PM	E	77.2	F	94.3	F	106	F	94.3	F	106
20. 7th Street & Big Four Blvd	Signal	AM	F	103.3	F	139.1	F	127.9	F	139.7	F	112.8
		PM	E	78.4	F	87.5	F	96.4	F	87.8	F	96.4
21. 7th Street & F Street	Signal	AM	E	77.4	F	110.6	F	134.8	F	110.6	F	134.8
		PM	F	180.3	F	229.8	F	249.6	F	229.1	F	249.6
22. 6th Street & G Street	Signal	AM	F	191.1	F	209.2	F	224.5	F	203.6	F	224.5
		PM	F	342.5	F	469.1	F	399.2	F	375.6	F	400
23. 7th Street & G Street	Signal	AM	C	31.6	C	32.7	D	37	D	35.7	D	37
		PM	D	46.3	D	42.5	D	44.9	D	41.9	D	46.7

TABLE 6.11-24

INTERSECTION LEVELS OF SERVICE – LONG TERM (YEAR 2030) CONDITIONS

									Mitigated			
Intersection	Traffic Control	Peak Hour	No Project		Scenario A: Residential		Scenario B: Office		Scenario A: Residential		Scenario B: Office	
			LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³	LOS ¹	Delay ² V/C ³
24. 6th Street & H Street	Signal	AM	F	146.6	F	157	F	182.4	F	157.9	F	182.5
		PM	F	122.3	F	157.9	F	163.5	F	154.2	F	163.4
25. 7th Street & H Street	Signal	AM	C	22.1	C	22.3	C	25.1	C	22.3	C	25.1
		PM	B	16.3	B	17.1	B	16.7	C	24.6	B	17.8
26. 6th Street & I Street	Signal	AM	F	266.5	F	323.4	F	323.5	F	317.3	F	320.5
		PM	F	434.7	F	494.1	F	517.6	F	479.3	F	517.4
27. 7th Street & I Street	Signal	AM	B	15.6	C	29.1	C	28.4	D	43.3	C	28.4
		PM	C	21.9	C	23.1	C	23.7	C	23.3	C	23.7
28. 6th Street & J Street	Signal	AM	A	6.3	B	10.7	B	10.3	B	10.2	B	10.3
		PM	F	197.9	F	234.5	F	272.3	F	240.2	F	276.7
29. 7th Street & J Street	Signal	AM	B	12.9	B	14.1	B	13.6	B	13.6	B	13.5
		PM	A	9.2	B	12.4	B	18.7	B	12.5	B	18.8
30. Dos Rios & Richards Blvd	Signal	AM	A	8.2	A	8.7	A	8	A	8.5	A	8
		PM	B	10.7	B	11.2	B	11.2	B	11.2	B	11.2
31. Richards Blvd & 12th Street	Signal	AM	B	16.2	B	16.8	B	18.8	B	16.8	B	18.8
		PM	E	56.2	E	63.9	E	72.7	E	63.9	E	72.7
32. 12th Street & Bannon Street	Signal	AM	B	18.7	B	19	B	18.9	B	19	B	19
		PM	D	43.8	D	45.8	D	50.9	D	45.8	D	50.9
33. 5th Street & Riverfront Drive	Stop	AM	A	0.5	A	0.5	A	0.5	A	0.5	A	0.5
		PM	A	0.8	A	0.8	A	1.0	A	0.8	A	1.0
34. 7th Street & Riverfront Drive	Stop	AM	A	0.5	A	0.5	A	0.5	A	0.5	A	0.5
		PM	A	1.0	A	0.8	A	1.0	A	0.8	A	1.0
35. 7th Street & New Street "A"	Roundabout	AM	A	9.2	See Table 6.11-25				See Table 6.11-26			
		PM	C	18.2								
36. Signature Street & 7th Street	Roundabout	AM	F	192.1	See Table 6.11-25				C	31.8	C	33.9
		PM	F	214.6					F	215.9	F	177.7

Note:
1 LOS = Level of Service
2 Delay = delay in seconds
3 V/C = volume/capacity ratio – for roundabout

TABLE 6.11-25

LONG TERM (YEAR 2030) WITH PROPOSED PROJECT

Long Term with Scenario A: Residential

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.47	Yes	0.53	Yes	0.01	Yes	0.11	Yes	0.01	Yes	0.15	Yes	0.59	Yes	0.38	Yes
	PM	0.42	Yes	0.75	Yes	0.01	Yes	0.10	Yes								
36. Signature Street & 7th Street	AM	0.44	Yes	0.60	Yes	0.82	Yes	0.38	Yes	0.40	Yes	0.19	Yes	0.62	Yes	0.33	Yes
	PM	0.36	Yes	0.95	NO	1.29	NO	0.77	Yes								
37. New Street "C" & New Street "B"	AM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.02	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.03	Yes	0.04	Yes	0.03	Yes	0.05	Yes	0.05	Yes	0.00	Yes	0.08	Yes	0.05	Yes
	PM	0.03	Yes	0.04	Yes	0.03	Yes	0.12	Yes								

Long Term with Scenario B: Office

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.48	Yes	0.55	Yes	0.01	Yes	0.11	Yes	0.01	Yes	0.15	Yes	0.60	Yes	0.38	Yes
	PM	0.42	Yes	0.77	Yes	0.01	Yes	0.10	Yes								
36. Signature Street & 7th Street	AM	0.52	Yes	0.76	Yes	0.98	NO	0.30	Yes	0.41	Yes	0.24	Yes	0.76	Yes	0.33	Yes
	PM	0.36	Yes	0.95	NO	1.31	NO	2.55	NO								
37. New Street "C" & New Street "B"	AM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.02	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.02	Yes	0.04	Yes	0.03	Yes	0.22	Yes	0.04	Yes	0.00	Yes	0.16	Yes	0.12	Yes
	PM	0.11	Yes	0.08	Yes	0.03	Yes	0.11	Yes								

TABLE 6.11-26

LONG TERM (YEAR 2030) WITH PROPOSED PROJECT (MITIGATED)

Long Term with Scenario A: Residential

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.47	Yes	0.53	Yes	0.01	Yes	0.11	Yes	0.01	Yes	0.15	Yes	0.59	Yes	0.38	Yes
	PM	0.42	Yes	0.75	Yes	0.01	Yes	0.10	Yes								
37. New Street "C" & New Street "B"	AM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.02	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.03	Yes	0.04	Yes	0.03	Yes	0.05	Yes	0.05	Yes	0.00	Yes	0.08	Yes	0.05	Yes
	PM	0.03	Yes	0.04	Yes	0.03	Yes	0.12	Yes								

Long Term with Scenario B: Office

Roundabout	Peak Hour	Entry Lane								Exit Lane							
		North Leg		West Leg		South Leg		East Leg		North Leg		West Leg		South Leg		East Leg	
		V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?	V/C	LOS C or better?
35. 7th Street & New Street "A"	AM	0.48	Yes	0.55	Yes	0.01	Yes	0.11	Yes	0.01	Yes	0.15	Yes	0.60	Yes	0.38	Yes
	PM	0.42	Yes	0.77	Yes	0.01	Yes	0.10	Yes								
37. New Street "C" & New Street "B"	AM	0.01	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.00	Yes	0.01	Yes	0.00	Yes	0.00	Yes
	PM	0.02	Yes	0.00	Yes	0.00	Yes	0.00	Yes								
38. New Street "C" & Signature Street	AM	0.02	Yes	0.04	Yes	0.03	Yes	0.22	Yes	0.04	Yes	0.00	Yes	0.16	Yes	0.12	Yes
	PM	0.11	Yes	0.08	Yes	0.03	Yes	0.11	Yes								

- t) Richards Boulevard /12th Street (PM peak hour)
- u) 12th Street / Bannon Street (PM peak hour for Scenario B only)
- v) 7th Street / Signature Street (AM peak hour for Scenario B only and PM peak hour for both scenarios)

7th Street / Signature Street

As described under Baseline Condition Impact 6.11-1(l), the proposed roundabout at the 7th Street and Signature Street intersection is deemed infeasible and it is recommended to be replaced by a traffic signal. Additionally, the construction of a new north-south street (North 8th Street) mid-block between North 7th Street and North 10th Street along the old Southern Pacific railroad right-of-way, as an access to the future development of Continental Plaza Phase III and IV, would reduce the amount of traffic on 7th Street. If North 8th Street were constructed with signalized access to Richards Boulevard and Bannon Street, the level of service under Scenario A would be reduced to LOS C (24.1 seconds delay) in the a.m. peak hour and LOS C (23.3 seconds delay) in the p.m. peak hour; and the level of service under Scenario B would be reduced to LOS C (31.2 seconds delay) in the a.m. peak hour and LOS C (29.5 seconds delay) in the p.m. peak hour. These results are shown in Appendix N. The City anticipates that North 8th Street may be constructed at a future date, however the actual construction remains uncertain due to the fact that available right-of-way does not exist and Continental Plaza's current PUD does not include this access but rather assumes access via North 7th Street. This EIR does not assume construction of North 8th Street for purposes of analysis; the impact therefore remains significant.

Mitigation Measures (2030)

- 6.11-18 a) *At the I-5 northbound ramps / Richards Boulevard intersection, optimizing signal timing would lessen the project impact; therefore the applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard. To fully mitigate the project impact would require widening of the freeway on-ramp and acquisition of right-of-way, which is under Caltrans jurisdiction and beyond the capability of the project. Therefore, the project impact would remain **significant and unavoidable** under both Scenario A and Scenario B.*
- b) *At the Bercut Drive / Richards Boulevard intersection, under both Scenario A and Scenario B, the City shall install, or cause to be installed, one westbound through lane to provide one left-turn lane, four through lanes and one combination through-right lane; and optimize signal timing. The City has included the cost of this improvement in its approved Richards Boulevard Area Plan and Facility Element and the project applicant shall provide "fair-share" funding for this improvement through payment of traffic impact fees. The applicant's fair share contribution shall be calculated pro rata, on a per unit and/or square foot basis, based upon the land uses identified in development applications submitted to the City. The fair share contribution shall be paid to the City prior to the issuance of building permits.*

The Richards Boulevard Area Plan and Facility Element is currently being updated, and it is anticipated that the City Council will consider the update in late 2007/early 2008. Because the update is currently in progress, the specific amount of the

applicant's fair share contribution is uncertain. The project applicant's fair share contribution shall be determined based on the Richards Boulevard Area Plan and Facility Element in place as building permits are issued for each building.

With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS B (12.7 seconds delay) in the a.m. peak hour and LOS C (21.1 seconds delay) in the p.m. peak hour, thus reducing the impact to **less than significant**; and the level of service under Scenario B would be reduced to LOS B (12.5 seconds delay) in the a.m. peak hour and LOS C (24.8 seconds delay) in the p.m. peak hour thus reducing impact to **less than significant**. These results are shown in Table 6.11-24.

- c) At the N. 5th Street / Richards Boulevard intersection, under Scenario B, the applicant shall dedicate right-of-way and construct an additional one westbound through lane to provide one left-turn lane, four through lanes and one combination through-right lane; and optimize signal timing. The applicant shall also dedicate sufficient right-of-way and construct an expanded intersection to the City of Sacramento Standards.

With implementation of this mitigation measure, the level of service under Scenario B would be reduced to LOS C (24.1seconds delay) in the a.m. peak hour and LOS C (21.3 seconds delay) in the p.m. peak hour thus reducing impact to **less than significant**. These results are shown in Table 6.11-26.

However, the implementation of Mitigation Measure 6.11-18(d) at 7th Street/Richards Boulevard would create a downstream secondary impact at the N. 5th Street/Richards Boulevard intersection during the p.m. peak hour under Scenario A, where the level of service would degrade to LOS E. The secondary impact may be mitigated by implementing Mitigation Measure 6.11-18(c) and modifying the signal phasing splits during the p.m. peak hour, which would reduce the secondary impact to a **less-than-significant level**. With implementation of this measure, the level of service under Scenario A would be reduced to LOS C (24.7 seconds delay) in the a.m. peak hour and LOS D (33.5 seconds delay) in the p.m. peak hour. These results are shown in Table 6.11-26. These mitigation measures shall be implemented by the applicant.

- d) At the N. 7th Street / Richards Boulevard intersection, under both Scenario A and Scenario B, the applicant shall dedicate right-of-way for and construct one westbound through lane to provide one left-turn lane, four through lanes and one right-turn lane; and optimize signal timing.

With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS D (36.3 seconds delay) in the a.m. peak hour and LOS C (26.3 seconds delay) in the p.m. peak hour, thus reducing the impact to **less than significant** during the p.m. peak hour while the impact during the a.m. peak hour remains **significant and unavoidable**; and the level of service under Scenario B would be reduced to LOS D (48.5 seconds delay) in the a.m. peak hour and LOS D (45.4 seconds delay) in the p.m. peak hour thus the impact remains **significant and unavoidable** during both peak hours. These results are shown in Table 6.11-26.

- e) At the N. 5th Street / Bannon Street intersection, under Scenario B during the p.m. peak hour, the City shall optimize signal timing in order to improve vehicle progression. Implementation of this measure would mitigate the project impact to a **less-than-significant level**. The applicant shall pay a fair share toward the City of Sacramento traffic operations center for the re-timing and monitoring of the signal to improve vehicle progression along Richards Boulevard.
- f) At the 7th Street / North B Street intersection, under both Scenario A and Scenario B, mitigating the project impact would entail widening of the roadways, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way (typically 12 feet per lane) and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant; hence the impact would remain **significant and unavoidable**.
- g) At the 6th Street / Big Four Boulevard intersection, mitigating the project impact would entail widening the roadways, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane). These improvements are beyond the capability of the project and not controlled by the project applicant; hence the impact would remain **significant and unavoidable**.
- h) At the 7th Street / Big Four Boulevard intersection, under both Scenario A and Scenario B, mitigating the project impact would require widening 7th Street which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant; hence the impact would remain **significant and unavoidable**.
- i) At the 7th Street / F Street intersection, under both Scenario A and Scenario B, mitigating project impact would entail widening the roadways beyond the road width found in downtown which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets, walkable communities and the Smart Growth polices. Additionally, it will require acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane). These improvements are beyond the capability of the project and not controlled by the project applicant; hence, the impact would remain **significant and unavoidable**.
- j) At the 6th Street / G Street intersection, under both Scenario A and Scenario B, mitigating project impact would entail widening the roadways beyond the road width found in downtown and necessitate acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) which is beyond the capability of the project and not controlled by the project applicant. Further, a wide roadway is in opposition of the City's goal of providing a

*pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*

- k) *At the 7th Street / G Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the road width found in downtown and necessitate acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) which is not controlled by the project applicant. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*
- l) *At the 6th Street / H Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the road width found in downtown and necessitate acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) which is beyond the control of the project applicant. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*
- m) *At the 6th Street / I Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the road width found in downtown and necessitate acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane). Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*
- n) *At the 6th Street / J Street intersection, under both Scenario A and Scenario B, mitigating project impact would require widening the roadways beyond the road width found in downtown and necessitate acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) which is beyond the control of the project applicant. Further, a wide roadway is in opposition of the City's goal of providing a pedestrian-friendly and walkable community. Hence, the impact would remain **significant and unavoidable**.*
- o) *At the Richards Boulevard / 12th Street intersection, mitigating the project impact would require widening of 12th Street, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant; hence the impact would remain **significant and unavoidable**.*
- p) *At the 12th Street / Bannon Street intersection, mitigating the project impact would require widening of 12th and Bannon Streets, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth polices. Additionally, it will require acquisition of right-of-way for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane) and/or relocation of light rail. These improvements are beyond the*

capability of the project and not controlled by the project applicant; hence the impact would remain **significant and unavoidable**.

- q) At the 7th / Signature Street intersection, the applicant shall implement Mitigation Measure 6.11-1(l) and add one westbound left-turn lane to provide two left-turn lanes and one through-right lane. With implementation of this mitigation measure, the level of service under Scenario A would be reduced to LOS C (31.8 seconds delay) in the a.m. peak hour and LOS F (215.9 seconds delay) in the p.m. peak hour, thus the impact would remain **significant and unavoidable**; and the level of service under Scenario B would be reduced to LOS C (33.9 seconds delay) in the a.m. peak hour and LOS F (177.7 seconds delay) in the p.m. peak hour, thus the impact would be reduced to **less than significant** during the a.m. peak hour but the impact during the p.m. peak hour would remain **significant and unavoidable**. These results are shown in Table 6.11-26. To fully mitigate the project impact would require further widening of 7th Street north of Signature Street for additional vehicle travel lanes to increase the capacity of the intersection (typically 12 feet per lane), which would be inconsistent with the goals and objectives of the project to create a pedestrian-friendly street that features a linear park and interpretive walkway down the median of 7th Street, with landscaping and amenities to encourage street life.

6.11-19 The proposed project would add traffic to the study roadway segments that results in substandard levels of service. This is considered a *significant impact*.

As shown in Table 6.11-27, the proposed project would result in additional traffic to all the study roadway segments and would degrade the operations to substandard levels on the following segments and are considered **significant impacts**:

- a) North 5th Street north of Richards Boulevard would degrade to LOS E under Scenario B;
- b) North 7th Street north of Richards Boulevard would operate in the LOS F range with or without project added traffic but the project under both scenarios would increase the V/C ratio by 0.02 or more;
- c) Richards Boulevard east of Bercut Drive would operate in the LOS E range without the project and under Scenario A and in the LOS F range under Scenario B. The project under both scenarios would increase the V/C ratio by 0.02 or more;
- d) Bannon Street east of Bercut Drive would operate at LOS D without the project. The project added traffic would cause the segment to deteriorate to the LOS F range under both scenarios and would increase the V/C ratio by 0.02 or more;
- e) Bannon Street east of Dos Rios Street would operate at LOS D with and without project added traffic under both scenarios but the project added traffic would cause the V/C ratios to increase by 0.02 or more.

TABLE 6.11-27

ROADWAY LEVELS OF SERVICE – YEAR 2030 LONG TERM CONDITIONS

Roadway Segment	Lanes	Year 2030 No Project			Scenario A: Residential			Scenario B: Office		
		ADT	LOS	V/C	ADT	LOS	V/C	ADT	LOS	V/C
N. 5 th Street north of Richards Boulevard	2	5330	A	0.36	9,860	B	0.66	13,740	E	0.92
N. 7 th Street north of Richards Boulevard	2	18420	F	1.23	26,160	F	1.74	26,170	F	1.74
Richards Boulevard east of Bercut Drive	4	33,730	E	0.94	35,530	E	0.99	37,130	F	1.03
Bannon Street east of Bercut Drive	4	32,400	D	0.90	33,410	E	0.93	35,290	E	0.98
Richards Boulevard east of Dos Rios Drive	4	13,410	A	0.37	14,270	A	0.40	16,800	A	0.47
Bannon Street east of Dos Rios Drive	4	28,960	D	0.80	29,730	D	0.83	31,270	D	0.87

Notes:
ADT = Averaged daily traffic
LOS = Level of service
V/C = Volume/Capacity
Source: Dowling Associates, Inc., 2006.

Effect of constructing new local street, North 8th Street

The construction of a new north-south street (North 8th Street), mid-block between North 7th Street and North 10th Street along the old Southern Pacific railroad right-of-way as an access to the future development of Continental Plaza Phase III and IV, would reduce the amount of traffic on 7th Street. If North 8th Street were constructed with signalized access to Richards Boulevard and Bannon Street, Scenario A would produce LOS A (v/c of 0.38) and Scenario B would produce LOS A (v/c of 0.54). These results are shown in Appendix N. The City anticipates that North 8th Street may be constructed at a future date; however, the actual construction remains uncertain due to the fact that available right-of-way does not exist and Continental Plaza's current PUD does not include this access but rather assumes access via North 7th Street. This EIR does not assume construction of North 8th Street for purposes of analysis; the impact therefore remains *significant*.

Mitigation Measures (2030)

- 6.11-19 a) *Widening of 5th Street to provide two travel lanes per direction would reduce the project impact of Scenario B to a **less-than-significant level**.*
- b) *Under both Scenario A and Scenario B, widening of 7th Street to provide two travel lanes per direction between Richards Boulevard and Signature Street would improve the roadway operations but the impacts of the 7th Street roadway segment would remain **significant and unavoidable**. As described in Mitigation Measure 6.11-12(a), further widening of 7th Street would necessitate acquisition of right-of-way and would create an unfriendly pedestrian environment. After implementation of this mitigation measure, Scenario A would produce LOS D (v/c of 0.87) and Scenario B would produce LOS D (v/c of 0.87). These results are shown in Appendix N.*
- c) *Under both Scenario A and Scenario B, no feasible mitigation measure was identified that would reduce the impact of the proposed project on the Richards Boulevard roadway segments. Mitigation would require increasing the number of travel lanes to increase the capacity of the intersection (typically 12 feet per lane), which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth policies.*

*Additionally, it will require acquisition of right-of-way and/or relocation of light rail. These improvements are beyond the capability of the project and not controlled by the project applicant. Therefore, the impacts of proposed project on roadway segments would remain **significant and unavoidable**.*

- d, e) *Under both Scenario A and Scenario B, no feasible mitigation measure was identified that would reduce the impact of the proposed project on the Bannon Street roadway segments. Mitigation would require increasing the number of travel lanes, which would be inconsistent with the City of Sacramento goals and objectives to create pedestrian-friendly streets and the Smart Growth policies. Additionally, it will require acquisition of right-of-way. These improvements are beyond the capability of the project and not controlled by the project applicant. Therefore, the impacts of proposed project on roadway segments would remain **significant and unavoidable**.*

6.11-20 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E under near term conditions. These are considered *significant impacts*.

Freeway mainline operating conditions for long term conditions are summarized in Table 6.11-28. The proposed project under both Scenario A and Scenario B would add traffic to the following freeway segments that would operate in the LOS F range with or without project added traffic:

- (a) Northbound I-5 North of Richards Boulevard on-ramp (PM peak hour)
- (b) Southbound I-5 North of Richards Boulevard off-ramp (AM and PM peak hours)
- (c) Northbound SR 160 at the American Bridge (PM peak hour)

Mitigation Measures (2030)

- 6.11-20 *The Traffic Study found that the impacted freeway mainline segments currently operate at LOS "F" in the Baseline Condition during the PM Peak Hour without the Project, and would continue to operate at LOS "F" in both the "Near Term Cumulative Condition (2013)" and "Long Term Cumulative Condition (2030)" both without and with the Project. Freeway mainline improvements are within the exclusive jurisdiction of Caltrans which can and should propose and adopt appropriate improvement plans that would reduce freeway mainline impacts pursuant to Public Resources Code Section 21081 and CEQA Guideline Section 15091.*

The City consulted with Caltrans prior to the preparation of this Draft EIR concerning possible mitigation measures to address impacts to the identified freeway mainline segments. The discussion focused on (1) identifying any Caltrans approved or adopted capital improvement projects that would improve access to and from Sacramento's downtown and improve the existing LOS F on the freeway mainline segments to LOS "E" or better in the Near Term (2013) and Long Term (2030), and (2) proportional share mitigation impact funding contributions to those projects as a means of addressing impacts to the highways from the Project and various other pending developments in the area.

TABLE 6.11-28

FREEWAY MAINLINE OPERATIONS – LONG TERM (YEAR 2030) CONDITIONS

Location	Without Project						Scenario A: Residential						Scenario B: Office					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²	Vol	V/C ¹	LOS ²
Northbound I-5																		
North of J Street off-ramp	8,451	1.40	F	9,239	1.53	F	8,451	1.40	F	9,239	1.53	F	8,451	1.40	F	9,239	1.53	F
South of Richards Blvd off-ramp	9,461	0.99	E	12,370	1.30	F	9,461	0.99	E	12,370	1.30	F	9,461	0.99	E	12,370	1.30	F
North of Richards Blvd on-ramp	9,137	0.96	E	14,416	1.51	F	9,367	0.98	E	14,596	1.53	F	9,360	0.98	E	14,756	1.55	F
Southbound I-5																		
North of Richards Blvd off-ramp	15,282	1.60	F	11,469	1.20	F	15,383	1.61	F	11,731	1.23	F	15,571	1.63	F	11,733	1.23	F
South of Richards Blvd on-ramp	13,070	1.37	F	11,223	1.18	F	13,070	1.37	F	11,223	1.18	F	13,070	1.37	F	11,223	1.18	F
North of I Street on-ramp	9,933	1.24	F	9,082	1.13	F	9,933	1.24	F	9,082	1.13	F	9,933	1.24	F	9,082	1.13	F
Northbound SR 160																		
At the American River Bridge	3,552	0.43	B	9,250	1.11	F	3,793	0.46	B	9,439	1.13	F	3,786	0.46	B	9,605	1.15	F
Southbound SR 160																		
At the American River Bridge	5,929	0.71	C	5,214	0.63	C	6,034	0.73	C	5,488	0.66	C	6,231	0.75	D	5,490	0.66	C

Source: Dowling Associates, Inc., 2006.

¹ V/C = Volume / Capacity

² LOS = Level of Service

Note: **Bold** values show substandard traffic operations.

Caltrans indicated that they have developed general cost estimates for the following projects. Though these projects are designed to address regional transportation needs that extend far beyond the downtown area, Caltrans believes they would serve to mitigate impacts from pending downtown developments and are viable:

- o I-5 American River Bridge widening - two structures. Add one standard lane and re-establish standard shoulders to each structure: \$134 million.*
- o I-5 HOV lanes - Garden Highway to I-80 HOV lanes with direct connectors: \$300 million.*
- o I-5 HOV lanes - U.S. 50 Interchange to Elk Grove Blvd: \$200 million.*

No preliminary improvement plans have been prepared for these proposed freeway improvements, and it is unclear what the cost estimates are based on or include.

These proposed freeway improvement projects are included in Sacramento Area Council of Governments (SACOG) existing Metropolitan Transportation Plan (MTP) for preliminary engineering and environmental only. The MTP is a long-range plan which is based on growth and travel demand projections coupled with financial projections. The MTP lists hundreds of locally and regionally important projects. It is updated every three years, at which time projects can be added or deleted. SACOG uses the plan to help prioritize projects and guide regional transportation project funding decisions. The projects included in the MTP have not gone through the environmental review process and are not guaranteed for funding or construction.

Given the status of the improvement projects identified by Caltrans and the information available at this time, the City has concluded that there is currently insufficient information and certainty on which to base a feasible and viable mitigation measure to address the Project's impacts on the identified freeway mainline segments. The proposed freeway improvement projects are not currently approved and funded. There is no fee or other funding mechanism currently in place for future funding. Furthermore, the City cannot determine either the cost of the proposed freeway improvement projects or the Project's fair share proportional contribution to the improvement projects with sufficient certainty to enable the City to develop a fee-based mitigation measure that would satisfy the legal requirements for fee-based mitigation under both CEQA (see CEQA Guidelines 15126.4) and constitutional principles that call for a nexus and rough proportionality between a project's impacts and the fee-based mitigation measure. Finally, the prospects of the proposed freeway improvements ever being constructed remains uncertain due to funding priorities and on-going policy developments that may favor other approaches to addressing freeway congestion. Widening the freeway mainline right of way would create adverse impacts by requiring the removal of historic buildings in the Old Sacramento District, and potentially the Crocker Art Museum, which are already situated adjacent to the existing freeway right of way; would potentially require modifications to the flood wall/levee that protects Downtown Sacramento; and would create further physical barriers between people living and working in Downtown Sacramento and the Sacramento River and the Old Sacramento District. Such new impacts from widening the freeway would not be capable of mitigation to a less than significant level and would violate City policies concerning: the preservation of the

Old Sacramento District; promoting ease of pedestrian access between Downtown Sacramento and the Sacramento River; promoting ease of pedestrian access between Downtown Sacramento and the Old Sacramento District; and protecting the integrity of Sacramento's flood control system.

*Consequently, the City has been unable to identify any feasible mitigation measures that could reduce or avoid the impact of the Project on I-5 freeway or SR 160 mainline segments to a less than significant level. The California Environmental Quality Act (Pub. Resources Code, §21000 et seq.) defines "feasible" for these purposes as capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors (Pub. Resources Code, §21061.1). Therefore, the impacts of the proposed Project on the three I-5 freeway segments would remain **significant and unavoidable**.*

- 6.11-21 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline under both Scenario A and Scenario B. These are considered *significant impacts*.**

Freeway interchange operations under long term conditions are summarized in Table 6.11-29. The project under Scenario A and Scenario B would add traffic to freeway ramps and weaving areas and cause the interchange levels of service to be worse than freeway mainline levels of service at the following locations:

- (a) Northbound I-5 P Street to J Street weave (AM peak hour)
- (b) Northbound I-5 Richards Boulevard on-ramp (PM peak hour)
- (c) Southbound I-5 Richards Boulevard off-ramp (AM peak hour)

Mitigation Measures (2030)

- 6.11-21** *No feasible mitigation measures were identified that would reduce the impact of the project on I-5 freeway ramp and weaving areas. The freeway is not under the jurisdiction of the City but is subject to Caltrans' jurisdiction. Improvements to this interchange are not included in any of Caltrans' funding mechanisms. Because mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is no established funding mechanism available for contribution, mitigation is considered infeasible and the impact is considered **significant and unavoidable**.*

- 6.11-22 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B at the following locations and are considered *significant impacts*.**

- (a) Northbound I-5 Richards Boulevard off-ramp (AM and PM peak hour)
- (b) Southbound I-5 Richards Boulevard off-ramp (AM and PM hours)

TABLE 6.11-29

FREEWAY INTERCHANGE OPERATIONS – LONG TERM (YEAR 2030) CONDITIONS

Ramp	Without Project						Scenario A: Residential						Scenario B: Office					
	AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour			AM Peak Hour			PM Peak Hour		
	LOS ¹	Den ²	Vol ³	LOS ¹	Den ²	Vol ³	LOS ¹	Den ²	Vol ³	LOS ¹	Den ²	Vol ³	LOS ¹	Den ²	Vol ³	LOS ¹	Den ²	Vol ³
	(Flow)			(Flow)			(Flow)			(Flow)			(Flow)			(Flow)		
Northbound I-5																		
P Street to J St weave	E	42.41	11,783	E	35.76	10,883	F	44.12	12,019	E	37.23	11,099	F	44.12	12,019	E	37.23	11,099
Richards Blvd off-ramp	E	35.84	1,782	F	53.75	1,437	E	35.84	1,782	F	53.75	1,437	E	35.84	1,782	F	53.75	1,437
Richards Blvd on-ramp	D	(1591)	1,458	F	(3800)	3,483	E	(1841)	1,688	F	(3996)	3,663	E	(1834)	1,681	F	(4171)	3,823
Southbound I-5																		
Richards Blvd off-ramp	F	36.52	3,138	F	27.41	2,385	F	36.77	3,239	F	28.04	2,647	F	36.77	3,239	F	28.04	2,647
Richards Blvd on-ramp	C	(1010)	926	F	(2333)	2,139	C	(1010)	926	F	(2333)	2,139	C	(1010)	926	F	(2333)	2,139
I St to Q St weave	D	32.77	10,527	E	35.20	10,966	D	33.92	10,710	E	37.03	11,244	D	33.92	10,710	E	37.03	11,244
Source: Dowling Associates, Inc., 2006.																		
¹ LOS = Level of Service																		
² Den = Density; Numbers with decimals indicate the density of passenger vehicles per mile per lane in the merge or diverge area. Whole numbers indicate the ramp flow rate in passenger car equivalents where a lane is added to the freeway at an on-ramp.																		
³ Vol = Volume																		
Note: Bold values show substandard traffic operations.																		

Mitigation Measures (2030)

6.11-22 *No feasible mitigation measures were identified that would reduce the impact of the freeway ramp queues. The freeway ramps are not under the jurisdiction of the City but subject to Caltrans' jurisdiction. Improvements to these ramps are not included in any of Caltrans' funding mechanisms. Because mitigation is beyond the control of the project applicant, outside the jurisdiction of the City, and there is no established funding mechanism available for contribution, mitigation is considered infeasible and the impact is considered **significant and unavoidable**.*

6.11-23 The proposed project would increase demand on the public transit system. This is considered a *potentially-significant impact*.

The proposed project would increase demand for transit service under both scenarios. Scenario B would generate a higher demand during the peak hours than Scenario A. Scenario A is estimated to generate approximately 64 transit trips during the a.m. peak hour and approximately 84 trips during the p.m. peak hour; while Scenario B is estimated to generate 125 a.m. peak hour trips and 145 p.m. peak hour trips.

As RT buses would provide the only directly transit link to the project site under the baseline conditions, the demand would focus on the three RT bus routes, which offer connecting services to light rail and Amtrak trains. With 11 buses operating during each peak hour, the project would add 13 riders per bus during the p.m. peak hour under Scenario B, the period with the highest transit demand. While RT may be able to accommodate the increased ridership, the project may result in a potentially significant impact.

Mitigation Measures (2030)

Compliance with Mitigation Measure 6.11-5 would help to reduce the project's impact to **a less-than-significant level**.

6.11-23 *The City shall work with RT to modify its bus routes and/or frequencies to better serve the needs of the proposed project and to help fund any necessary improvements. In particular, RT should increase the frequency of Route 33, which is a neighborhood shuttle service that operates between the Richards Boulevard district and the downtown area.*

6.11-24 The project construction would increase traffic volumes in the project area and involve the use of large construction equipment and vehicles that could result in traffic hazards. This is considered a *potentially significant impact*.

Construction activities associated with the proposed project could result in temporary (though significant) disruptions in traffic conditions along project area roadways. Disruptions could include, but are not limited to, inconveniences associated with temporary roadway closures, temporary traffic congestion from slow moving construction vehicles and equipment and blocked access for emergency vehicles. Construction traffic would include construction worker commute trips, delivery of construction equipment, haul truck trips, delivery trips and other associated trips. The project applicant has not provided any details regarding the exact extent of construction equipment or workers or how the site would be accessed and staged during construction. This would be a **potentially significant impact**.

Mitigation Measure

Compliance with Mitigation Measure 6.11-24 would reduce the project's impact to a ***less-than-significant level***.

6.11-24 *Prior to the issuance of grading permits for the Town Ship 9 project, the project applicant shall prepare a Construction Management Plan that will address construction traffic and ensure acceptable and safe operating conditions on project area roadways. This Plan shall be reviewed and approved by the City and any other affected agency and will contain the following (at a minimum):*

- *Identification of the anticipated mix of construction equipment and vehicles and their proposed staging location.*
- *Number of truck trips and the daily schedule of truck trips entering and leaving the site. Truck trips shall be scheduled outside the AM and PM peak hours of traffic.*
- *Identification of measures to maintain safe vehicular, pedestrian and bicycle movements in the project area.*
- *Maintenance of access for emergency vehicles in the project area.*
- *Provision of manual traffic control (if required).*
- *Clear demarcation of construction areas along project roadways.*
- *Provision of this plan 14 days prior to the commencement of construction.*

7.0 ALTERNATIVES

INTRODUCTION

The purpose of this chapter is to identify and describe alternatives to the proposed project. Project alternatives are developed to reduce or eliminate the significant or potentially significant adverse environmental effects identified as a result of the proposed project, while still meeting most if not all of the basic project objectives.

California Environmental Quality Act Requirements

An EIR must evaluate a reasonable range of alternatives to the proposed project, or to the location of the proposed project that could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines, Section 15126.6). An EIR need not evaluate the environmental effects of alternatives in the same level of detail as the proposed project, but must include enough information to allow meaningful evaluation, analysis, and comparison with the proposed project. The CEQA Guidelines provide the following language for discussing alternatives to a proposed project:

The specific alternative of the “no project” shall also be evaluated along with its impacts....If the environmentally superior alternative is the “no project” alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines, Section 15126.6 subd.(e)(2)).

The discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the proposed objectives, or would be more costly (CEQA Guidelines, Section 15126.6 subd.(b)).

If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines, Section 15126.6 subd.(d)).

The range of 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 range of feasible alternatives shall be selected and discussed in a manner to foster meaningful public participation and informed decision making....An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative (CEQA Guidelines, Section 15126.6 subd.(f)).

The requirement that an EIR evaluate alternatives to the proposed project or alternatives that address the location of the proposed 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 proposed project. The EIR need examine in detail only the alternatives that could feasibly attain most of the basic objectives of the project. The Public Resources Code and the CEQA Guidelines direct that the EIR need “set forth only those alternatives necessary to permit a reasoned choice.” The CEQA Guidelines provide a definition for “a range of reasonable alternatives” and, thus, limit the number and type of alternatives that need to be evaluated in a given EIR. According to the CEQA Guidelines (Section 15126.6 (b)):

The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project.

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, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (CEQA Guidelines, Section 15126.6 (f)(1)).

Finally, an EIR is not required to analyze alternatives when the effects of the alternative “cannot be reasonably ascertained and whose implementation is remote and speculative” (Section 15126.6 (f)(2)(3)).”

The selection of alternatives takes into account the project objectives provided in Chapter 2 (Project Description). The project objectives are listed below.

- Create a transit-oriented, pedestrian-friendly, mixed-use, live-work development that is a logical extension of the downtown area north to the American River;
- Incorporate a riverfront park and river trail into the project to enhance both the project’s and City’s goals of increasing public use and enhancing the appearance of the riverfront;
- Integrate employment opportunities with residential neighborhoods of varying unit densities throughout the project area;
- Create a residential development near the major employment centers of downtown Sacramento;
- Provide for construction of a transit line and Richards Boulevard Light Rail Station along the planned Downtown-Natomas-Airport (DNA) light rail transit line with densities that would support the feasibility of a light rail line;
- Design a project that promotes using various modes of transportation by locating high-density residential development within a quarter-mile of the proposed light rail station;
- Develop the project site in a manner consistent with and supportive of Sacramento Area Council of Government’s (SACOG’s) Blueprint plan;
- Provide neighborhood and community retail near residential development to shorten or reduce the number of vehicle trips;
- Incorporate urban parks, plazas and open space into the project design in a manner that provides community connectivity;
- Make efficient and economically viable use of an infill development opportunity;
- Ensure adequate, timely, and cost-effective public services for the project; and
- Site housing and other adjacent mixed uses to capture maximum orientation to the river and to the riverfront open space.

The City has developed the following objectives for the proposed project:

- Stimulate planned development along the waterfront, in turn creating a more inviting and safer waterfront environment for its residents;
- Increase office and retail job opportunities in the City and the residential component that accompanies such jobs;
- Provide and encourage public access to the American River waterfront; and
- Enhance the City's supply of housing that provides a range of housing opportunities available to residents from a wide range of economic levels.

Equally important to attaining the project objectives is the reduction of some or all significant impacts, particularly those that could not be mitigated to a level below the threshold of significance. The project-specific and cumulative significant and unavoidable impacts of the proposed project, after mitigation, are identified below.

Project-Specific Significant and Unavoidable Impacts

Impact Number

- 6.2-3 Activities associated with the operation of the proposed project would generate emissions of particulate matter.
- 6.4-1 The proposed project could cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5.
- 6.8-1 Construction of the proposed project would temporarily expose existing receptors to increased noise levels.
- 6.8-2 Ground-borne vibration from construction activity could cause structural damage.
- 6.11-1 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.
- 6.11-2 The proposed project would add traffic to the study roadway segments that result in substandard levels of service.
- 6.11-3 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E.
- 6.11-4 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline.
- 6.11-5 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.

Cumulative Significant and Unavoidable Impacts

- 6.2-7 Operation of the proposed project would contribute to emissions of ozone precursors.
- 6.2-9 Operational activities associated with the proposed project would contribute to cumulative levels of particulate matter in the vicinity of the project site.

- 6.4-3 The proposed project, in combination with other development in the City of Sacramento, could cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5.
- 6.11-12 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.
- 6.11-13 The proposed project would add traffic to the study roadway segments.
- 6.11-14 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E under near term conditions.
- 6.11-15 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline under both Scenario A and Scenario B.
- 6.11-16 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.
- 6.11-18 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.
- 6.11-19 The proposed project would add traffic to the study roadway segments that results in substandard levels of service.
- 6.11-20 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E under near term conditions.
- 6.11-21 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline under both Scenario A and Scenario B.
- 6.11-22 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.

ALTERNATIVES CONSIDERED AND DISMISSED FROM FURTHER CONSIDERATION

Consistent with CEQA, primary consideration was given to alternatives that would reduce significant impacts while still meeting most of the project objectives. Those alternatives that would have impacts identical to or more severe than the proposed project, or that would not meet most of the project objectives, were rejected from further consideration. The alternatives included in this chapter were derived after the establishment of significance thresholds for those issue areas with significant and unavoidable impacts, which are operational air emissions, construction and operational noise, historical resources, and traffic. Alternatives that would exceed the significance thresholds for the aforementioned issue areas would not substantially lessen any significant environmental impacts identified in Chapter 6 of the EIR and were rejected from further analysis. The following alternatives were considered but rejected from further analysis because they were determined to be infeasible.

- **Historical Resources Alternative – Total Preservation:** This alternative would include total preservation of the Bercut-Richards cannery complex, which qualifies as an historical resource under CEQA. Under this alternative the 12 buildings that contribute to the property's historical significance (Buildings 1 to 12) would be retained and

rehabilitated for contemporary use. The buildings would have a mix of residential and commercial uses. This alternative would also entail new construction on other portions of the property and in non-contributing portions of the historically significant buildings. This new construction would be designed and built in a manner that would not diminish the historic integrity of the property. This alternative would not cause substantial adverse change in the significance of the historical resource and thus would not be considered a significant effect on the environment because the significance of the historical resource would not be materially impaired. Preservation of these buildings would likely be infeasible due in part to the fact that most of the buildings are in poor condition and would require extensive rehabilitation.

- **Historical Resources Alternative – Preservation of Building 1:** This alternative would include preservation of Building 1 of the Bercut-Richards cannery complex, which qualifies as an historical resource under CEQA. Under this alternative, Building 1 would be retained and rehabilitated for contemporary use. The building would serve a mix of residential and commercial uses. While the cannery complex as a whole is considered an historical resource under CEQA and none of the buildings in the complex appear to be individually eligible for listing on a local, state, or national register,¹ Building 1 was recommended for review by the City of Sacramento Historic Preservation Director based on information provided by JRP Historical Consulting. Building 1 was selected because it historically represented the public facade of the Bercut-Richards cannery complex and is one of the more representative buildings within the cannery resource. A preserved and rehabilitated Building 1 would potentially be used as a focal point for historical interpretation on the property. Development under this alternative would also include new construction on other portions of the property. New construction adjacent to Building 1 would be designed and built in a manner that would be as compatible as possible with the building's historic character.

While this alternative includes demolition of most of the existing buildings on the former cannery property, it only modestly reduces the impact on the historical resource in comparison to complete demolition of all buildings at the former Bercut-Richards cannery. Environmental impacts under this alternative would be similar to those attributed to the proposed project because the level of development and earth disturbance would be essentially the same. Therefore, this alternative would not eliminate any significant impacts or significant and unavoidable impacts identified for the project. Specifically, this alternative would cause substantial adverse change in the significance of the historical resource — the Bercut-Richards cannery complex. This change would be considered a significant-and-unavoidable effect on the environment because the significance of the historical resource would be materially impaired as a result of development under this project alternative. The historical resource would be materially impaired through the demolition of most of the historical resource's physical characteristics (other than Building 1) that convey its historical significance and that justify its inclusion in the California Register of Historical Resources (CRHR). Therefore, the impact would remain significant and unavoidable and this alternative is dismissed from further consideration.

- **Historical Resources Alternative – Preservation and Relocation of Building 1:** This alternative would include preservation of Building 1, but would require that Building 1 be

1 Personal communication, Chris McMorris, JRP Historical Consulting, LLC, February 27, 2007.

moved north into the footprint of the proposed new buildings at the southeast corner of the proposed project site facing North 7th Street. By moving Building 1 from its present location, this alternative would preserve Building 1 without interfering with the right of way for the future light rail. Under this alternative, like under the Preservation of Building 1 Alternative discussed above, Building 1 would be retained and rehabilitated for contemporary use. The building would serve a mix of residential and commercial uses. It would potentially be used as a focal point for historical interpretation on the property. Development under this alternative would also include new construction on other portions of the property. New construction adjacent to Building 1 would be designed and built in a manner that would be as compatible as possible with the building's historic character. While this alternative includes demolition of most of the existing buildings on the former cannery property, it modestly reduces the impact on the historical resource in comparison to complete demolition of all buildings at the former Bercut-Richards cannery. Preservation and relocation of Building 1 would retain a portion of the physical characteristics of the resource that convey its historical significance.

Environmental impacts under this alternative would be similar to those attributed to the proposed project because the level of development and earth disturbance would be essentially the same. Therefore, this alternative would not eliminate any significant impacts or significant and unavoidable impacts identified for the project. This alternative would still materially impair a historical resource (i.e., the Bercut-Richards cannery complex) through the demolition of most of the historical resource's physical characteristics that convey its historical significance and that justify its inclusion in the CRHR. Therefore, the impact would remain significant and unavoidable and this alternative is dismissed from further consideration.

ALTERNATIVES CONSIDERED IN THIS EIR

Although any number of alternatives could be designed that could result in the reduction or elimination of project impacts, a total of four representative alternatives, each intended to reduce or eliminate one or more of the significant impacts identified for the proposed project, are evaluated in this Draft EIR. The alternatives are described below.

- **No Project / No Development Alternative**, which assumes that the proposed project would not be built and there would be no new development of the site. This alternative assumes the existing buildings and uses on the site would remain.
- **No Project/Existing Zoning Alternative**, which assumes that the proposed project site would be developed consistent with currently allowable land uses, zoning, and development intensities.
- **Reduced Density/Reduced Height Alternative**, which assumes that the proposed project site would be developed at a lower density than the proposed project through a reduction in the maximum allowable building height.
- **Historical Resources Alternative – Preservation of Building 3**, which assumes that the proposed project site would be developed as proposed, except that Building 3 would be retained and rehabilitated for contemporary use. The building would include retail uses only; however, Building 3 could also be used as focal point for historical interpretation on the property.

Each of the alternatives is described in more detail, below, followed by an assessment of the alternative's impacts relative to the proposed project. Estimates for water demand and the generation of wastewater and solid waste were calculated by applying the standard generation rates used in the utilities analysis of the proposed project to the land uses proposed under this alternative. Transportation impacts were qualitatively assessed using assumptions of trip generation based on land uses. The alternatives' potential for noise impacts were qualitatively by their relative inclusion of noise-sensitive land uses, the length of their construction schedules, and their potential for generating motor vehicle trips in comparison with the proposed project. The alternatives' potential for air quality impacts were judged quantitatively by calculating their emissions of air pollutants from both stationary and mobile sources using the URBEMIS model with quantitative specifications of the type of land uses they would include.

The focus of this analysis is the difference between the alternative and the proposed project, with an emphasis on addressing the significant impacts identified under the proposed project. For each issue area, the analysis indicates which mitigation measures would be required of the alternative and which significant and unavoidable impacts would be avoided. If necessary, the analysis indicates what additional mitigation measures, would be required for the alternative being discussed, and what significant impacts would be more (or less) severe. Unless otherwise indicated, the level of significance and required mitigation would be the same for the alternative as for the proposed project and no further statement of the level of significance is made. Table 7-1 provides a summary comparison of the severity of impacts for each alternative by topic.

Issue Area	Proposed Project	No Project/ No Development	No Project / Existing Zoning	Reduced Density/Reduced Height	Historical Resources
Aesthetics, Light, and Glare	LS	NI	Reduced	Reduced	Reduced
Air Quality	SU	NI	Reduced	Reduced	Reduced
Biological Resources	LS	NI	Reduced	Equal	Equal
Cultural Resources	SU	NI	Equal	Equal	Reduced
Geology and Soils	LS	NI	Equal	Equal	Equal
Hazards	LS	NI	Greater	Reduced	Equal
Hydrology	LS	NI	Equal	Equal	Equal
Noise and Vibration	SU	NI	Reduced	Reduced	Reduced
Public Services	LS	NI	Reduced	Reduced	Reduced
Public Utilities	LS	NI	Reduced	Reduced	Greater
Transportation and Circulation	SU	NI	Reduced	Reduced	Equal
Notes: SU = Significant and Unavoidable – if any impact was identified as significant and unavoidable in the technical analysis. S = Significant before mitigation – if any impact was identified as significant in the technical analysis. LS = Less than Significant – if all impacts were identified as less than significant in the technical analysis. NI = No impact would occur when compared to the proposed project. Equal = Level of significance is equal to the proposed project. Greater = Level of significance is greater compared to the proposed project. Reduced = Level of significance is reduced compared to the proposed project, but not necessarily to a less-than-significant level. Source: EIP Associates, a division of PBS&J, 2007.					

No Project/No Development Alternative

Under CEQA, the No Project/No Development Alternative must consider the effects of forgoing the project. The purpose of analyzing the No Project Alternative is to allow decision-makers to compare the impacts of the proposed project versus no project. The No Project Alternative describes the environmental conditions that exist at the time that the environmental analysis commences (CEQA Guidelines, section 15126.6 (e) (2)). Under the No Project/No Development Alternative the existing structures on the site would remain and the site would not be redeveloped.

Comparative Environmental Effects

Because the existing buildings would remain, there would be no change in the visual character of the area. There would be no impacts to biological resources as a result of construction and operation associated with redevelopment of the site. No buildings on-site would be demolished and therefore there would be no impacts to historical resources or archaeological resources. Project impacts related to air quality, noise and vibration, geology and soils, hydrology, and hazardous materials would no longer occur under this alternative because no new construction would occur. There would be no operational air and noise impacts because there would be no new development or traffic. Project impacts related to public services and utilities would be substantially reduced due to the less intensive uses that currently exist on the project site. There would be no transportation-related impacts under the No Project Alternative because there would be no new trips. Therefore, there would be no significant and unavoidable traffic impacts identified under this alternative.

Mitigation That Would No Longer Be Required

None of the mitigation measures identified in this EIR would be required under the No Project/No Development Alternative.

Significant and Unavoidable Impacts That Would No Longer Occur

None of the significant and unavoidable impacts identified in this EIR would occur under the No Project/No Development Alternative.

Relationship of the No Project/No Development Alternative to the Project Objectives

The No Project/No Development Alternative would not achieve any of the project objectives, including creating a transit-oriented development and providing for construction of a transit line and Richards Boulevard Light Rail Station along the planned DNA line. Additional objectives related to the project's location on the DNA line, including designing a project that promotes using various modes of transportation by locating high-density residential development within a quarter-mile of the proposed light rail station, developing the project site in a manner consistent with and supportive of SACOG's Blueprint plan, and making efficient and economically viable use of an infill development opportunity would not be achieved under the No Project/No Development Alternative. In addition, the No Project/No Development Alternative would not meet the City objectives to stimulate planned development along the waterfront, increase office and retail job opportunities, and provide and encourage public access to the American River waterfront.

No Project/Existing Zoning Alternative

The No Project/Existing Zoning Alternative assumes that the proposed project site would be developed consistent with currently allowable land uses, zoning, and development intensities.

The City of Sacramento General Plan land use designation for the proposed project site is Special Planning District (SPD). SPD's establish special processing procedures, flexible development standards, and incentives to regulate properties under multiple ownerships. The Richards Boulevard SPD is intended to implement the development standards and design guidelines in the Richards Boulevard Area Plan (RBAP).

The proposed project site is currently zoned American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Parkway Corridor Overlay Zone; Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)). These zoning designations are defined below:

ARP-F American River Parkway: Applies to areas designated as a floodway likely to be inundated by a flood having a one per cent per annum chance of occurrence or greater. This overlay is intended to prevent the loss of life and property by prohibiting the erection of improvements or structures. Also to protect the natural features of property within the flood plain of the American River to prevent erosion and situation and to preserve valuable open space in accordance with the provisions of the General Plan.

Parkway Corridor Overlay Zone: Since the American River and its adjacent flood plain are situated within an intensively developed urban area, it is necessary to mitigate the potential adverse environmental impacts associated with contiguous urban development. The Parkway Corridor Overlay Zone designation applies to all property within the city of Sacramento zoned ARP-F and includes special development regulations intended to reduce those impacts which are incompatible with the maintenance of the American River as a natural resource. In addition, the regulations are intended to implement the general plan and the American River parkway plan.

M-2 Heavy Industrial Zone: This zone permits the manufacture or treatment of goods from raw materials. Maximum height is 75 feet. There is no maximum lot coverage. The parking ratio for warehousing uses is no less than 1 space per 1000 square feet gross floor area and no more than 1 space per 500 square feet of gross floor area.

E, W, C, N East, West, Central, or North Richards Blvd: Affixed to zoning in Richards Blvd area as indicators of industrial locations that have different zoning requirements. They are consistent with the Community Plan land use designation for Office, Residential, Utility and Blue Diamond areas. Since these properties were not rezoned with the adoption of Richards Blvd area plan and the land use designations, this is how these zoning areas are identified with different zoning requirements.

SPD Special Planning District: An area designated as a Special Planning District has been determined to be in need of general physical and economic improvement or has special environmental features that land use, zoning and other regulations cannot adequately address. Property with an SPD designation is subject to the requirements set forth in the SPD Ordinance adopted specifically for the area and the SPD section of the zoning ordinance.

PC American River Parkway Corridor: May be applied to all areas of the City for which the Council determines that development might have an impact upon the preservation or enhancement of the scenic, recreational, fishery, or wildlife value of the American River Parkway.

Under the No Project/Existing Zoning Alternative, the site is designated as an SPD, which allows for a flexible mixed-use development, similar to the proposed project. Under the current zoning the project site could be developed with industrial, office (with a Special Permit), and multi-family residential (with a Special Permit). The density range for multi-family residential is between 25 dwelling units (du)/acre and 65 du/acre. The maximum building height is 75 feet.

Although the Richards Boulevard SPD encourages opportunities for office, commercial, and residential development, it is not reasonable, for the purposes of this alternative, to assume development of these types of uses. Because residential and office uses require a special permit, which is a discretionary action, there is no guarantee that these uses could be developed. Therefore, for the purposes of this alternative, future development of only industrial uses is assumed. Assuming a floor area ratio (FAR) of 0.7, a total of approximately two million square gross square feet of industrial uses could be developed on the site. It is assumed that the waterfront pavilion uses would not be developed under this alternative. No parks or open space would be provided.

Comparative Environmental Effects

Under this alternative, it is assumed that impacts associated with the change in visual character would be very similar to those associated with the proposed project under both Scenario A or B. However, under this alternative, industrial uses at a lower allowable height would be developed, which would presumably not require the same level of design review as the proposed project, providing it complied with chapter 17.120 of the City's Zoning Ordinance, which pertains to the Richards Boulevard SPD. Under this alternative it is assumed the aesthetic impact would be reduced due to the reduction in building height. It is assumed that the development of new and expanded urban uses would change the existing visual character of the site and its surroundings. Identical to the proposed project, new sources of light and glare would be introduced and implementation of Mitigation Measure 6.1-2 would be required to mitigate any impacts.

Impacts associated with construction activities, which include impacts to air quality and noise associated with construction equipment could be the same or slightly less than the proposed project because it is assumed the site would be developed with a variety of buildings, roads, utilities, and other infrastructure resulting in a contribution of air pollutants and construction-related noise. If the new on-site uses under this alternative were limited to industrial only, the potential for construction and operational noise impacts to disturb new or existing on-site sensitive receptors (residential uses) would be effectively eliminated. Under this alternative it is feasible that fewer buildings could be constructed compared to what is proposed under the project which could also translate into fewer cars and employees accessing the local roadways as well as fewer truck trips compared to the project and shorter construction schedules and/or reduce the need for construction equipment. Overall, industrial uses generate fewer vehicle trips compared to office or residential uses. Therefore, it is assumed under this alternative that fewer vehicle trips would occur. Mitigation Measure 6.8-1(a) through (c) included as part of the proposed project that recommended restrictions on daytime only construction activity to reduce noise impacts would not be necessary under this alternative and this significant and unavoidable noise impact would not occur. Mitigation Measure 6.8-2 recommending further technical studies to determine the need for noise attenuation measures for on-site residential uses, and the need for project design changes to reduce noise disturbance from truck deliveries, garbage pickups, etc. would not be necessary. It is assumed that all of the air quality mitigation measures would be required if the project site were developed consistent with the existing zoning.

Impacts associated with the loss of undeveloped land, which includes impacts to biological resources and cultural resources, would be very similar those associated with the proposed project because it is assumed under the No Project/Existing Zoning Alternative that a majority of the project site would be disturbed. Therefore, under this alternative there could be a

disturbance to nesting habitat and bats associated with project construction, loss of VELB habitat, and tree removal. It is assumed Mitigation Measures 6.3-1(a) and (b), 6.3-2(a) through (d), 6.3-4(a) through (d), 6.3-5(a) through (c), and 6.3-7(a) through (c) would still be required if the site were to be developed under the existing zoning. There would be no impact under the No Project/Existing Zoning Alternative associated with the disturbance or loss of riparian vegetation on the water side of the levee because the waterfront pavilion uses would not be developed under this alternative. Therefore, Mitigation Measures 6.3-6(a) through (e) would not be required under this alternative. Identical to the proposed project, new sources of light and glare would be introduced to the riparian area and implementation of Mitigation Measure 6.1-2 would be required to limit the potential for light spill over impacts.

This analysis assumes that all historic buildings on the project site would be removed to accommodate development under the No Project/Existing Zoning Alternative. Therefore, Mitigation Measures 6.4-1(a) through (f) would be required to mitigate the loss of any historic structures. However, because the loss of these structures is considered a significant and unavoidable impact this would not change under the No Project/Existing Zoning Alternative. Mitigation Measure 6.4-2(a) and (b), that address the identification of any unknown archaeological resource would also be required under this alternative.

Impacts associated with the hazards of constructing buildings on unstable soils or in areas where erosion is a concern would still occur under this alternative, the same as the project. During construction there would be grading activities that could cause erosion to occur. Therefore, Mitigation Measure 6.5-1 would still be required to ensure all impacts associated with erosion are reduced to a less-than-significant level. The geotechnical investigation conducted for the project indicated that the upper 40 to 60 feet of soils on-site were variable in densities and would not be suitable for supporting mid-rise (three to five stories) or high-rise (six stories and higher) structures without experiencing differential settlements. Because under this alternative, buildings up to 75-feet in height could be developed, this would also be an issue. In addition, there could be buildings constructed below-grade which, as indicated in the geotechnical report, could result in the need to dewater due to the high ground water table in this area. Therefore, Mitigation Measures 6.5-3(a) through (c) and 6.5-4(a) and (b) would be required.

Hazards associated with exposing people to detours associated with construction, and the potential exposure of people to previously unidentified hazards in the soil or groundwater, and exposure of construction workers to hazards associated with building demolition would all occur under the Existing Zoning Alternative, the same as the project. Mitigation Measures 6.6-2, 6.6-3(a) through (c), and 6.6-4 would still be required under this alternative. However, depending upon the types of uses developed there could be an increase in the use, storage, or disposal of hazardous materials compared to the project. The same is true for hydrology and water quality. Under the Existing Zoning Alternative the same impacts would occur as under the proposed project requiring the same mitigation because essentially the entire site would be developed, the same as the proposed project.

Under the No Project/Existing Zoning Alternative, the demand for public services would decrease compared to the project because there would be no residential or office component. However, depending upon the types of uses that could be developed there could be a requirement for more stringent fire requirements. Mitigation required for the proposed project to ensure provision of public services would also be required under this alternative.

Industrial uses that would be developed under this alternative would not generate school-age children and a demand for new school facilities; therefore, the less-than-significant impacts related to the generation of new students under the proposed project would not occur under the No Project/Existing Zoning Alternative. In addition, industrial uses would not generate demand for parks and library services, as this alternative would not generate new residential population.

Because this alternative would not develop any of the uses proposed by the proposed project, the demand for public utilities could be substantially different from that of the project. Demand for water, wastewater, and solid waste under Scenario A of the proposed project would be expected to be approximately 818,236 gallons per day (gpd), 927,600 gpd and 2,172 tons per year, respectively. Scenario B would produce a demand for 759,473 gpd of water, 805,600 gpd of wastewater, and 2,327 tons per year of solid waste. Assuming that 2 million square feet of light industrial uses would be developed under this alternative, demand for water could be expected to be approximately 123,000 gpd, while generation of wastewater and solid waste could be anticipated to be approximately 92,250 gpd and 1,825 tons per year, respectively. It should, however, be noted that demand for water as well as wastewater and solid waste generation for industrial uses can vary substantially depending on the specific types of industrial uses at a particular site. For example, a manufacturing facility would have substantially higher demands for water, wastewater, and solid waste than an industrial warehouse. Therefore, the rates applied to this analysis should be considered to be a general estimate of public utilities at the project site. Subsequent analyses would need to be conducted to more accurately estimate demand for the provision of public utilities if this alternative were to be selected in place of the proposed project.

Under the No Project/Existing Zoning Alternative it is anticipated that the traffic impacts would be less than what was identified under the project. The number of average daily trips generated by industrial uses would be less than what is anticipated to occur under the proposed project. However, this alternative would not eliminate any of the significant and unavoidable impacts identified under the proposed project. Therefore, all of the mitigation measures identified for the project related to transportation and circulation would still be required under this alternative, and, although the severity of the impacts would be reduced, it would not reduce any impacts to a less-than-significant level.

Mitigation That Would No Longer Be Required

The No Project/Existing Zoning Alternative involves disturbance to the site, the same as the project, along with the development of new buildings; therefore, the impacts are generally the same as those associated with the proposed project and would require the same mitigation as the project. However, there would be no impact under the Existing Zoning Alternative associated with the disturbance or loss of riparian vegetation on the water side of the levee because it is assumed there would be no development on this side of the levee. Therefore, Mitigation Measures 6.3-6(a) through (e) would not be required under this alternative. Mitigation Measure 6.8-1(a) through (c), which restricts construction activities to daytime hours to reduce noise impacts, would not be necessary under this alternative. Mitigation Measure 6.8-2 recommending further site-specific technical studies to determine the need for noise attenuation measures for on-site residential uses would not be necessary under this alternative. Mitigation Measures 6.9-13 through 6.9-15 would not be required because this alternative would not generate a need for new park facilities because there would be no increase in population.

Significant and Unavoidable Impacts That Would No Longer Occur

All of the significant and unavoidable project-specific and cumulative impacts would occur under the No Project/Existing Zoning Alternative. However, construction and transportation-related noise impacts would be less in magnitude.

Relationship of the No Project/Existing Zoning Alternative to the Project Objectives

The No Project/Existing Zoning Alternative meets the general intent of some of the project objectives by developing more employment generating uses in this area of the city. In addition, this alternative meets the intent of two of the polices to “[m]ake efficient and economically viable use of an infill development opportunity” and “[e]nsure adequate, timely, and cost-effective public services for the project”. However, a majority of the project objectives set forth by the project applicant and the city that encourages development of a mixed-use community with residential, commercial, and office uses would not be achieved under this alternative.

Reduced Density/ Reduced Height Alternative

Under the Reduced Density/Reduced Height Alternative, the development footprint would be the same as that of the proposed project, but the maximum height of the proposed buildings would be reduced. This reduction in the maximum height of the proposed buildings, from 15 stories to 1 to 7 stories, would reduce the number of residential units per acre. Under Scenario A, this alternative would result in a reduction of dwelling units to approximately 2,100 units. Under Scenario B, the number of residential units would be reduced to approximately 1,800 units, and the office space would be reduced to approximately 515,000 square feet. Under both Scenario A and Scenario B, the proposed neighborhood-serving retail and restaurant uses would remain the same, at 146,194 square feet combined. The proposed overlook and waterfront pavilion would be developed under this alternative, as would the same parks acreage that would be developed under the proposed project. Table 7-2 provides a summary comparison of development under the Reduced Density/Reduced Height Alternative and the proposed project.

Land Use Type	Proposed Project (Scenario A)	Reduced Density Alt (Scenario A)	Proposed Project (Scenario B)	Reduced Density Alt (Scenario B)
Residential	2,981 units	2,084 units	2,350 units	1,806 units
Office	None	None	839,628 square feet	515,992 square feet
Neighborhood-Serving Retail	146,194 square feet	146,194 square feet	146,194 square feet	146,194 square feet
Max Building Height	180 feet	1-7 stories 75 feet	235 feet	1-7 stories 75 feet

Source: Capitol Station 65, LLC, 2006.

Comparative Environmental Effects

Under this alternative it is assumed that impacts associated with the overall change in visual character would be similar to the analysis of the proposed project (either scenario) because the site would be developed. However, under this alternative, the maximum height of the proposed

buildings would be reduced from 15 stories to 1 to 7 stories with a maximum allowable height of 75-feet so the visual effects would be less in magnitude compared to the project. It is assumed that development of an urban environment in this area would significantly change the existing visual environment and new sources of light and glare would be introduced; therefore, Mitigation Measure 6.1-2 would still be required under this alternative.

Compared with the proposed project, the opportunities for construction noise and vibration impacts could be reduced because of the smaller size of the residential component of this alternative. It is possible that fewer buildings would be constructed compared to the proposed project. This could shorten construction schedules and/or reduce the need for construction equipment, consequently lowering construction-related air pollutant emissions and reducing the off-site mitigation fee for NO_x emissions. Operational motor vehicle and area-source air pollutant emissions associated with this alternative were calculated based on the information in Table 7-2; these are compared with emissions from the proposed project in Table 7-3. As shown in Table 7-3, operational air pollutant emissions for this alternative would be less than the proposed project's, but the ozone precursor emissions (ROG and NO_x) would still exceed SMAQMD significance thresholds. Under this alternative because the SMAQMD thresholds would be exceeded, it is anticipated that operational air pollutant emissions, specifically ozone precursors, would be cumulatively significant and unavoidable, the same as the proposed project.

Land Use Type	ROG	NO _x	CO	PM ₁₀
Proposed Project (Scenario A)	377.10	338.91	2196.42	205.54
Reduced Density (Scenario A)	131.61	104.36	639.73	60.05
Change (Scenario A)	-65%	-69%	-71%	-71%
Proposed Project (Scenario B)	381.23	390.02	2615.10	247.02
Reduced Density (Scenario B)	113.59	107.29	698.24	66.29
Change (Scenario B)	-70%	-72%	-73%	-73%

Source: EIP Associates, a division of PBS&J, 2007.

Impacts associated with the loss of undeveloped land, which includes impacts to biological resources and cultural resources would be very similar to the proposed project because it is assumed under the Reduced Density/Reduced Height Alternative that the development footprint would be essentially the same as that of the proposed project. Therefore, under this alternative there could be a disturbance to nesting habitat and bats associated with project construction, loss of VELB habitat, and tree removal. It is assumed Mitigation Measures 6.3-1(a) and (b), 6.3-2(a) through (d), 6.3-4(a) through (d), 6.3-5(a) through (c), and 6.3-7(a) through (c) would also still be required under this alternative. The impact associated with the disturbance or loss of riparian vegetation on the water side of the levee would remain under this alternative because this alternative would include the construction of the overlook. Therefore, Mitigation Measures 6.3-6(a) through (e) would also be required under this alternative. Identical to the proposed project, new sources of light and glare would be introduced to the riparian area and implementation of Mitigation Measure 6.1-2 would be required to limit the potential for light spill over impacts.

The historic buildings on the project site that would be removed to accommodate development under proposed project would also be removed under the Reduced Density/ Reduced Height Alternative. Therefore, Mitigation Measures 6.4-1(a) through (f) would be required to mitigate the loss of any historic structures. However, because the loss of these structures is considered a significant and unavoidable impact this would not change under the Reduced Density/ Reduced Height Alternative. Mitigation Measure 6.4-2(a) and (b), that address the identification of any unknown archaeological resource would also be required under this alternative.

Proposed project impacts associated with the hazards of constructing buildings on unstable soils or in areas where erosion is a concern would still occur under this alternative. During construction there would be grading activities that could cause erosion to occur. Therefore, Mitigation Measure 6.5-1 would still be required to ensure all impacts associated with erosion are reduced to a less-than-significant level. The geotechnical investigation conducted for the proposed project indicated that the upper 40 to 60 feet of soils on-site were variable in densities and would not be suitable for supporting mid-rise (three to five stories) or high-rise (six stories and higher) structures without experiencing differential settlements. Because there could be buildings up to seven stories in height under this alternative, this would also be an issue. In addition, there could be buildings constructed below-grade which, as indicated in the geotechnical report, could result in the need to de-water due to the high groundwater table in this area. Therefore, Mitigation Measures 6.5-3(a) through (c) and 6.5-4(a) and (b) would be required.

As is the case with the proposed project, hazards associated with exposing people to detours associated with construction, and the potential exposure of people to previously unidentified hazards in the soil or groundwater, and exposure of construction workers to hazards associated with building demolition would all occur under the Reduced Density/Reduced Height Alternative. Mitigation Measures 6.6-2, 6.6-3(a) through (c), and 6.6-4 would still be required under this alternative. Under the Reduced Density/ Reduced Height Alternative, the same impacts related to Hydrology and Water Quality would occur as under the proposed project and would require the same mitigation.

Under the Reduced Density/Reduced Height Alternative, the demand for public services would decrease compared to the project because there would be a reduced number of residential and office uses. This alternative would generate new student populations and demand for park and library facilities, but on a lesser order of magnitude than the proposed project. Mitigation identified to ensure the provision of public services for the proposed project would be required under this alternative.

Under this alternative, demand for public utilities such as water, wastewater, and solid waste services would be reduced. Proposed project demands for water, wastewater, and solid waste under Scenario A would be expected to be approximately 818,236 gpd, 927,600 gpd and 2,172 tons per year, respectively. Scenario B would produce a demand for 759,473 gpd of water, 805,600 gpd of wastewater, and 2,327 tons per year of solid waste. Under this alternative, water demand would be reduced to approximately 530,488 gpd and 660,045 gpd for Scenario A and Scenario B, respectively. Wastewater generation would also be reduced in both scenarios, to approximately 720,555 gpd under Scenario A and 678,435 gpd under Scenario B. Also, due to reduced density of all uses, this alternative would result in a substantial reduction in solid waste generation. Scenario A and Scenario B would be expected to generate approximately 1,564 tons per year and 1,735 tons per year, respectively. With reductions in the water demand, wastewater generation, and solid waste generation at the project site, this

alternative could result in the need for the construction of reduced infrastructure both on and off-site, potentially resulting in fewer and less severe physical impacts to the environment.

Because there would be fewer residents and employees under this alternative, there would be fewer vehicle trips. However, it is anticipated that the transportation impacts identified for the proposed project would be similar under this alternative, but they would be less in magnitude.

Mitigation That Would No Longer Be Required

All mitigation measures identified for project-specific and cumulative impacts would be required for the Reduced Density/ Reduced Height Alternative.

Significant and Unavoidable Impacts That Would No Longer Occur

All of the significant and unavoidable project-specific and cumulative impacts would occur under the Reduced Density/Reduced Height Alternative. However, transportation related impacts, operational air quality impacts, and construction and operational noise impacts would be lesser in magnitude.

Relationship of the Reduced Density/ Reduced Height Alternative to the Project Objectives

While development of this alternative would reduce proposed project impacts related to air quality, noise and vibration, public services, public utilities, and traffic, the alternative would not reduce impacts to a less-than-significant level or achieve all of the project's objectives. The project objectives include creating a transit-oriented development and providing for construction of a transit line and Richards Boulevard Light Rail Station along the planned DNA line. In order to provide this transit line, the City would need federal funding. Federal funding for light rail projects is extremely competitive and is usually not available unless the transit service would immediately serve at least a minimal service population. Thus, the project needs to include densities that would support the line and make funding feasible. Additional objectives related to the project's density include designing a project that promotes using various modes of transportation by locating high-density residential development within a quarter-mile of the proposed light rail station, developing the project site in a manner consistent with and supportive of SACOG's Blueprint plan, and making efficient and economically viable use of an infill development opportunity. Under the Reduced Density/Reduced Height Alternative the applicant's ability to meet all of these project objectives is limited by limiting the height of all proposed buildings, thus reducing density throughout the project site. In addition, one of the City's objectives for the project that supports a higher density development is to enhance the City's supply of housing that provides a range of housing opportunities available to residents from a wide range of economic levels. Under the Reduced Density/Reduced Height Alternative the City's ability to meet this objective would be limited. The Reduced Density/Reduced Height Alternative would be consistent with project objectives related to integrating residential neighborhoods with employment opportunities and neighborhood retail, although to a lesser degree than the proposed project, as this alternative involves development of a mixed-use development of residential and commercial uses, along with office uses under Scenario B.

Historical Resources Alternative – Preservation of Building 3

Under the Preservation of Building 3 Alternative, Building 3 of the Bercut-Richards cannery complex would be retained and rehabilitated for contemporary use. The building would include retail uses only; however, it could potentially be used as a focal point for historical interpretation on the property. While the cannery complex as a whole is considered an historical resource under CEQA and none of the buildings in the complex appear to be individually eligible for listing on a local, state, or national register, Building 3 was selected for this alternative because it is one of the more historically representative buildings within the cannery resource. Rehabilitation of this building would follow the *Secretary of the Interior's Standards for Rehabilitation* and the guidelines for rehabilitating historic buildings. Development under this alternative would also include new construction on other portions of the property. New construction adjacent to Building 3 would be designed and built in a manner that would be as compatible as possible with the building's historic character.

Under this alternative, Lot 15 of the proposed project would no longer be used for residential purposes. Thus, under both Scenario A and B, the number of dwelling units would be reduced by 73 units. In addition, because Lot 15 would consist of Building 3 and house only retail uses, the amount of square footage dedicated to retail uses would increase under both Scenario A and B. This alternative would not change the amount of office space available under Scenario B of the proposed project. Waterfront pavilion and park uses would be the same as the proposed project under this alternative. Under this alternative, there would be a slight reduction in the amount of open space to provide community connectivity, because Signature Boulevard would no longer be a through street with a large landscaped roundabout.

Comparative Environmental Effects

Under this alternative it is assumed that impacts associated with the change in visual character would be similar to the analysis of the proposed project (either scenario). It is assumed that development of an urban environment in this area would significantly change the existing visual environment and new sources of light and glare would be introduced; therefore, Mitigation Measure 6.1-2 would still be required under this alternative. Impacts associated with construction activities, which include impacts to air quality and noise associated with construction equipment could be the same or slightly less than the proposed project, because it is assumed the site would be developed with essentially the same uses as the proposed project with the exception of preserving one of the historic buildings. Therefore, this alternative, the same as the project, would result in a contribution of air pollutants and construction-related noise. All air quality and noise mitigation measures identified for the proposed project would be required for this alternative.

Impacts associated with the loss of undeveloped land, which includes impacts to biological resources and cultural resources would be very similar to the proposed project because it is assumed under the Preservation of Building 3 Alternative that the development footprint would be the same as that of the proposed project. Therefore, under this alternative there could be a disturbance to nesting habitat and bats associated with project construction, loss of VELB habitat, and tree removal. It is assumed Mitigation Measures 6.3-1(a) and (b), 6.3-2 (a) through (d), 6.3-4(a) through (d), 6.3-5(a) through (c), and 6.3-7(a) through (c) would also still be required under this alternative. The impact associated with the disturbance or loss of riparian vegetation on the water side of the levee would remain under this alternative because this alternative would include the construction of the overlook. Therefore, Mitigation Measures

6.3-6(a) through (e) would be required under this alternative. Identical to the proposed project, new sources of light and glare would be introduced to the riparian area and implementation of Mitigation Measure 6.1-2 would be required to limit the potential for light spill over impacts.

Mitigation would be required to decrease the impact of this alternative on historical resources. The impact to historic resources would be reduced, compared to the proposed project, because building 3 of the Bercut-Richards cannery property would be retained. As a result of rehabilitation of Building 3, the mitigation measure that addresses historical interpretation and salvage/reuse could be reduced, or possibly eliminated. Interpretative displays and materials could be consolidated in public areas in and around Building 3 and could be reduced in number. Salvage of warehouse roof trusses, brick/hollow clay tile, and steel casement windows would not be required because examples of those features would be visible on Building 3. All measures in Mitigation Measures 6.4-1 related to recordation/documentation, design guidelines, and site interpretation would be required under this alternative to reduce the impact on historical resources. Mitigation Measure 6.4-2(a) and (b), that address the identification of any unknown archaeological resource would also be required under this alternative.

While this alternative includes demolition of most of the existing buildings on the former cannery property, it modestly reduces the impact on the historical resource in comparison to complete demolition of all buildings at the former Bercut-Richards cannery. Preservation and rehabilitation of Building 3 would retain a portion of the physical characteristics of the resource that convey its historical significance. This alternative would also support historical interpretation activities that could mitigate the significant impact on cultural resources.

The Preservation of Building 3 Alternative would still, however, cause substantial adverse change in the significance of the historical resource. This change would be considered a significant effect on the environment because the significance of the historical resource would be materially impaired as a result of construction under this alternative. The historical resource would be materially impaired through the demolition of most of the historical resource's physical characteristics, other than Building 3, that convey its historical significance and that justify its inclusion in the CRHR. Although mitigation strategies would reduce the impact, impacts that result from the demolition proposed under this alternative cannot be reduced to a less-than-significant level.

Proposed project impacts associated with the hazards of constructing buildings on unstable soils or in areas where erosion is a concern would still occur under this alternative. During construction there would be grading activities that could cause erosion to occur. Therefore, Mitigation Measure 6.5-1 would still be required to ensure all impacts associated with erosion are reduced to a less-than-significant level. The geotechnical investigation conducted for the proposed project indicated that the upper 40 to 60 feet of soils on-site were variable in densities and would not be suitable for supporting mid-rise (three to five stories) or high-rise (six stories and higher) structures without experiencing differential settlements. Because there would be buildings up to 15 stories in height under this alternative, this would still be an issue. In addition, below-grade construction could still occur under this alternative, which, as indicated in the geotechnical report, could result in the need to de-water due to the high ground water table in this area. Therefore, Mitigation Measures 6.5-3(a) through (c) and 6.5-4(a) and (b) would be required under this alternative.

As is the case with the proposed project, hazards associated with exposing people to detours associated with construction, and the potential exposure of people to previously unidentified

hazards in the soil or groundwater, and exposure of construction workers to hazards associated with building demolition would all occur under the Historical Resources Alternative. Mitigation Measures 6.6-2, 6.6-3(a) through (c), and 6.6-4 would still be required under this alternative. Under this alternative, the same or very similar impacts related to Hydrology and Water Quality would occur as under the proposed project and would require the same mitigation.

Under the Preservation of Building 3 Alternative, the demand for public services such as police, fire, schools, parks, and library facilities would decrease compared to the project because there would be a reduced number of residential uses. However, mitigation identified to ensure the provision of public services for the proposed project would still be required under this alternative.

Demand for public utilities under this alternative would be similar to that of the proposed project under both Scenario A and Scenario B, especially for wastewater and solid waste. The amount of retail space under this alternative would increase since more would be developed on Lot 15 in lieu of 73 residences. Water demand under this alternative would be approximately 751,791 gpd for Scenario A and 904,732 gpd for Scenario B, compared to the project demand of 818,236 gpd under Scenario A and 759,473 gpd under Scenario B. The generation of wastewater for this alternative would be expected to be similar to that of the project, with 931,023 gpd generated under Scenario A, compared to 927,600 gpd under the proposed project and 786,992 gpd generated for the alternative under Scenario B compared to 805,600 gpd generated under Scenario B of the proposed project. Likewise, solid waste generation in this alternative would also be similar to that of the project, with approximately 2,200 tons per year generated under Scenario A and 2,306 tons per year generated under Scenario B. Comparatively, solid waste generation for the proposed project would be approximately 2,172 tons per year and 2,327 tons per year for Scenario A and Scenario B, respectively. Water demand under Scenario A and wastewater and solid waste generation under Scenario B of this alternative would be less than that of the proposed project. However, solid waste generation and wastewater generation under Scenario A and water demand under Scenario B of this alternative would have a greater magnitude on impacts to utilities than would the proposed project.

Because the uses under this alternative would be similar to the proposed project, there would be negligible differences in trip generation and the transportation impacts identified for the proposed project would be similar under this alternative.

Mitigation That Would No Longer Be Required

Mitigation would still be required to decrease the impact of this alternative on historical resources. However, as a result of the rehabilitation of Building 3, interpretative displays and materials required under Mitigation Measure 6.4-1 could be consolidated in public areas in and around Building 3 and could be reduced in number. Salvage of warehouse roof trusses, brick/hollow clay tile, and steel casement windows required under Mitigation Measure 6.4-1 would not be required because examples of those features would be visible on Building 3. All other requirements under Mitigation Measure 6.4-1 related to recordation/documentation, design guidelines, and site interpretation would be required under this alternative to reduce the impact on historical resources. All other mitigations required under the proposed project would be required under the Historical Resources Alternative.

Significant and Unavoidable Impacts That Would No Longer Occur

Although the Preservation of Building 3 Alternative would reduce the impact to historical resources, historical resources would still be materially impaired as a result of construction under this alternative, resulting in significant and unavoidable project-specific and cumulative impacts. All of the significant and unavoidable project-specific and cumulative impacts identified under the proposed project would occur under the Historical Resources Alternative at approximately the same order of magnitude.

Relationship of the Preservation of Building 3 Alternative to the Project Objectives

This alternative would meet most of the project objectives because it would create a mixed-use community with access to light rail and other modes of transportation, employment opportunities, and access to open space. However, under this alternative there would be a slight reduction in the amount of open space to provide community connectivity, because Signature Boulevard would no longer be a through street with a large landscaped roundabout.

Environmentally Superior Alternative

The environmentally superior alternative would be the No Project/No Development Alternative because it would eliminate and/or reduce the significant impacts identified for the proposed project. However the No Project/No Development Alternative does not achieve any of the project's objectives. CEQA Guidelines Section 15126.6(e)(2) states that when the No Project/No Development Alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative from among the other alternatives.

The No Project/Existing Zoning Alternative would reduce impacts related to aesthetics, construction and operation air quality and noise and vibration, biological resources on the water side of the levee, and public utilities. However, it would result in equal impacts associated with ground disturbance and ground cover such as cultural resources, geology, and hydrology and water quality. It is possible that hazardous materials impacts would be greater when compared to the proposed project depending on the type of industrial uses developed. The No Project/Existing Zoning Alternative meets the general intent of some of the project objectives by developing more employment generating uses in this area of the city. This alternative also meets the intent of two of the polices to "[m]ake efficient and economically viable use of an infill development opportunity" and "[e]nsure adequate, timely, and cost-effective public services for the project". However, a majority of the project objectives set forth by the project applicant and the city that encourages development of a mixed-use community with residential, commercial, and office uses would not be achieved under the No Project/Existing Zoning Alternative.

The Reduced Density/ Reduced Height Alternative would reduce proposed project impacts related to aesthetics, construction and operational air quality and noise and vibration, hazardous materials, public services, public utilities, and transportation and circulation because less units and square footage would be developed when compared to the proposed project. Impacts associated with ground disturbance and cover would be identical to the proposed project because the same footprint would be developed. The Reduced Density/ Reduced Height Alternative would achieve some but not all of the project's objectives. This alternative would not fully facilitate creating a transit-oriented development and providing for construction of a transit line and Richards Boulevard Light Rail Station along the planned DNA line. In order to

provide this transit line, the City would need federal funding. Federal funding for light rail projects is extremely competitive and is usually not available unless the transit service would immediately serve at least a minimal service population. Additional objectives related to the project's density include designing a project that promotes using various modes of transportation by locating high-density residential development within a quarter-mile of the proposed light rail station, developing the project site in a manner consistent with and supportive of SACOG's Blueprint plan, and making efficient and economically viable use of an infill development opportunity. Under the Reduced Density/Reduced Height Alternative the applicant's ability to meet all of these project objectives is limited by limiting the height of all proposed buildings, thus reducing density throughout the project site. In addition, one of the City's objectives for the project that supports a higher density development is to enhance the City's supply of housing that provides a range of housing opportunities available to residents from a wide range of economic levels. Under the Reduced Density/Reduced Height Alternative the City's ability to meet this objective would be limited. The Reduced Density/Reduced Height Alternative would be consistent with project objectives related to integrating residential neighborhoods with employment opportunities and neighborhood retail, although to a lesser degree than the proposed project, as this alternative involves development of a mixed-use development of residential and commercial uses, along with office uses under Scenario B.

The Preservation of Building 3 Alternative would reduce project impacts related to aesthetics, construction air quality and noise and vibration, and public services. In addition, impacts attributed to loss of historic structures would be reduced because Building 3 would be preserved. However, this alternative would not reduce the cultural resources impact to less than significant; therefore, preservation of any of the buildings alone (such as preserving Building 3) would serve as partial mitigation by providing a structural interpretation and explanation of an historical resource. Similar, if not superior, structural interpretation would be accomplished as part of the proposed project, which would preserve, replicate, and showcase the historical resources throughout the redeveloped property, particularly at the transit station. This approach would incorporate preservation, reuse, and replication to provide the public with more prominent, visual locations to view historical resources than would preserving Building 3.

Impacts associated with ground disturbance and cover would be identical to the proposed project because the same footprint would be developed. Transportation and circulation impacts would be identical because the difference in trip generation would be negligible. As a result, impacts associated with operational air quality and noise attributed to vehicle trips would be identical to the proposed project. Because the amount of retail space would be increased there would be a slight increase in demand for utilities under Scenario A, including wastewater and solid waste disposal. This alternative would meet most of the project objectives; however, it would only slightly reduce the project's incorporation of open space to provide community connectivity as Signature Boulevard would no longer be a through street with a large landscaped roundabout.

Conclusion

The environmentally superior alternative is the Reduced Density/Reduced Height Alternative. As described above, this alternative would reduce many of the significant impacts identified for the proposed project, but not a less-than significant level. However, it would not eliminate any significant and unavoidable impacts. While it would achieve many of the objectives established by the City and the applicant for the proposed project, the ability to achieve objectives of transit-

oriented development and consistency with the SACOG Blueprint plan would be limited due to the decrease in densities when compared to the project.

8.0 CEQA CONSIDERATIONS

8.0 CEQA CONSIDERATIONS

INTRODUCTION

Section 15126 of the California Environmental Quality Act (CEQA) Guidelines requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. As part of this analysis, the EIR must also identify (1) significant environmental effects of the proposed project, (2) significant environmental effects that cannot be avoided if the proposed project is implemented, (3) significant irreversible environmental changes that would result from implementation of the proposed project, (4) growth-inducing impacts of the proposed project. It should be noted that although growth inducement itself is not considered an environmental effect, it could potentially lead to foreseeable physical environmental effects, which are discussed under Growth Inducing Impacts below.

Significant Environmental Effects

Chapter 3 of this EIR, Summary of Impacts and Mitigation Measures, and Sections 6.1 through 6.11 of this EIR provide a comprehensive identification of the proposed project's environmental effects, including the level of significance both before and after mitigation.

Significant and Unavoidable Impacts

Section 15126.2(b) of the 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 proposed project on various aspects of the environment are discussed in detail in Chapter 6 of this EIR. Project-specific and cumulative impacts that cannot be avoided if the project is approved as proposed include:

Project-Specific Significant and Unavoidable Impacts

Impact Number

- 6.2-3 Activities associated with the operation of the proposed project would generate emissions of particulate matter.
- 6.4-1 The proposed project could cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5.
- 6.8-1 Construction of the proposed project would temporarily expose existing receptors to increased noise levels.
- 6.8-2 Ground-borne vibration from construction activity could cause structural damage to nearby buildings.
- 6.11-1 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.
- 6.11-2 The proposed project would add traffic to the study roadway segments that result in substandard levels of service.

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- 6.11-3 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E.
 - 6.11-4 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline.
 - 6.11-5 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.

Cumulative Significant and Unavoidable Impacts

Impact Number

- 6.2-7 Operation of the proposed project would increase cumulative levels of ozone precursors.
- 6.2-9 Operational activities associated with the proposed project would contribute to cumulative levels of particulate matter in the vicinity of the project site.
- 6.4-3 The proposed project, in combination with other development in the City of Sacramento, could cause a substantial change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5.
- 6.11-12 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.
- 6.11-13 The proposed project would add traffic to the study roadway segments.
- 6.11-14 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E under near term conditions.
- 6.11-15 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline under both Scenario A and Scenario B.
- 6.11-16 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.
- 6.11-18 The proposed project would add traffic to study intersections under both Scenario A and Scenario B and cause the level of service to deteriorate.
- 6.11-19 The proposed project would add traffic to the study roadway segments that results in substandard levels of service.
- 6.11-20 The proposed project would add traffic to the study freeway mainline segments and cause the level of service to degrade below LOS E under near term conditions.
- 6.11-21 The proposed project would add traffic to the study freeway interchanges and cause the level of service to degrade below those of the freeway mainline under both Scenario A and Scenario B.
- 6.11-22 The proposed project would add traffic to the study freeway off-ramps where queues would exceed available storage capacity with or without the proposed project under both Scenario A and Scenario B.

Significant Irreversible Environmental Effects

Section 15126.2(c) of the CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the proposed project. 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 uses in which irreversible damage could result from any potential environmental accidents associated with the project;
- The project would involve a large commitment of nonrenewable resources;
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Development of the proposed project would result in the continued commitment of the project site to more intense urban development, thereby precluding any other uses for the lifespan of the project. Restoration of the site to a less developed condition would not be feasible given the degree of disturbance, the urbanization of the area, and the level of capital investment.

The CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident associated with the project. While the project would result in the use, transport, storage, and disposal of hazardous wastes, as described in Chapter 6.6, Hazardous Materials and Public Safety all activities would comply with applicable state and federal laws related to hazardous materials, which significantly reduces the likelihood and severity of accidents that could result in irreversible environmental damage.

Implementation of the proposed project would result in the long-term commitment of resources to urban development. The most notable significant irreversible impacts are alteration of the visual character of the site, increased generation of pollutants, and the short-term commitment of non-renewable and/or slowly renewable natural and energy resources, such as water resources during construction activities. Operations associated with future uses would also consume natural gas and electrical energy. These unavoidable consequences of urban growth are described in the appropriate sections in Chapter 6 of this EIR and in the Initial Study (Appendix A).

Resources that would be permanently and continually consumed by project implementation 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 all applicable building

codes, as well as mitigation measures, planning policies, and standard conservation features, would ensure that natural resources are conserved to the maximum extent possible. It is also possible that 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 proposed 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.

Growth Inducing Impacts

As required by Section 15126.2(d) of the CEQA Guidelines, an EIR must discuss ways in which a proposed 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. Although growth inducement itself is not considered an environmental effect, it could potentially lead to environmental effects.

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 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, etc). These circumstances are further described below:

- **Elimination of Obstacles to Growth:** This refers to the extent to which a proposed project removes infrastructure limitations or provides infrastructure capacity, or removes regulatory constraints that could result in growth unforeseen at the time of project approval.
- **Economic Effects:** This refers to the extent to which a proposed project could cause increased activity in the local or regional economy. Economic effects can include effects such as the “multiplier effect.” A “multiplier” is an economic term used to describe inter-relationships among various sectors of the economy. The multiplier effect provides a quantitative description of the direct employment effect of a project, as well as indirect and induced employment growth. The multiplier effect acknowledges that the on-site employment and population growth of each project is not the complete picture of growth caused by the project.

Elimination of Obstacles to Growth

Growth in an area may result from the removal of physical impediments or restrictions to growth, as well as the removal of planning impediments resulting from land use plans and policies. In this context, physical growth impediments may include nonexistent or inadequate access to an area or the lack of essential public services (e.g., water service), while planning impediments may include restrictive zoning and/or general plan designations.

The project would be developed in an area that contains established land uses and supporting infrastructure (roads, water distribution, wastewater and drainage collection, and energy distribution). The City's plans include redevelopment of the Richards Boulevard area which could intensify the uses over what currently exists. The existing infrastructure capacity could be an obstacle to this growth. Construction of the Township 9 development would require the modification and/or replacement of existing infrastructure in order to support the increased land use intensity associated with the proposed project.

An established transportation network exists in the project area that offers local and regional access to the project site. The existing roadways adjoining the site, including Richards Boulevard, North 5th Street, and North 7th Street, provide access to the project site. On-site circulation would be facilitated by a system of internal streets. Improvements to streets immediately adjacent to the project site (i.e., Richards Boulevard, North 5th Street, and North 7th Street) are anticipated to occur in order to serve the increased population generated by the proposed project. Although these off-site roadway improvements would be intended to facilitate improved circulation in and around the proposed Township 9 development, they would improve the circulation system in the project vicinity and could remove an obstacle for further redevelopment in the project area.

Water service to the project site would be provided by existing transmission mains in North 5th Street, North 7th Street, and Richards Boulevard. Sanitary sewer from the project site would be conveyed to the existing pipelines in North 5th Street and North 7th Street, eventually flowing to the 33-inch main in Richards Boulevard. The only existing pipelines that would need to be replaced are on the north half of North 7th Street. No new water or sewer mains other than those required to serve the project site would be constructed. As such, the development of on-site water and sewer infrastructure to serve the project would not be sized to support other development in the project area.

Electricity and natural gas transmission infrastructure presently exists on and in the vicinity of the project site. Development of the project would necessitate the construction of an on-site distribution system to convey this energy to uses on the site. In addition, it is anticipated that limited off-site upgrading/upsizing of existing utilities would occur within street right-of-ways immediately adjacent to the project site (i.e., Richards Boulevard, North 5th Street, and North 7th Street). While these off-site improvements would be designed to accommodate uses proposed within the Township 9 development, the improvements could be sized to support other development in the project area which could remove an obstacle to growth.

While the project site and the surrounding area are currently urbanized, development of the proposed project includes off-site improvements to roadways and utilities distribution infrastructure that would be sized to accommodate more growth than just that associated with the project. As such, these improvements could eliminate an obstacle to further redevelopment and growth in the Richards Boulevard area.

Economic Effects

In addition to the employment generated by the proposed project, additional local employment can be generated through the multiplier effect. The multiplier effect tends to be greater in regions with larger diverse economies due to a decrease in the requirement to import goods and services from outside the region.

Two different types of additional employment are tracked through the multiplier effect. Indirect employment includes those additional jobs that are generated through the expenditure patterns of direct employment associated with the project. For example, workers in the office (under Development Scenario B) and retail portions of the proposed project would spend money in the local economy, and the expenditure of that money would result in additional jobs. Indirect jobs tend to be in relatively close proximity to the places of employment and residence.

The multiplier effect also calculates induced employment. Induced employment follows the economic effect of employment beyond the expenditures of the employees within the proposed project area to include jobs created by the stream of goods and services necessary to support businesses within the proposed project. For example, when a manufacturer buys or sells products, the employment associated with those inputs or outputs are considered induced employment.

When an employee from the project goes out to lunch, the person who serves the project employee lunch holds a job that was indirectly caused by the proposed project. When the server then goes out and spends money in the economy, the jobs generated by this third-tier effect are considered induced employment.

The multiplier effect also considers the secondary effect of employee expenditures. Thus, it includes the economic effect of the dollars spent by those employees who support the employees of the project.

Increased future employment generated by employee spending ultimately results in physical development of space to accommodate those employees. It is the characteristics of this physical space and its specific location that will determine the type and magnitude of environmental impacts of this additional economic activity. Although the economic effect can be predicted, the actual environmental implications of this type of economic growth are too speculative to predict or evaluate, since they can be spread throughout the Sacramento metropolitan region and beyond.

Impacts of Induced Growth

Planning documents, such as the City of Sacramento General Plan, Richards Boulevard Area Plan, and Central City Community Plan, try to plan for future growth and plan for potential impacts due to this growth. While these documents attempt to incorporate the most current population projections, new development projects are often not included in the plans. For example, since the adoption of the current General Plan (1988), the City has begun working toward higher intensity uses within the Central City, which would cause an increase in population which could exceed General Plan projections. There have been several planned and recently approved projects within the Central City area that include higher density residential towers and commercial high rises, which in combination with the proposed project, would exceed the current General Plan's population projections.

In addition to the growth of the Central City area from other development projects, the proposed project would increase the population within the Central City by between 6,040 and 7,661 residents. While growth in the Richards Boulevard area of the City is an intended consequence of the proposed project, growth induced directly and indirectly by the proposed project could adversely affect the greater Sacramento area. Potential impacts associated with induced growth in the area could include: traffic congestion; air quality deterioration; loss of habitat and

wildlife; impacts on 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 population-growth-induced 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 and infrastructure.

While the proposed project would contribute to direct, indirect, and induced growth in the area, it would also enhance the vitality of the Richards Boulevard area which is a goal of the City's General Plan, the Central City Community Plan, and the Richards Boulevard Area Plan.

Cumulative Impacts

CEQA requires that an EIR contain an assessment of the cumulative impacts that could be associated with project implementation. This assessment involves examining project-related effects on the environment in the context of similar effects that have been caused by past or existing projects, and the anticipated effects of future projects. Although project-related impacts may be individually minor, the cumulative effects of these impacts, in combination with the impacts of other projects, could be significant under CEQA and must be addressed (CEQA Guidelines, section 15130(a)). Each subsection of Chapter 6, Environmental Analysis, concludes with a cumulative impact analysis for the issue area addressed in the subsection.

An EIR must discuss the "cumulative impacts" of a project when its incremental effect will be cumulatively considerable. This means that the incremental effects of an individual project would be considerable when viewed in combination with the effects of past projects, the effects of other current projects, and the effects of probable future projects (CEQA Guidelines, section 15065(c)).

CEQA Guidelines section 15355 defines cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." This section states further that "individual effects may be changes resulting from a single project or a number of separate projects." "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

Section 15130(a)(3) states also that an EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund its fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

Section 15130(b) indicates that the level of detail of the cumulative analysis need not be as great as for the project impact analyses, that it should reflect the severity of the impacts and their likelihood of occurrence, and that it should be focused, practical, and reasonable.

For the purpose of this EIR analysis, the cumulative impacts analysis assumes buildout of the City of Sacramento General Plan and includes recently approved and/or probable future projects under consideration in the Central City as The Towers on Capitol Mall, 500 Capitol Mall, EPIC Tower and the Railyards.

While the cumulative analysis takes into consideration the impacts of the project in combination with project's anticipated in the General Plan and/or recently approved or probable future projects, the context of the cumulative analysis varies by technical area. For example, the cumulative context for air quality is dependent on the specific pollutant being considered. For ozone precursors, the cumulative context would be all development occurring in the Sacramento Valley. The cumulative effects of PM₁₀ and CO would be limited to the general vicinity of the project and would be affected only by other local projects being developed concurrently. Cumulative impacts to biological and cultural resources are analyzed assuming buildout of the City of Sacramento General Plan. In addition to buildout of the City, biological resources also evaluates SACOG's regional buildout for cumulative impacts to biological resources. Another technical area that considers a larger cumulative context is hydrology and water quality. The hydrology and water quality analysis in this EIR considers development within the Sacramento River watershed, of which the project site is a part.

The cumulative context for other technical areas, such as geology and hazards, is generally site-specific, rather than cumulative in nature, because each development site has unique geologic, soils, and hazard characteristics that would be subject to uniform site development and construction standards imposed by the City of Sacramento.

The cumulative context for aesthetics evaluates the surrounding area from three separate viewsheds in the project vicinity, while the cumulative context for light and glare considers additional development projects that could affect the same sensitive receptors as the proposed project. The cumulative context for noise considers existing and future noise sources that could affect the project or surrounding uses.

The cumulative analysis for public services and utilities typically considers the service area of the issue being analyzed. For example, the cumulative context for the schools analysis is the school district boundaries; the cumulative context for libraries is the Sacramento Public Library service area. Some of the services, such as libraries and parks, also analyze impacts until specific horizon dates as specified by the service's master plan.

9.0 REFERENCES

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10.0 REPORT PREPARATION

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APPENDICES

APPENDIX A – Initial Study

**TOWNSHIP 9
P06-047**

INITIAL STUDY/ MITIGATED NEGATIVE DECLARATION

This Initial Study has been prepared by EIP Associates, a Division of PBS&J, for the Development Services Department, 2101 Arena Boulevard, Second Floor, Sacramento, CA 95834, pursuant to Title 14, Section 15070 of the California Code of Regulations; and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento.

Organization of the Initial Study

This Initial Study contains the following sections:

Section I – Project Background: - provides summary background information about the project name, location, sponsor, and the date this Initial Study was completed.

Section II – Project Description: - includes a detailed description of the proposed project.

Section III – Environmental Checklist and Discussion: - contains the Environmental Checklist form together with a discussion of the checklist questions. The following are determined for the proposed project:

Potentially Significant Impacts - identifies impacts that may have a significant effect on the environment, but for which the level of significance cannot be appropriately determined without further analysis in an Environmental Impact Report (EIR)

or

Potentially Significant Impacts Unless Mitigated - identifies impacts that could be mitigated to less than significant with implementation of mitigation measures

or

Less Than Significant Impacts - identifies impacts that would be less than significant and do not require the implementation of mitigation measures.

Section IV – Potentially Affected Environmental Factors: - identifies which environmental factors were determined to have either a “Potentially Significant Impact” or “Potentially Significant Impact Unless Mitigated,” as indicated in the Environmental Checklist.

Section V - Determination: - identifies the determination of whether impacts associated with development of the Proposed project are significant, and what, if any, added environmental documentation may be required.

Section I – Project Background

Project Name and File Number: Township 9 (P06-047)

Project Location: The approximately 65-acre project site is generally bounded by Richards Boulevard to the south, the American River to the north, North 5th Street to the west, and North 7th Street to the east.

Project Applicant: Capitol Station 65, LLC
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Sacramento, CA 95814
(916) 482-7900

Project Planner: Michael York
Development Services Department
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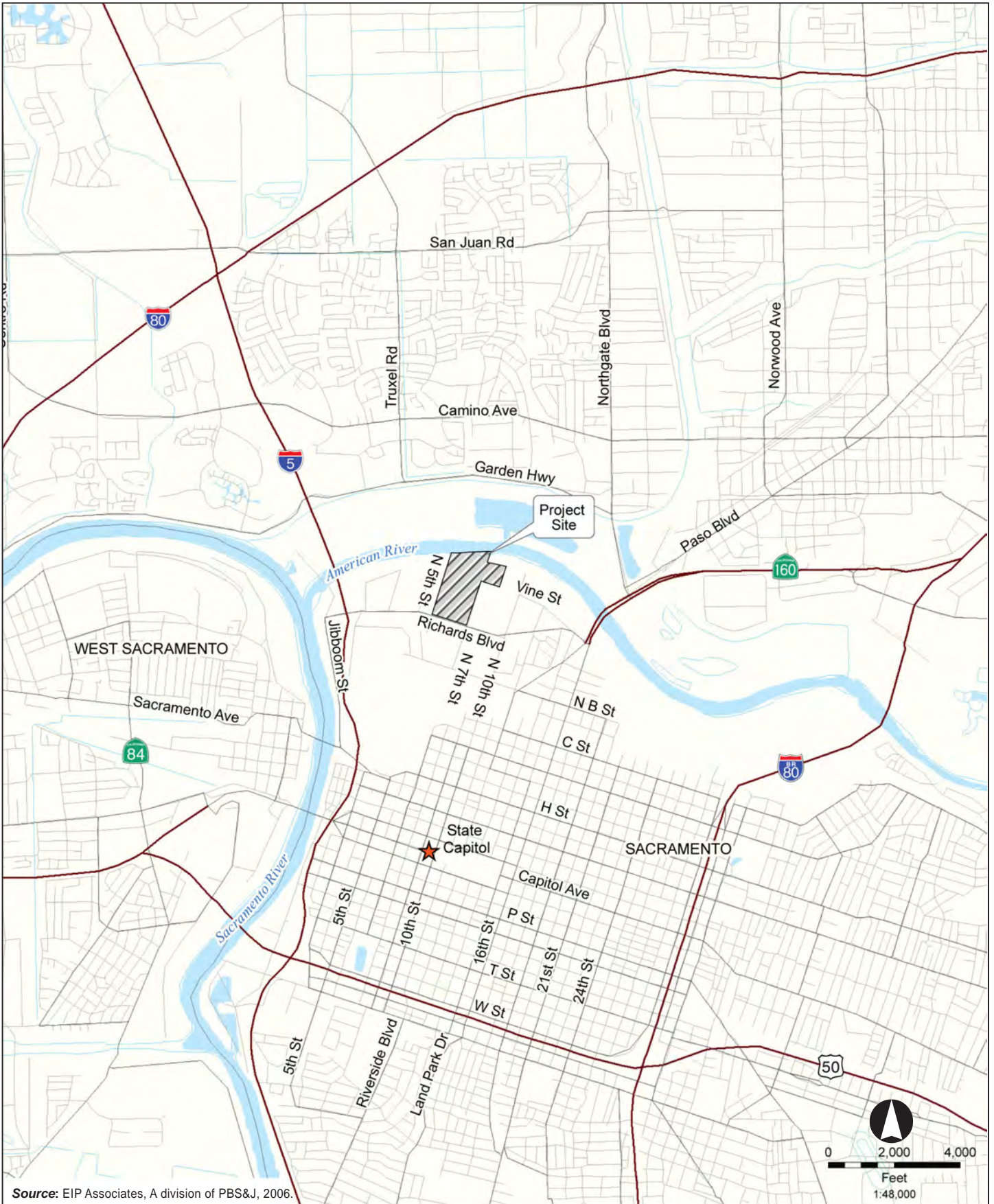
Environmental Planner: Jennifer Hageman
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Date Initial Study Completed: October 2006

Section II – Project Description

INTRODUCTION

The Township 9 project (proposed project) is a proposed mixed-use development in the Richards Boulevard Area Plan (RBAP) area in the City of Sacramento (see Figures 1 and 2). The RBAP comprises approximately 1,050 acres bounded by the Sacramento River on the west, the American River on the north, the Union Pacific rail line on the south, and Sutter's Landing Park on the east. The RBAP establishes policies and standards which guide the distribution, location, and intensity of new development in the area; standards and design guidelines which are intended to enhance the character of new development and compatibility between the different uses planned for the area; policies and guidelines that provide direction on expanding existing uses; policies and actions for establishing new housing in the area; and policies and standards related to the provision of community facilities, including schools, parks and open space, police and fire facilities, child care and social service facilities. The project site is located in the central portion of the RBAP in an area designated RB-3: Riverfront Central planning sub-area. The project location, project objectives, and specific project elements are described in detail below.



Source: EIP Associates, A division of PBS&J, 2006.

FIGURE 1
Project Location

D51214.01

Township 9



A Division of **PBS&J**



Source: Carter-Burgess, 2006.

FIGURE 2
Illustrative Site Plan



A Division of **PBS&J**

D51214.01

Township 9

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PROPOSED PROJECT

Project Location and Setting

The approximately 65-acre Township 9 site is generally bounded by Richards Boulevard to the south, the American River to the north, North 5th Street to the west, and North 7th Street to the east. There are 13 parcels on the project site. Surrounding land uses consist of the American River to the north, industrial uses to the south, industrial and office uses to the east and west. Regional access to the project site is provided by Interstate 5 (I-5) and State Route 160 (SR 160). Local access is provided by Richards Boulevard. Existing transit facilities in the project vicinity include the Sacramento Amtrak Station at 4th and I Streets, approximately 1.8 miles from the project site; the Sacramento Regional Transit (RT) Blue Line light rail route along 12th Street, with the La Valentina light rail station approximately 1.2 miles from the project site on 12th Street between D and E Streets; and RT bus service on Richards Boulevard, North B Street, 7th Street, and 12th Street.

The Sacramento Regional Radio Communications System (SRRCS), the Automated Local Evaluation in Real Time (ALERT) system, and the State of California Public Safety Microwave Network are telecommunication microwave systems that serve federal, state, county, and City agencies. These emergency and weather communication systems are located on the rooftops of many downtown Sacramento buildings. Some microwaves from these systems cross the project site.

Existing Uses on the Project Site

The site is predominantly covered with commercial structures and impervious surfaces. Vegetation is sparse and consists of shrubs and trees located sporadically across the site. A portion of the site, approximately 12 acres, is located on the water side of the American River levee, within the American River Parkway. Existing uses on the project site include industrial, warehouse, commercial, and office uses. Current active businesses on the property include Offices of the project applicant, cold storage, concrete storage and delivery, a livestock feed supplier, hay-bail compression and delivery, and a warehouse occupied by the Sacramento Habitat for Humanity. A number of the existing buildings on the project site are considered historic structures.

Existing Land Use Designations and Zoning

The City of Sacramento's General Plan land use designation for the project site is Special Planning District (SPD). The RBAP designations for the project site are Industrial/Residential (IR), Transit-Oriented Office (O), and Open Space (OS). Existing zoning consists of American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Parkway Corridor Overlay Zone; Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)).

Project Objectives

The overarching goal of the proposed Township 9 project is the orderly and systematic development of an integrated, transit oriented, mixed-use community that is generally consistent with the goals and policies of the City's General Plan, the Central City Community Plan (CCCP), the RBAP, and the American River Parkway Plan, and is compatible with site characteristics. In

support of this overarching goal, the project applicants have developed the following objectives for the proposed project:

- Create a transit-oriented, pedestrian-friendly, mixed-use, live-work development that is a logical extension of the downtown area north to the American River;
- Incorporate a riverfront park and river trail into the project to enhance both the project's and City's goals of increasing public use and enhancing the appearance of the riverfront;
- Integrate employment opportunities with residential neighborhoods of varying unit densities throughout the project area;
- Create a residential development near the major employment centers of downtown Sacramento;
- Provide for construction of a transit line and Richards Boulevard Light Rail Station along the planned Downtown-Natomas-Airport (DNA) light rail transit line with densities that would support the feasibility of a light rail line;
- Design a project that promotes using various modes of transportation by locating high-density residential development within a quarter-mile of the proposed light rail station;
- Develop the project site in a manner consistent with and supportive of Sacramento Area Council of Government's (SACOG's) Blueprint plan;
- Provide neighborhood and community retail near residential development to shorten or reduce the number of vehicle trips;
- Incorporate urban parks, plazas and open space into the project design in a manner that provides community connectivity;
- Make efficient and economically viable use of an infill development opportunity;

The City has developed the following objectives for the proposed project:

- Stimulate planned development along the waterfront, in turn creating a more inviting and safer waterfront environment for its residents;
- Increase office and retail job opportunities in the City and the residential component that accompanies such jobs;
- Provide and encourage public access to the American River waterfront; and
- Enhance the City's supply of housing that provides a range of housing opportunities available to residents from a wide range of economic levels.

Project Elements

The proposed project includes two development scenarios. Scenario A includes the development of approximately 2,981 dwelling units and approximately 146,194 gross square feet of neighborhood-serving retail and restaurant uses. Scenario B would develop approximately 839,628 gross square feet of office use (instead of residential) on proposed lots fronting Richards Boulevard (lots 13, 14, and 17). Under Scenario B, the number of dwelling units would be reduced to approximately 2,350. The approximately 146,194 gross square feet of neighborhood-serving retail and restaurant uses would remain unchanged under Scenario B.

The project would include residential/retail structures, a network of public streets, aboveground and subgrade parking facilities, public and private open space areas, a river trail, and a

riverfront pavilion with a tower structure, an overlook, and an outdoor performance facility. The project would also include space for a transit station and tracks for future construction by Sacramento RT. Specific project elements are discussed in detail below.

Residential Uses

Proposed residential uses include apartments, condominiums, townhomes, and live/work units. Buildings would range from 2 to 15 stories with a maximum height of 180 feet. Under Scenario A, approximately 2,981 residential units are proposed. Under Scenario B, approximately 2,350 residential units would be developed.

Office Uses (Scenario B)

Under Development Scenario B, 839,628 square feet of office uses would be developed in place of residential units on lots 13, 14, and 17. No office use is proposed under Scenario A. The tallest structure under this scenario would be a 15-story, 235-foot-tall office building (with ground-floor retail) on lot 13.

Retail and Restaurant Uses

Retail uses would be located in the ground floor of residential buildings and would include a mix of restaurant uses such as coffee and sandwich shops, fast-food establishments, and bars. Other neighborhood-serving uses such as hair salons, dry cleaning, small grocery stores, flower shops, and office-type services would also be provided. Retail/restaurant uses proposed total approximately 146,194 square feet under either Scenario A or Scenario B.

Parking Facilities

Parking facilities would include parking structures and may also include subgrade parking. Under Scenario A, the project would include approximately 4,134 parking spaces. Under Scenario B, the project would include approximately 5,389 parking spaces. The project would achieve City code requirements for parking. It is anticipated that the project would make use of joint parking arrangements where parking required for one parcel could be provided on an adjacent or adjoining parcel within the project site. On an interim basis, parking requirements for individual parcels could be met through the use of temporary surface parking that would be provided on-site on adjacent lots within the project site as well as off-site on adjacent parcels located outside of the project boundaries.

Parking structures would likely be cast-in-place concrete construction. Parking facilities on major street frontages (e.g., Richards Boulevard, North 5th Street, and North 7th Street) would be integrated into residential / retail buildings. On minor internal street frontages, parking garages could be exposed to view but would have architectural finishes and design treatment, continuous landscaping or planters, and be subject to design review.

If subgrade parking is developed, it would be limited to one level below existing grade and would not occur within the first block adjacent to the levee. Within the first block parcels, the subgrade parking would be built on existing grade with earthen fill placed against it to create the subgrade condition. The facilities would likely be cast-in-place concrete construction.

Parks and Open Space

The project would include approximately 27 acres of public open spaces and approximately 3,920 square feet of private open spaces. Public open spaces would include urban parks and plazas, parkways, and natural open space along the American River. Private open spaces would consist of central courtyards that would serve as common open space for residential buildings. Although these courtyards would probably not be open to the public, they would serve residents as relief from the higher density nature of the project.

Riverfront Pavilion

A riverfront pavilion is proposed at the terminus of North 7th Street as it approaches the waterfront. Pavilion uses could include an outdoor performance venue, a tower structure, an overlook onto the American River, and other public urban park uses. The pavilion uses would rely upon on-street parking along the proposed Riverfront Drive, nearby internal streets within the project site, and on adjacent properties up and down the river.

Outdoor Performance Venue

The informal lawn seating capacity of the outdoor performance venue would be approximately 2,500 to 3,000 people. The park area surrounding the riverfront pavilion would be open from dawn to 10 p.m., but events at the outdoor performance venue would be limited to evenings and weekends and would be conducted pursuant the restrictions and permitting requirements of Chapter 8.68, Noise Control, of the Sacramento Municipal Code.

Tower

The tower structure would be an approximately 150-foot-tall feature that would be oriented towards downtown and would provide a visual landmark identifying the termination of North 7th Street. The design of the tower is a cable-supported fabric structure. The fabric would be transparent depending upon if the fabric is a teflon-coated fiberglass or polyvinyl chloride (PVC). The fabric would be either white or possibly colored depending upon the material. The tower structure would also include a light feature consisting of a controlled neon or laser light source that would operate from dusk until dawn. One lighting concept being considered is to use neon and cold cathode lighting applied to the entire height of the tower itself. Although this type of lighting feature may be bright to look at, it does not cast light beyond a very small area. The second lighting concept being evaluated is to illuminate the fabric portion of the structure. Any light feature would include cut-off shields that screen the light from shining to the north or onto the riverfront area of the proposed development. In both cases, glare and night sky light can be avoided. The possibility of projected media such as laser light shows could potentially be included, but not necessarily as permanent features, as a part of the tower feature. These features would be treated as any other light source and shielded from the river.

Low-level down lighting for security purposes is also proposed as a part of the proposed tower. The average lighting levels would be between 1 to 5 foot candles, with increased levels of approximately 50 foot candles during special events and facility maintenance.

Aviation navigation lighting is not required for the proposed tower structure. According to Title 14 of the Code of Federal Regulations, aircraft are prohibited from flying within 1,000 feet of the highest obstacle in a populated area.

Overlook

The overlook would be an up to 230-foot-wide cast-in-place concrete construction that could extend up to 60 feet from the centerline of the levee toward the American River. The overlook would not exceed the waterside toe of the levee. The overlook may be in the form of a cantilever that would be supported at the top of the levee, or the overlook could be supported by a retaining wall at its northern edge. If the overlook is a cantilever, all of the construction would be done at the top of the levee. If the overlook is supported by a retaining wall, construction activity would take place no further than 10 feet from the wall location toward the American River. The retaining wall included within the overlook would be designed with neutral colors to blend into the natural features of the American River Parkway. In addition, native plants and shrubs would be planted along the base of the wall.

Landscaping

Proposed on-site landscaping would include trees, shrubs, groundcover and/or turf and irrigation within street planter areas, medians, paseos and parks. Landscaped areas may include water features such as fountains.

Two Rivers Trail and Levee Improvements

The existing American River levee would be adapted to accommodate the Two Rivers Trail, a bicycle trail that runs between I-5 and SR 160. The existing trail and proposed park facilities would provide public access to the river. The Township 9 project proposes no change to the grade of the trail, which currently runs along the top of the levee. The levee improvements would be accomplished through grading operations that would place earthen fill against the existing levee that gently slopes away from the levee toward Richards Boulevard. The goal of this improvement is to minimize the visual and physical barrier of the levee and make the waterfront accessible to the public. The slope would meet existing ground at an average of 450 feet south of the existing levee. Since the adjacent properties do not incorporate this concept into their design, this improvement would need to conform to the existing topography on the east and west sides of the site. In most cases this would be accomplished by placing a slope of earthen fill down to existing ground level. The exception is that a retaining wall would be required along North 5th Street on the east side of the existing pump station. Starting at the levee and going south, the retaining wall would range in height from 13-feet to 2-feet. The existing access road to the pump station would need to be reconstructed in conjunction with the retaining wall design. Part of the project would also include rebuilding the connection from North 5th Street. The improvements would meet or exceed the City standards for the trail through this site and could include a wider pavement width that accommodates more users and a meandering alignment that works with the park uses planned within the project site. The final alignment and design elements would be planned with City input.

Transit Space

The project would include an allowance for a transit station and tracks to be constructed by Sacramento Regional Transit. The project applicant proposes to create a 60-foot-wide easement over the south edge of lots 13, 14, and 17 subject to an agreement between the applicant and Regional Transit. It is anticipated that the air rights above the transit area would be maintained by the project applicant with the possibility of future structures being constructed. The planning, approval, environmental clearance, and construction of the station and tracks are not part of the proposed project.

Infrastructure

Roadways and Circulation

The project would construct a network of public streets to provide vehicle and bicycle access throughout the project site. In addition, the project would provide sidewalks along all public streets to encourage pedestrian activity.

Water Supply Distribution

Installation of the water distribution system would occur in phases, corresponding to the construction phasing of the project (see discussion of project phasing below). The water system for the project would consist of 12-inch water distribution lines within the street rights-of-way with connections to existing City transmission mains in North 5th Street, North 7th Street, and Richards Boulevard.

Wastewater Collection

Wastewater from the project site would be conveyed to the existing pipelines in North 5th Street and North 7th Street, eventually flowing to the 33-inch main in Richards Boulevard. The pipe system internal to the project would consist of 8-inch to 10-inch pipes located within public streets. The existing pipelines on the north half of North 7th Street would need to be replaced.

Storm Drain Collection

The storm drainage system would be a gravity-fed system of pipelines connecting to the existing system at multiple locations on North 5th Street, North 7th Street, and Richards Boulevard. The pipe system internal to the project would consist of 12-inch to 24-inch pipes with drop inlets to collect drainage from roadways. Additional drop inlets would also be constructed in North 5th and North 7th Streets to accompany the new street intersections. Installation of the drainage system would occur in phases, corresponding to the construction phasing of the project (see phasing discussion below). Prior to discharge to the existing storm drain system, runoff from the 65 acre project site would be treated per the City's NPDES permit requirements issued by the state.

Electric, Gas, Telephone, and Cable Utilities

The project applicant anticipates that the following service providers would serve the proposed project:

Electric – Sacramento Municipal Utility District (SMUD)

Natural Gas – Pacific Gas and Electric (PG&E)

Telephone – AT&T

Cable Television – Comcast Cable

Infrastructure presently exists for these utilities on and in the vicinity of the project site. Development of the project would necessitate the construction of an on-site distribution system to convey these services to uses on the project site. It is anticipated that upgrading/upsizing of

existing utilities would occur on streets immediately adjacent to the project site (i.e., Richards Boulevard, North 5th Street, and North 7th Street) in order to serve the project.

Energy Conservation Features

Proposed office uses under Scenario B would include lighting conservation efforts and other energy conservation measures. Lighting conservation efforts would include occupancy sensors to automatically turn off lights when not in use, lighting reflectors, electronic ballasts, and energy-efficient lamps. Conservation efforts are expected to include improved HVAC systems with microprocessor-controlled energy-management systems.

Construction Considerations

Site Preparation and Grading

All existing structures on the project site, totaling approximately 1.4 million square feet, would be demolished to accommodate the proposed project. These structures would be demolished in phases independent of the proposed construction phasing. All trees and shrubs on the project site would be removed. As with the construction phasing plan, market conditions could expedite or extend the schedule or require an additional phase(s).

All construction staging areas would be located on the proposed project site. The northern end of the project site would require approximately 133,000 cubic yards of fill to backfill against the levee in order to make the site more level for development. Currently it is planned that fill would be obtained from excavations on-site, particularly in lots 13, 14, and 17 where below grade parking structures are proposed. These excavations would be approximately 14 feet in depth. Additional fill would be obtained from minor excavations across the remainder of the site. Imported fill may be needed if on-site material is found to be unsuitable or insufficient. Potential additional sources for the imported fill have been identified and include downtown City of Sacramento construction sites. Haul routes would be identified after the tentative map is approved and prior to construction. Haul routes would use existing roadways. No temporary roads would be constructed. The proposed project would require a grading permit, which would be reviewed and approved by the City Department of Utilities.

Temporary Recycling Facility

The project would include the operation of a temporary portable recycling facility. The recycling facility would be in operation for approximately six weeks during demolition activities. The facility would be used to recycle material from the demolition of buildings and paved areas on-site. These materials could include brick, tile, concrete, and asphalt, as well as other materials. Some material would be re-used on the project site for new buildings and some would be hauled off-site. Recycled materials hauled off-site would be taken to various recycling facilities. Any wood removed from the site would be hauled to either the co-generation plant or Kiefer Landfill. The recycling operation would be located in the open area along the north end of North 5th Street or on the North end of North 7th Street on the east side of the street. A temporary access off of North 5th Street or North 7th Street would be used for truck traffic. The recycling facility location may be moved if phasing of the project changes.

SMAQMD staff has indicated that the stationary source permit for operation of the proposed temporary recycling facility would include a cap, which would be determined by SMAQMD based on the anticipated operational emissions. SMAQMD would monitor the operation of the

facility and the operator would not be able to exceed the emissions cap. In addition, obtaining the permit would require that a SMAQMD engineer review the equipment and the operation of the project and determine how best to minimize air emissions. The applicant has submitted the permit application and is coordinating with SMAQMD.

Project Phasing

The project applicant anticipates that construction of the proposed project would be done in four phases. Construction is anticipated to occur from summer 2007 through summer 2016. Market conditions could expedite or extend the schedule or require an additional phase(s).

Required Permits and Approvals

City of Sacramento

Project approval requires the City of Sacramento to approve the proposed project and to issue required permits or affirm compliance with agency requirements. Described below are the discretionary actions sought by the project applicant for the Township 9 project that the City of Sacramento will consider during its review. This EIR is intended to be used in conjunction with the consideration of the following entitlements.

EIR Approval

Before the City can approve the proposed project, it must certify that the Township 9 EIR was completed in compliance with CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the City of Sacramento. Approval of the EIR also requires adoption of a Mitigation Monitoring Plan (MMP), which will specify the methods for monitoring mitigation measures required to eliminate or reduce the project's significant effects on the environment. The City Council will also be required to adopt Findings of Fact, and for those impacts determined to be significant and unavoidable, adopt a Statement of Overriding Considerations.

Development Agreement (DA)

The City and the project applicant will enter into a development agreement for allocation of infrastructure costs, park dedication requirements and turn key agreements.

Rezone

The project would require approval of a rezone to change the zoning designations (as identified in Title 17 of the Sacramento Municipal Code) on the proposed project site. Existing zoning on the project site consists of American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)). The project would require approval of a rezone to the following designations: Residential Mixed Use (RMX-PUD) and Open Space (AOS-PUD). There would be no rezoning of the portion of the project site zoned ARP-F-SPD.

Designation of a Planned Unit Development (PUD) and Adoption of Development Guidelines and Schematic Plan

The proposed project will require approval of a PUD designation for the parcels proposed as RMX-PUD and A-OS-PUD. A PUD is a development of land that is under unified control and is

planned and developed in phases or as a whole in a single development operation. The purpose of a PUD is to provide greater flexibility in the design of integrated developments than is otherwise possible through strict application of zoning regulations. The intent of a PUD is to encourage the design of well-planned facilities that offer a variety of land use types and integrated open space areas through creative and imaginative planning. PUDs can include all or a portion of a residential neighborhood, an employment center, or a mixed residential/employment development.

Tentative Map

The project would require approval of a Tentative Map to subdivide approximately 65 gross acres into 20 lots.

Design Commission Review

The proposed project would require Design Commission approval of the Township 9 Planned Unit Development (PUD) Guidelines and Schematic Plan. The Design Commission would review and make recommendation to the City Council of the Planned Unit Development Guidelines and Schematic Plan.

Preservation Commission Review

The proposed project would require Preservation Commission approval for demolition of any or all structures on the project site. Preservation Commission will also be required for partial preservation to move, rehabilitate, and adaptively reuse any buildings on the project site.

Water Supply Assessment

The City will approve the Water Supply Assessment prepared for the proposed project and provide a written verification consistent with SB 610/221 requirements.

Other Agency Approvals

- The Sacramento Metropolitan Air Quality Management District (SMAQMD) would issue a permit to operate.
- The State Water Resources Control Board would issue a Construction Storm Water Discharge permit.
- The State Reclamation Board would issue a permit prior to beginning work within floodways, levees, and ten feet landward of the landside of a levee toe.

Section III – Environmental Checklist and Discussion

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
1. <u>LAND USE</u>			
<i>Would the proposal:</i>			
A) Result in a substantial alteration of the present or planned use of an area?	✓		
B) Affect agricultural resources or operation (e.g., impacts to soils or farmlands, or impact from incompatible land uses?)			✓

Environmental Setting

The project site is within in the RBAP area in the City of Sacramento. The approximately 65-acre project site is generally bounded by Richards Boulevard to the south, the American River to the north, North 5th Street to the west, and North 7th Street to the east. The City of Sacramento’s General Plan land use designation for the project site is Special Planning District. Existing zoning consists of American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)). The project proposes to rezone the parcels on the project site currently zoned M-2-PC-SPD(N) and M-2-SPD(C) to Residential Mixed Use (RMX-PUD) and Open Space (AOS-PUD). There would be no rezoning of the portion of the project site zoned ARP-F-SPD.

Surrounding land uses consist of the American River to the north, industrial to the south, industrial/office to the east, and industrial to the west. The site is predominately covered with impervious surface. Existing uses on the site include industrial and warehouse use — mainly cold storage and related uses. A portion of the site, approximately 12 acres, is located on the American River side of the levee, in the American River Parkway. There are no agricultural uses on the project site.

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

- the project substantially alters an approved land use plan, resulting in a physical change to the environment.

The discussions of impacts to the physical environment resulting from the project are in the subsequent sections of this document.

Answers to Checklist Questions

Scenarios A and B

- A) The project would require rezoning and changes to the RBAP, including changing the location and amount of various designations including residential, office, and open space. In addition, the project proposes changes to development standards, including parking requirements, height restrictions, and street standards. Project development would alter the present planned use of the area. This would be considered a ***potentially significant impact***. This issue will be further addressed in the EIR.
- B) The project site is located in an urban area that is currently developed for industrial use and recreational use on the American River Parkway. There are no agricultural activities on site or in the surrounding area that could be impacted by the proposed project. Impacts to agricultural operations or resources would be ***less than significant***. This issue will not be further addressed in the EIR.

Findings

The proposed project is anticipated to result in a potentially significant impact associated with land use issues and less-than-significant impacts related to agricultural resources or operations. Potential impacts associated with altering an approved land use plan will be addressed further in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
2. <u>POPULATION AND HOUSING</u>			
<i>Would the proposal:</i>			
A) Induce substantial growth in an area either directly or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	✓		
B) Displace existing housing, especially affordable housing?			✓

Environmental Setting

The City of Sacramento’s General Plan land use designation for the project site is Special Planning District (SPD). The RBAP designations for the project site are Industrial/Residential (IR), Transit-Oriented Office (O), and Open Space (OS). Existing zoning consists of American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)).

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project induces substantial growth that is inconsistent with the approved land use plan(s) for the area or displaces existing housing, especially affordable housing.

Answers to Checklist Questions

Scenarios A and B

- A)** Assuming 2.57 persons per household, the anticipated residential population for the proposed project would be approximately 7,661 under Scenario A and approximately 6,034 under Scenario B. The population generated by the proposed project under either development option could result in physical environmental effects associated with an increase in demand for services. This is considered a **potentially significant impact** and will be discussed in the EIR. The potential for the proposed project to be growth-inducing will also be addressed in the EIR.

- B)** The project site is located in an urban area that is currently developed for industrial use and recreational use on the American River Parkway. No housing is located on the project site; therefore, no housing would be displaced as a result of the proposed

project. This would result in a *less-than-significant* impact. This issue will not be further addressed in the EIR.

Findings

The proposed project would not displace existing housing, especially affordable housing. However, since the project would generate a new permanent population, environmental effects resulting from this growth are considered potentially significant and will be discussed further in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
3. SEISMICITY, SOILS, AND GEOLOGY Would the proposal result in or expose people to potential impacts involving:			✓
A) Seismic hazards?			
B) Erosion, changes in topography or unstable soil conditions?	✓		
C) Subsidence of land (groundwater pumping or dewatering)?	✓		
D) Unique geologic or physical features?	✓		

Environmental Setting

Reportedly, earthquakes that have occurred in Northern California since the 1800s have had only moderate effects in the Sacramento area with intensities not exceeding about VI on the Modified Mercalli Scale (MMS). For example, the 1906 earthquake on the San Andreas Fault, which had a maximum intensity of XI MMS and a moment magnitude (Mw) of about 7.9 in the San Francisco bay area, produced only an intensity of V MMS in the Sacramento area. However, the City of Sacramento General Plan Update (GPU) determined that an earthquake of Intensity VII on the Modified Mercalli Scale is a potential event due to the seismicity of the region. In addition, the Health and Safety Element of the General Plan for the County of Sacramento shows two faults as being influential to Sacramento County: the Midland fault zone, located approximately 20 miles west of the site, and the Bear Mountain fault zone, located approximately 24 miles east of the site. These faults are mapped by the California Geological Survey (CGS) as pre-Quaternary and late-Quaternary, respectively. The Midland fault zone is considered to be a deep pre-Pleistocene subsurface feature extending nearly 50 miles along the west side of the Sacramento Valley. This fault has been only approximately located as a result of natural gas exploration work. Subsurface data indicate that there has been no appreciable movement on the Midland fault in the last 24 to 36 million years, and no evidence of surface expression has yet been found. The Bear Mountain fault is the westerly-most fault within the Foothills fault zone, which consists of numerous northwesterly trending faults along the western edge of the Sierra Nevada range. The Foothills fault zone is generally bounded by the Bear Mountains and Melones fault zones, located approximately 25 and 40 miles east of the site, respectively. The Green Valley, Concord, Cleveland Hill, and Hayward faults are considered to be "Active" as defined by the Alquist-Priolo Earthquake Fault Zoning Act, meaning they have experienced activity within the last 11,000 years. The Cleveland Hill fault, located approximately 60 miles north of the site, was last active in 1975, producing a magnitude 5.7 earthquake event. The Green Valley, Concord and Hayward Faults historically rupture by fault creep, that is, they move continually at a slow rate; however, these faults are considered capable of producing significant earthquake events if a large segment of the fault slips at one time.

Site Geology

The project site is located on Quaternary alluvial deposits of the Sacramento and American Rivers.¹ These materials are part of a sedimentary rock layer is approximately 3,000 feet of fluvial-deposited sediments eroded from the mountains to the north and east. In the City of Sacramento, the two uppermost sequences of these fluvial sediments are named the Victor and Laguna formations.²

The Victor formation forms the natural ground surface and consists of channel sands and gravels, and overbank deposits of silt and clay extending as much as 100 feet below the ground surface. The Victor formation overlies the Laguna formation, which is about 200 to 300 feet thick and consists of silt, clay, and sand with lenses (layers) of gravel. The gravel lenses slope and thicken toward the west. The mixture of particle size in both formations varies widely.³

Fill soils (stockpile) were found on the western side of the site, in a berm approximately three to four feet high, parallel to North 5th Street. These fill soils are loose and generally consist of gravelly sands, with scattered demolition debris.⁴

Site Soils

Surface and near-surface soils at the project site consist of soft silts and clayey silts to approximately 15 to 20 feet below site grade. From here, there are silty and clean sands over a layer of sandy gravels located between 42 and 56 feet below site grade. A six-inch layer of peach pit refuse from peach processing operations that previously occupied the site was discovered on the surface along the western portion of the project site.

Liquefaction

Significant ground motion resulting from movement along a fault could cause liquefaction in areas underlain by loose, cohesionless sands and soft silty materials, especially when combined with high groundwater levels typical of near-river environments. During seismic events with strong ground shaking, these factors could result in liquefaction hazards to structures such as shallow and deep foundation bearing failure, lateral spreading, and differential settlement of foundations, which can contribute to structural damage and collapse.

However, the geotechnical investigation stated that there have been no reported events of liquefaction occurring within the downtown Sacramento area during the major earthquake events that have cause ground shaking in the region, including the 1892 Vacaville-Winters event, 1906 San Francisco event, and the 1989 Loma Prieta event.⁵ The geotechnical

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- 1 Wagner D.L., et. al., State of California, Department of Conservation, State Mining and Geology Board, *Geologic Map of the Sacramento Quadrangle*, 1981.
 - 2 California Geological Survey, 1966, *Geology of Northern California*, Bulletin 190, Pages 217 through 219.
 - 3 Harding Lawson Associates, *Draft Preliminary Geotechnical Evaluation Richards Boulevard Redevelopment Area Sacramento, California*, HLA Job No. 20169,00.04, San Francisco, California, October 17, 1990, Pages 4 and 5.
 - 4 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, page 4.
 - 5 Wallace-Kuhl & Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, page 9.

investigation included an analysis of soils underlying the project site to determine their potential for liquefaction. The geotechnical report concluded that the soils at the project site were nonliquefiable.⁶

Groundwater

Groundwater levels in the project area are located at approximately +0 msl, which is 25 feet below the ground surface at the project site. The Preliminary Geotechnical Engineering Report identified saturated soil conditions at seven feet below grade at boring locations. Groundwater levels were also detected at 4.9 feet and 12.4 feet below grade during pore water dissipation testing.⁷

Groundwater flow in the shallow zones generally is east-southeast, but is controlled by the river. As the surface water elevation of the Sacramento and American Rivers rise and fall, groundwater levels near the banks fluctuate. Depth to groundwater generally is about 20 feet, but fluctuates from less than 5 feet to greater than 15 feet on an annual basis.⁸

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project introduces either geologic or seismic hazards by allowing the construction of the project on a site without protection against those hazards.

Answers to Checklist Questions

Scenarios A and B

- A)** A Preliminary Geotechnical Engineering Report was prepared for the proposed project by Wallace-Kuhl and Associates, Inc. in July 2006. The report found that historically, areas in the vicinity of the project site experienced the most intense earthquake ground shaking during the M_R 8.25 San Francisco earthquake of 1906, with an epicenter 83 miles southwest of the project site. The closest recorded earthquake to the project site was the M_R 4.2 aftershock of the Vacaville-Winters earthquake in 1892, which occurred approximately 22 miles west of the site.

The geotechnical report also determined that the project site has a 10 percent probability of exceeding 0.21g horizontal ground acceleration (PGA) in 100 years. The maximum ground motion that can be expected at the site would result from a 6.9 M_W event 28 miles west of the project site on Segment 3 of the Great Valley fault system. This system could produce peak horizontal ground motion of 0.23g. The Foothills Fault System, located 22 miles to the east of the project site, is capable of generating earthquakes with a magnitude of 6.5, which could result in site accelerations of 0.23g as well.⁹

6 Wallace-Kuhl & Associates, Inc., Preliminary Geotechnical Engineering Report, Capitol Station 65, July 13, 2006, page 10.
7 Wallace-Kuhl & Associates, Inc., Preliminary Geotechnical Engineering Report, Capitol Station 65, July 13, 2006, page 4.
8 Wallace-Kuhl & Associates, Inc., Preliminary Geotechnical Engineering Report, Capitol Station 65, July 13, 2006, page 12.
9 Wallace-Kuhl and Associates, Inc., *Preliminary Geotechnical Engineering Report, Capitol Station 65*, July 13, 2006, page 8.

However, the City of Sacramento GPU determined that an earthquake of Intensity VII on the MMS is a potential event due to the seismicity of the region. Such an event would cause alarm and moderate structural damage could be expected. People and property on the site could be subject to seismic hazards, such as groundshaking, liquefaction, and settlement, which could result in damage or failure of components of the proposed project. This seismic activity could disrupt utility service due to damage or destruction of infrastructure, resulting in unsanitary or unhealthful conditions or possible fires or explosion from damaged natural gas lines.

The City is located in Zone 3 of the Uniform Building Code (UBC) Seismic Risk Map; and therefore, the City requires that all new structures be designed and constructed consistent with the UBC's Zone 3 requirements. In addition, compliance with the California Uniform Building Code (CUBC) (Title 24) would minimize the potential for adverse effects on people and property due to seismic activity by requiring the use of earthquake protection standards in construction.

The project applicant has submitted a geotechnical report to the City. Based on the site-specific conditions, the report recommended further measures to ensure that the region's seismic activity does not affect the proposed project. Prior to construction, the project applicant must demonstrate to the City that the site, infrastructure, and building designs for the proposed project comply with all required regulations and standards pertaining to seismic hazards, including the inclusion of the recommendations from the geotechnical study.

Implementation of applicable regulations, codes, and standard engineering practices would mitigate significant constraints on development of the proposed project site related to groundshaking or secondary seismic hazards. Therefore, the impacts due to seismic activity would be **less than significant** and this issue will not be further addressed in the EIR.

- B-D)** Development of the proposed project could result in **potentially significant impacts** related to erosion, changes in topography or unstable soil conditions, subsidence of land (groundwater pumping or dewatering), and unique geologic or physical features (the levee in the northern portion of the project site). These issues will be addressed in the EIR; the analysis will be based on the geotechnical report that has been prepared for the proposed project.

Findings

The proposed project is anticipated to result in less-than-significant impacts related to seismic safety and potentially significant impacts related to soils. These issues will be discussed further in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
<p><u>4. WATER</u> Would the proposal result in or expose people to potential impacts involving:</p>			
<p>A) Changes in absorption rates, drainage patterns, or the rate and amount of surface/stormwater runoff (e.g. during or after construction; or from material storage areas, vehicle fueling/maintenance areas, waste handling, hazardous materials handling & storage, delivery areas, etc.)?</p>	✓		
<p>B) Exposure of people or property to water related hazards such as flooding?</p>			✓
<p>C) Discharge into surface waters or other alteration of surface water quality that substantially impact temperature, dissolved oxygen or turbidity, beneficial uses of receiving waters or areas that provide water quality benefits, or cause harm to the biological integrity of the waters?</p>	✓		
<p>D) Changes in flow velocity or volume of stormwater runoff that cause environmental harm or significant increases in erosion of the project site or surrounding areas?</p>	✓		
<p>E) Changes in currents, or the course or direction of water movements?</p>			✓
<p>F) Change in the quantity of ground waters, either through direct additions or withdrawal, or through interception of an aquifer by cuts or excavations or through substantial loss of groundwater recharge capability?</p>	✓		
<p>G) Altered direction or rate of flow of groundwater?</p>	✓		
<p>H) Impacts to groundwater quality?</p>	✓		

Environmental Setting

Surface Water/Drainage

The project site is located in an urbanized portion of the City of Sacramento, approximately ¾ mile east of the Sacramento River and immediately adjacent to the American River. The project site is located in a portion of the City served by a separated sewer system. Stormwater runoff is conveyed to Sump 111, located adjacent to the project site on North 5th Street. Sump 111 discharges stormwater flows to the American River, directly north of the project site. Wastewater flows are conveyed east toward 16th, where they connect with the City's Combined Sewer System (CSS), which ultimately discharges to the Sacramento River. Therefore, Sacramento River hydrology and water quality characteristics are relevant to the proposed project.

The Sacramento River drainage area encompasses 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 Delta-Central Sierra area to the south. The American River is one of four major tributaries from the east. Numerous smaller tributary creeks in Sacramento flow from the east through the city and ultimately discharge to the Sacramento River. The Sacramento River system experiences variations in water levels during different parts of the year and during different parts of the month. Water level is largely affected by 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 Sacramento-San Joaquin Delta (Delta).

Water Quality

The Sacramento River has been classified by the Central Valley Regional Water Quality Control Board (CVRWQCB) as having numerous beneficial uses, including providing municipal, agricultural, and recreational water supply. Other beneficial uses include freshwater habitat, spawning grounds, wildlife habitat, and navigation. Ambient water quality in the Sacramento River is significantly influenced by agricultural drainage, mine drainage, urban runoff, and industrial, municipal, and construction discharges. The reach of the Sacramento that flows through the Sacramento urban area is listed on the federal Clean Water Act Section 303(d) list of impaired and threatened waters for California. The Sacramento River is listed for unknown toxicity and mercury, and the segment from Knights Landing to the Delta, which receives CSS discharges, is also listed for diazinon. Mercury is primarily a legacy of gold mining, and diazinon, a pesticide, is primarily from agricultural return flows and urban application, although urban use of diazinon is expected to be on the decline as the nonagricultural unrestricted use of diazinon has been phased out by the EPA.

Flood

According to the Federal Emergency Management Agency (FEMA), the project site is not located within the 100-year flood hazard zone.¹⁰ In February 2005, U.S. Army Corps (Corps) of Engineers certified area flood protection improvements as achieving 100-year flood protection. As a result, the project site and surrounding area were designated in Flood Zone X on the FEMA Flood Insurance Rate Map (FIRM) for the City of Sacramento revised February 18, 2005

10 U.S. Army Corps of Engineers certified area flood protection improvements as achieving 100-year flood protection, effective February 18, 2005.

(060262-0045F). This designation allows for development to occur in the area without restrictions caused by flooding concerns. However, since the certification, the Sacramento Area Flood Control Agency (SAFCA) conducted a study that determined that some flood control facilities, including levees, could be subject to flooding risks caused by erosion and underseepage during a 100-year storm event. Current studies are being undertaken by regulatory agencies such as SAFCA and the Corps which examine levee stability and look at enhancing flood protection against a 200-year level flood event. Many of these studies include levee stability studies and geotechnical and geomorphic seepage studies, all of which are conducted in collaboration with the Corps, the State Lands Commission, and SAFCA to ensure adequate coverage of all potential issues of concern. Based on these the conclusions of these studies, there is a possibility that SAFCA could request that FEMA's flood designation be changed, but at this time the project site and surrounding area are not considered to be at risk from a 100-year storm event.

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project substantially degrades water quality and violates any water quality objectives set by the SWRCB, due to increases in sediments and other contaminants generated by consumption and/or operational activities or

the project substantially increases exposure of people and/or property to the risk of injury and damage in the event of a 100-year flood.

Answers to Checklist Questions

Scenarios A and B

A, C) The majority of the project site is covered by impervious surfaces (buildings, concrete, or asphalt), while a portion of the project site, the northwest portion, is unpaved. Development of the proposed project could result in a substantial change to the amount and character of impervious surfaces, current absorption rates, drainage patterns, and the rate and amount of surface runoff.

Development associated with the proposed project would involve soil-disturbing construction activities, such as grading, excavation, and trenching. These activities would result in soil being exposed to erosion by wind or rain, depending on the time of year. Runoff from the construction site could contain constituents such as sediment and urban pollutants that could enter storm drains that drain to the American River, while wastewater ultimately drains to the Sacramento River. Increased turbidity in the American or Sacramento River could have adverse impacts on fish and wildlife habitat and other established beneficial uses. Increased sediment deposition could also result in increased water treatment costs for turbidity removal, and reduction in the City's CSS conveyance capacity. Development of the proposed project could involve some construction activities on and along the American River's southern levee, which could introduce sediments and construction runoff into the American River, creating effects similar to those possible in the Sacramento River.

Development of the proposed project could result in substantial changes in absorption rates, drainage patterns, and the rate and amount of surface/stormwater runoff and

could result in harmful discharges into surface waters during construction activities. This is a **potentially significant impact** that will be addressed in the EIR.

- B) Effective February 2005, the Corps certified area flood protection improvements as achieving 100-year flood protection. Accordingly, the proposed project site is not considered to be in a 100-year flood hazard zone. Therefore, the proposed project would not result in a substantial risk to people or property due to flooding. This is a **less-than-significant impact** and will not be further addressed in the EIR.
- D) Development of the proposed project could result in a substantial change to the flow velocity or volume of stormwater runoff that could cause environmental harm or significant increases in erosion of the project site or surrounding areas. This is a **potentially significant impact** that will be addressed in the EIR.
- E) The project site is located in an urbanized portion of the City of Sacramento, approximately 3/4 mile east of the Sacramento River and immediately adjacent to the American River. The project would not affect water movements because it does not include new structures or bridges that would affect water movement of flow; therefore, impacts are **less than significant**. This issue will not be further addressed in the EIR.
- F–H) The depth to groundwater on the project site ranges from approximately 3 to 30 feet.¹¹ In the event that excavation is required and reaches the groundwater table, dewatering would be required. In addition, excavation and the development of building foundations could interfere with the movement of groundwater either horizontally or vertically. This analysis assumes that the proposed project has the potential to substantially deplete or degrade the quality of groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Consequently, the proposed project could result in **potentially significant impacts** related to groundwater movement, quality, and supply. These issues will be addressed in the EIR.

Findings

The proposed project would result in less-than-significant impacts related to flooding and currents and the course or direction of surface water movements. These issues will not be discussed further in the EIR.

The proposed project could result in potentially significant impacts related to changes in absorption rates, drainage patterns, or the rate and amount of surface/stormwater runoff; discharge into surface waters or other alterations to surface water quality; changes in flow velocity or volume of stormwater runoff; and groundwater movement, quality, and supply. These issues will be addressed in the EIR.

11 Ground Zero Analysis, Inc., *Phase I Environmental Site Assessment, Capitol Station 65*, March 2006, page 5.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
5. AIR QUALITY			
<i>Would the proposal:</i>			
A) Violate any air quality standard or contribute to an existing or projected air quality violation?	✓		
B) Exposure of sensitive receptors to pollutants?	✓		
C) Alter air movement, moisture, or temperature, or cause any change in climate?			✓
D) Create objectionable odors?			✓

Environmental Setting

Air quality is monitored, evaluated and regulated by federal, state, regional, and local regulatory agencies and jurisdictions, including the United States Environmental Protection Agency (EPA), the California Air Resources Board (CARB), and the SMAQMD. The EPA, CARB, and the SMAQMD develop rules and/or regulations to attain the goals or directives imposed by legislation. Both state and regional regulations may be more, but not less, stringent than federal regulations.

The CARB establishes state ambient air quality standards and motor vehicle emission standards, conducts research, and oversees the activities of regional Air Pollution Control Districts and Air Quality Management Districts. The CARB has designated the Sacramento Valley as a non-attainment area with respect to ozone and particulate matter under 10 microns (PM10). The Sacramento Urbanized Area has recently been redesignated to attainment status with respect to the state carbon monoxide (CO) standard, bringing the entire county into attainment.

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

Ozone: the project increases nitrogen oxide (NOx) levels above 85 pounds per day for short-term effects (construction).

The project increases either ozone precursors, nitrogen oxides (NOx) or reactive organic gases (ROG), above 65 pounds per day for long-term effects (operation).

Particulate Matter (PM₁₀): the project emits pollutants at a level equal to, or greater than, five percent of the CAAQS (50 micrograms/cubic meter for 24 hours) if there is an existing

or projected violation; however, if a project is below the ROG and NO_x thresholds, it is assumed that the project is below the PM₁₀ threshold as well.

Carbon Monoxide (CO): the project results in CO concentrations that exceeds the 1-hour State ambient air quality standard of 20.0 parts per million (ppm) or the 8-hour State ambient standard of 9.0 ppm.

Answers to Checklist Questions

Scenarios A and B

- A-B)** The proposed project would result in construction and operational air emissions. These emissions may exceed thresholds set by federal, state, and local regulations. Sensitive receptors in the area include users of nearby existing facilities and residents in surrounding neighborhoods. The project applicant anticipates that construction of the proposed project would be done in multiple phases. Construction and operation of the project could result in ***potentially significant impacts*** to air quality. These issues will be further addressed in the EIR.
- C)** The area around the proposed project site is relatively flat, with the changes in topography caused primarily by water features. The existing built environment consists of industrial and office uses. Significant changes in air movement can result from the construction of tall or large-mass structures. Construction of buildings that result in the shading of adjoining buildings or parcels for a significant part of the day can result in temperature changes in the project vicinity. Temperature and moisture changes can also result from the construction of structures that emit large quantities of air that is significantly different in temperature and/or humidity than the surrounding environment. There are no structures tall enough to affect significantly air movement and temperature surrounding the proposed project site. Because the existing and proposed structures are not tall enough, or of a mass, to affect significantly air movement and/or temperature changes through shading by buildings and there are no proposed land uses that emit large quantities of humidity or heated/cooled air; the proposed project would result in a ***less-than-significant impact*** for changes in climate.
- D)** The project would develop land uses that are typical in an urban environment; uses that include residential, office, retail, and restaurant. Restaurant uses could produce some odors, but restaurants typically do not produce odors that people would consider offensive; consequently, there would be a ***less-than-significant impact***.

Findings

The proposed project could potentially result in violations of air quality standards or contribute to existing or projected air quality violations. In addition, the project could potentially expose sensitive receptors to pollutants. These impacts are potentially significant and will be discussed further in the EIR. In addition, potential impacts associated with toxic air contaminants (TAC) from both stationary and mobile sources will be qualitatively evaluated based on the SMAQMD's recommended approach adopted by the City of Sacramento. Impacts associated with odors are less than significant and will not be discussed further.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
6. TRANSPORTATION/CIRCULATION			
Would the proposal result in:			
A) Increased vehicle trips or traffic congestion?	✓		
B) Hazards to safety from design features (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	✓		
C) Inadequate emergency access or access to nearby uses?	✓		
D) Insufficient parking capacity on-site or off-site?	✓		
E) Hazards or barriers for pedestrians or bicyclists?	✓		
F) Conflicts with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	✓		
G) Rail, waterborne or air traffic impacts?			✓

Environmental Setting

Regional automobile access to the Richards Boulevard area is provided primarily by the freeway system that includes Interstate 5 (I-5), the Capital City Freeway (Business Route 80), and US 50. Primary access to the project site is via Richards Boulevard, with additional access from North 5th Street on the west boundary of the site and North 7th Street on the east boundary. No public roadways exist in the interior of the project site. There are currently no Light Rail facilities in the project area.

The Capital City Freeway (Business Route 80) is a north-south freeway that is located approximately 2.5 miles east of the project site. Access to this freeway is primarily via interchanges at E Street, H Street, J Street, N Street, P Street and T Street. To the northeast, the Capital City Freeway provides access to northeastern portions of the City and County of Sacramento, and Interstate 80 extending into Placer County. To the south, the freeway provides access to US 50 and continues as SR 99 south of US 50.

I-5 is a north-south freeway located along approximately one mile west of the project site. It provides access to Richards Boulevard area via the Richards Boulevard exit

US 50 is an east-west freeway that is located approximately two miles south of the project site. Access to this freeway is primarily via interchanges at Business Route 80, Stockton Boulevard, and 26th Street. To the east, US 50 serves eastern portions of the City and County of Sacramento and extends into El Dorado County. To the west, US 50 extends via the Pioneer Bridge to West Sacramento and Yolo County.

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

Roadways: the project causes the facility to degrade from LOS C or better to LOS D or worse.

For facilities that are already worse than LOS C without the project, a significant impact occurs if the project increases the V/C ratio by 0.02 or more on a roadway.

Signalized and unsignalized Intersections: the project causes the LOS of the intersections to degrade from LOS C or better to LOS D or worse.

For intersections that are already operating at LOS D, E, or F without the project, a significant impact occurs if the project increases the average delay by 5 seconds or more at an intersection.

Transit Facilities: the project-generated ridership, when added to the existing or future ridership, exceeds existing and/or planned system capacity. Capacity is defined as the total number of passengers the system of buses and light rail vehicles can carry during the peak hours of operation.

A significant impact occurs if the project adversely affects the transit system operations or facilities in a way that discourages ridership (e.g. removes shelter, reduces park and ride).

Bicycle Facilities: the project eliminates or adversely affects an existing bikeway facility in a way that discourages bikeway use; interferes with the implementation of a proposed bikeway; or results in unsafe conditions for bicyclists, including unsafe bicycle/pedestrian or bicycle/motor vehicle conflicts.

Pedestrian Facilities: the project adversely affects an existing pedestrian facility or results in unsafe conditions for pedestrians, including unsafe pedestrian/bicycle or pedestrian/motor vehicle conflicts.

Parking Facilities: the anticipated parking demands of the project exceed the available or planned parking supply for typical day conditions. However, the impact would not be significant if the Project is consistent with the parking requirements stipulated in the City Code.

Answers to Checklist Questions

Scenarios A and B

- A) The proposed project would increase traffic both temporarily during construction and permanently during operation. This additional traffic could result in a ***potentially significant*** impact to neighboring intersections, freeways, and light rail operations. This issue will be further addressed in the EIR.
- B, C) Project construction and operation could create a hazard or inadequate emergency access, resulting in a ***potentially significant*** impact. This issue will be further addressed in the EIR.
- D) Development of the proposed project would result in intensified usage of the project area and increased parking demand. Parking associated with the proposed project is not known at this time. This is a ***potentially significant impact*** that will be addressed in the EIR.
- E, F) Construction of the proposed project could create hazards or barriers for pedestrians and bicyclists in the project area during project construction. This is a ***potentially significant impact*** that will be addressed in the EIR.
- G) The proposed project is not located near a railroad or an airport and would not include any development that would affect water travel. Therefore, the proposed project would not affect rail or air traffic or watercraft travel patterns. This is a ***less-than-significant impact*** that will not be addressed in the EIR.

Findings

Development of the proposed project could increase traffic congestion, create hazards to safety due to design features, result in inadequate emergency access during project construction, result in insufficient parking capacity, and create hazards or barriers for pedestrians and bicyclists in the project area during project construction. These issues could result in potentially significant impacts; therefore, these issues will be addressed in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
7. BIOLOGICAL RESOURCES Would the proposal result in impacts to:			
A) Endangered, threatened or rare species or their habitats (including, but not limited to plants, fish, insects, animals and birds)?	✓		
B) Locally designated species (e.g., heritage or City street trees)?	✓		
C) Wetland habitat (e.g., marsh, riparian and vernal pool)?	✓		

Environmental Setting

The property is generally bounded by Richards Boulevard to the south, the American River to the north, North 5th Street to the west and North 7th Street to the east. The property has been developed for industrial use and is actively use for warehousing, cold storage, and related uses. The majority of the property is covered with impervious surfaces (buildings, concrete, or asphalt) while a portion of the property, the north western portion is bare ground.

Habitat Types

There are three habitat types present in the proposed project site; urban/ruderal, riparian, and denuded/developed habitat. Urban/ruderal and denuded/developed habitats occupy most of the project site, except for an approximately six acres of riparian vegetation along the American River.

Denuded/Developed

The majority of the site has been denuded of vegetation and converted to commercial or industrial, uses. This is characteristic of the intensive disturbance evident on the site, resulting from a variety of land uses including past and present industrial and commercial activities. These areas are unable to support vegetation due to either the direct removal or displacement of habitat through construction of buildings, roads, or other hardscaped areas, and the ongoing activities associated with last 100+ years of human use of the area. Vegetation growth is precluded in these areas via direct physical disturbance by these same actions or via the development and maintenance of structures associated with the facilities on site.

Urban/Ruderal Habitat

Urban or ruderal habitat exists within developed areas where pre-development vegetation has been removed and new species of plants introduced, intentionally (ornamental species) or inadvertently (weeds). Urban vegetation accounts for most of the habitat acreage present within

the project site. At present, the dominant plant species in the project site include wild oats (*Avena fatua*), ripgut brome (*Bromus diandrus*), yellow star thistle (*Centaurea solstitialis*), vetch (*Vicia* sp.), field bindweed (*Convolvulus arvensis*), milk thistle (*Silybum marianum*), and tar weed (*Holocarpa* sp.) Other grassland plants observed during field surveys included cutleaf geranium (*Geranium dissectum*), wild mustard (*Brassica* spp.), and Italian thistle (*Carduus pycnocephalus*).

Riparian Woodland Habitat

Riparian woodland is the predominant vegetation community found within the south bank of the American River. Most of the habitat found within this section has been heavily degraded by human activity. The overstory is dominated by Fremont's cottonwood (*Populus fremontii*), with some valley oak (*Quercus lobata*) and arroyo willow (*Salix lasiolepis*). Shrub cover is heavy through out the area and is comprised primarily of Himalayan blackberry (*Rubus discolor*), poison oak (*Toxicodendron diversilobium*), and California wild grape (*Vitis californica*). The herbaceous understory consists of creeping wild rye (*Leymus triticoides*), wild oats (*Avena fatua*), wild pea (*Lathyrus jepsonii* ssp. *californicus*), field bindweed (*Convolvulus arvensis*) and white sweetclover (*Melilotus alba*).

Wildlife Resources

The project site is predominated by non-native vegetation and vacant areas that primarily support common birds and mammals. Wildlife species that were observed or expected to occur in the Project site are western scrub jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), northern mockingbird (*Mimus polyglottos*), Brewer's blackbird (*Euphagus cyanocephalus*), yellow-billed magpie (*Pica nuttalli*), house finch (*Carpodacus mexicanus*), house mouse (*Mus musculus*), black rat (*Ratus ratus*), house cat (*Felis silvestris catus*), raccoon (*Procyon lotor*), and skunk (*Mephitis mephitis*).

In addition to the terrestrial species identified above, both resident and migratory fish species use the American River. Fish residing within the American River include channel catfish (*Ictalurus punctatus*), white catfish (*Ictalurus catus*), hardhead (*Mylopharodon conocephalus*), largemouth bass (*Micropterus salmoides*), redeared sunfish (*Lepomis microlophus*), Sacramento sucker (*Catostomus occidentalis*), Sacramento pikeminnow (*Ptychocheilus grandis*), tule perch (*Hysterocarpus traski*), and Sacramento sucker (*Catostomus occidentalis*). The Sacramento splittail (*Pogonichthys macrolepidotus*) spawns in the Sacramento area, but lives in the Delta. Anadromous fish species use the American River as migration corridors between the ocean and spawning areas upstream. These species include steelhead (*Oncorhynchus mykiss*), Chinook salmon (*Oncorhynchus tshawytscha*), striped bass (*Morone saxatilis*), green sturgeon (*Acipenser medirostris*), white sturgeon (*Acipenser transmontanus*), and American shad (*Alosa sapidissima*). Although striped bass is an anadromous species, young striped bass are present in the American River area year-round.

The open water zones of the American River provide cover and foraging for bird species. Many species of waterfowl, such as American coot (*Fulica americana*), use the open water for resting and escape. Gulls (*Larus* sp) forage on open water, and species of insectivorous birds, such as black phoebe (*Sayornis nigricans*) and violet-green swallow (*Tachycineta thalassina*), hunt insect prey over the water.

In general, near shore waters, riverbanks, and adjacent riparian vegetation provide several specialized habitats for a variety of bird species. Steep banks provide nesting habitat for

northern rough-winged swallow (*Stelgidopteryx serripennis*). In the near shore waters, mallard (*Anas platyrhynchos*) and wood duck (*Aix sponsa*) feed upon plants, green heron (*Butorides striatus*) and belted kingfisher (*Ceryle alcyon*) forage for fish. Fish feed upon "insect drop" from riparian vegetation overhanging the water, and rocky substrates provide habitats for crayfish, sunfish, and bass.

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project creates a potential health hazard, or involves the use, production or disposal of materials that pose a hazard to plant or animal populations in the affected area;

the project results in substantial degradation of the quality of the environment or reduction of habitat or population below self-sustaining levels of threatened or endangered species of plant or animal;

the project affects other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands); or

the project violates the Heritage Tree Ordinance (City Code 12.64.040).

Answers to Checklist Questions

Scenarios A and B

- A) Endangered, threatened, or rare species or their habitats, including Swainson's hawk, white-tailed kite, and other riparian-nesting species, could be adversely affected by project construction and operation. This is a **potentially significant impact** that will be addressed in the EIR.
- B) The City of Sacramento has adopted an ordinance to protect trees as a significant resource to the community. Construction activities associated with the project would result in the disturbance or loss of individual protected trees. Protected trees could be removed or affected during staging, trimming for equipment access, and other construction-related activities. Additional protected trees may be removed or indirectly affected by adjacent construction activities in the project area. The loss of protected trees, including oak trees (*Quercus* sp) would be considered a **potentially significant impact**. This issue will be addressed in the EIR.
- C) Urban/ruderal and denuded/developed habitats occupy most of the project site, except for an approximately six acres of riparian vegetation along the American River. While there are no wetlands on the project site, proposed trail improvements and the construction of an overlook that would traverse the river side of the levee could have adverse impacts on riparian vegetation along the American River. This is considered a **potentially significant impact** and will be addressed in the EIR.

Findings

The proposed project could result in significant impacts endangered, threatened or rare species or their habitats; locally designated species; and wetland habitat. These issues will be addressed in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
8. <u>ENERGY</u> Would the proposal result in impacts to:			
A) Power or natural gas?	✓		
B) Use non-renewable resources in a wasteful and inefficient manner?	✓		
C) Substantial increase in demand of existing sources of energy or require the development of new sources of energy?	✓		

Environmental Setting

The project site is within the Richards Boulevard area of the City of Sacramento. Electricity within the City is supplied by SMUD. PG&E provides natural gas service within the area. The project site is located in a mineral resource area classified MRZ-3, which indicates that an area contains unknown or inferred mineral occurrences of undetermined significance.¹²

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project requires or results in the construction of new, or the expansion of existing, facilities, the construction of which causes significant environmental effects or

the project requires or results in the construction of new, or the expansion of, facilities, the construction of which causes significant environmental effects.

Answers to Checklist Questions

Scenarios A and B

A-C) Although the project site is not located in an area identified as having significant mineral resources deposits, the proposed project could result in impacts to power and natural gas supplies, use non-renewable resources in a wasteful and inefficient manner, and result in a substantial increase in demand of existing sources of energy. This is a ***potentially significant impact*** that will be addressed in the EIR.

12 City of Sacramento, General Plan Technical Background Report, June 2005, pp. 6.4-3 to 6.4-6.

Findings

The proposed project is anticipated to result in potentially significant impacts to energy resources. These issues will be discussed further in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
9. <u>HAZARDS</u> <i>Would the proposal involve:</i>	✓		
A) A risk of accidental explosion or release of hazardous substances (including, but not limited to: oil, pesticides, chemicals or radiation)?			
B) Possible interference with an emergency evacuation plan?	✓		
C) The creation of any health hazard or potential health hazard?	✓		
D) Exposure of people to existing sources of potential health hazards?	✓		
E) Increased fire hazard in areas with flammable brush, grass, or trees?			✓

Environmental Setting

The project site currently contains four main buildings and associated structures housing warehouse space, commercial office space, a cold storage facility, and former food processing facilities. Historically, the project site was used as a fruit and vegetable cannery, with buildings on site being constructed between the early 1930s and 1970s. The cannery ceased operations in the late 1990s. During that time, wastes used during cannery operations included solid waste and wastewater from fruit and vegetable production, waste oil, solvents, paints, adhesives, aerosols, inks, lubricants, degreasers, metal cuttings, laboratory chemicals, hypochlorites, chlorine, petroleum hydrocarbons, CFCs, ammonia, and propane. Adjacent uses include commercial office space and warehouses to the east, more commercial space and warehouses, including a Fed Ex shipping terminal and Sacramento County Sheriff facility to the west, and a trucking facility and State Printing Plant to the south.

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project exposes people (e.g., residents, pedestrians, construction workers) to existing contaminated soil during construction activities;

the project exposes people (e.g., residents, pedestrians, construction workers) to asbestos-containing materials; or

the project exposes people (e.g., residents, pedestrians, construction workers) to existing contaminated groundwater during construction or dewatering activities.

Answers to Checklist Questions

Scenarios A and B

- A,C,D)** The project site is not included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 (Cortese List).¹³ A Phase 1 Environmental Site Assessment (ESA)¹⁴ prepared for the proposed project determined that several potential environmental concerns exist on the project site in the form of above-ground fuel-storage tanks, although the tanks appear to be well-maintained and properly located within double-containment and product lines associated with cold storage facilities on-site. A previous ESA conducted in 1999 included other potential concerns, including residual containers of hazardous materials left over from canning operations, cracked or etched concrete throughout the facility in close proximity to surface staining and an extensive drainage system throughout the facility that eventually emptied into the city sanitary sewer, and a hazardous materials storage area previously located in the northern portion of the project site. None of these conditions appeared to be of concern during the field inspection conducted for the proposed project. Nonetheless, construction and operation of the proposed project could result in the release of hazardous substances and the exposure of people to existing sources of potential health hazards associated with the proposed project. This is considered a ***potentially significant impact*** and will be addressed in the EIR.
- B)** The proposed project would include modifications to the street system and would generate traffic that could impair emergency evacuation. This is considered a ***potentially significant impact*** and will be addressed in the EIR.
- E)** The project site is located in a developed, urban environment adjacent to the American River and American River Parkway recreation area. The project site is not intermixed with wildlands; therefore, impacts related to increased fire hazard are considered ***less than significant*** and will not be further addressed in the EIR.

Findings

The proposed project is anticipated to result in less-than-significant impacts associated with fire hazards. This issue will not be discussed further in the EIR.

The proposed project is anticipated to result in potentially significant impacts associated with hazardous materials and public safety. These issues will be discussed further in the EIR.

13 DTSC's Hazardous Waste and Substances Site List (Cortese List) for Sacramento County <http://www.dtsc.ca.gov/database/Calsites/Cortese_List.cfm?county=34> (June 29, 2006).

14 Ground Zero Analysis, Inc., *Phase I Environmental Site Assessment, Capitol Station 65*, March 2006.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
10. <u>NOISE</u> <i>Would the proposal result in:</i>			
A) Increases in existing noise levels? Short-term Long Term	✓		
B) Exposure of people to severe noise levels? Short-term Long Term	✓		

Environmental Setting

The three major noise sources in the City of Sacramento are surface traffic, aircraft, and the railroad. The project site is located in close proximity to city streets and would be subject to associated noise levels. No light rail facilities currently exist in the project area, but the project does include a reservation of space for a future light rail station and tracks. Existing noise sources on the project site include industrial, warehouse, commercial, and office uses. Current active businesses on the property include offices of the project applicant, cold storage, concrete storage and delivery, a livestock feed supplier, hay-bail compression and delivery, and a warehouse occupied by the Sacramento Habitat for Humanity.

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project results in exterior noise levels in the project area that are above the upper value of the normally acceptable category for various land uses due to the project's noise level increases;

the project results in residential interior noise levels of L_{dn} 45 dB or greater caused by noise level increases due to the project;

construction noise levels exceed the standards in the City of Sacramento Noise Ordinance;

existing and/or planned residential and commercial areas are exposed to vibration-peak-particle velocities greater than 0.5 inches per second due to project construction;

adjacent residential and commercial areas are exposed to vibration peak particle velocities greater than 0.5 inches per second due to highway traffic and rail operations; or

historic buildings and archaeological sites are exposed to vibration-peak-particle velocities greater than 0.25 inches per second due to project construction, highway traffic, and rail operations.

Answers to Checklist Questions

Scenarios A and B

A, B) Construction and normal operation at the project site could result in both a short-term (construction) and long-term (operation) increase in existing noise levels and potentially expose people to increased noise levels. Impacts associated with these issues are ***potentially significant*** and will be further addressed in the EIR.

Findings

Noise issues could result in potentially significant impacts; therefore, these issues will be addressed in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
11. PUBLIC SERVICES Would the proposal have an effect upon, or result in a need for new or altered government services in any of the following areas:			
A) Fire protection?	✓		
B) Police protection?	✓		
C) Schools?	✓		
D) Maintenance of public facilities, including roads?			✓
E) Other governmental services?			✓

Environmental Setting

The project site is served and would continue to be served by the Sacramento Police Department (SPD) and Sacramento Fire Department (SFD). The SFD provides fire-related and emergency services to Downtown and surrounding areas. The project site is within the North Sacramento School District (NSSD) and the Grant Joint Union High School District (GJUHS). Park and recreation facilities are provided by the City and County of Sacramento. Library services are provided by the Sacramento Public Library which is a joint powers agency of the City of Sacramento and Sacramento County. Roadways are maintained by the City of Sacramento Department of Transportation (DOT).

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project requires, or results in, the construction of new, or the expansion of existing, facilities related to the provision of fire protection, police protection, school facilities, roadway maintenance, or other governmental services.

Answers to Checklist Questions

Scenarios A and B

A-C,E) Development of the proposed project under either Scenario A or B could result in an increased demand for fire protection, police protection schools and other governmental services, specifically libraries. Impacts associated with these issues are ***potentially significant*** and will be further addressed in the EIR.

- D) The City of Sacramento DOT has developed a 10-year street maintenance plan that addresses approximately 2.6 million square yards of paved roadway in the City annually. The Street Maintenance Resurfacing Plan (SMRP) identifies areas in the City where planned road maintenance is proposed. The need for maintenance is based on several factors, including age, location, maintenance history of the roadway, council districts, curb, shoulder, and pavement types, and street functional classifications. It is the goal of the Department to resurface every street in the City every 10 to 12 years. The proposed project would introduce a higher intensity use on the site than currently exists, and could potentially accelerate the timeframe for roadway improvements in the project area. As part of the SMRP, new development projects in the City are not considered part of the plan. According to the DOT, improvements to roadways are based on the timing for needed improvements.¹⁵ However, through the entitlement process, the project applicant or developer would be required to pay any fair share fees to construct or widen new roadways, re-stripe existing streets, construct new turn lanes, install new traffic lights, etc. associated with developing the project. In addition, new residents would contribute to the Gas Tax Funds and Measure A, a portion of which would be incorporated into the City's General Fund. A portion of these funds would go to on-going road maintenance in the City. The funds would be allocated to the maintenance of roadways in the Capital Improvement Plan (CIP). The maintenance of roads in the project vicinity would be improved according to the SMRP and planned for through the CIP. The payment of required taxes and fees would ensure that the Department meets its goal of resurfacing every street in the City every 10 to 12 years.

Because the City would coordinate the need for roadway improvements in the vicinity of the project site through the entitlement process, and other funding mechanisms including the CIP,¹⁶ and because the project would not result in the need to construct new, or expand existing facilities related to the provision of roadway maintenance this would be considered **less-than-significant** and will not be further addressed in the EIR.

Findings

Impacts to public services including police protection, fire protection schools and libraries could be potentially significant and will be discussed further in the EIR. Impacts associated with the maintenance of public facilities, including roadways would be less than significant and will not be further addressed in the EIR.

15 David Cullivan, Street Services Division Supervisor, City of Sacramento Department of Transportation, personal communication, January 17, 2007.

16 City of Sacramento, Department of Transportation website, <http://www.cityofsacramento.org/transportation/>, accessed January 16, 2007.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
12. UTILITIES			
<i>Would the proposal result in the need for new systems or supplies, or substantial alterations to the following utilities:</i>			
A) Local or regional water supplies?	✓		
B) Local or regional water treatment or distribution facilities?	✓		
C) Sewer or septic tanks?	✓		
D) Storm water drainage?	✓		
E) Solid waste disposal?	✓		

Environmental Setting

Water Supply

The City of Sacramento is primarily supplied with surface water from the Sacramento and American Rivers. The City diverts water pursuant to riparian and pre-1914 rights to divert 75 cubic feet per second (cfs) from the Sacramento River and secured five additional appropriative water rights with various priorities from October 1947 to September 1954. Sacramento River permit 00992 and American River permits 011358 and 011361 authorize the taking of water from the respective sources by direct diversion. The other two permits, 011359 and 011360, authorize re-diversion and consumptive uses of stored water and releases from the Upper American River Project. Currently, the City has Application S014834 pending with the SWRCB for an additional 50,581 acre-feet per annum (AFA) from the Sacramento River. The City's surface water permits require use of the diverted water within the authorized Place of Use (POU). Permits 11359 and 11361 designate a 96,000-acre area within and adjacent to the City as the POU. Permits 11358 and 11360 designate a 79,500-acre area within and adjacent to the City as the authorized POU. Permit 992 designates lands within the City of Sacramento as the authorized place of use. Additionally, the City maintains 32 groundwater wells for potable and non-potable use; 23 wells are actively used to supply drinking water. The current system can supply 24 million gallons per day (mgd) and produce up to 26,800 AFA.

Wastewater

Existing Wastewater System

Wastewater treatment within the City of Sacramento is provided by the Sacramento Regional County Sanitation District (SRCSD). SRCSD operates all regional interceptors and wastewater treatment plants serving the City except for the combined sewer and storm drain treatment facilities which are operated by the City of Sacramento. Local and trunk wastewater collection in the City is provided by

County Sanitation District 1 (CSD-1) and the City of Sacramento. Within this area, the CSD-1 serves the community plan areas of South Natomas, North Natomas, and portions of Arcade-Arden, East Broadway, East Sacramento, Airport Meadowview and South Sacramento. The City provides wastewater collection to about two-thirds of the area within the City Limits, which is comprised of two distinct areas; the area served by the CSS and the areas served by a separated sewer system. The community plan areas served by the City include the Central City, Land Park, Pocket, North Sacramento, and portions of Arden-Arcade, South Sacramento, East Sacramento, East Broadway and Airport Meadowview. The proposed project would be served by the City and is outside of the CSS area. The City provides wastewater collection to the site by a separated sewer system, although wastewater flows from the project site eventually connect with the CSS at 16th Street.

The Sacramento Regional Wastewater Treatment Plant (SRWTP), which is located just south of the City Limits, is owned and operated by SRCSD and provides sewage treatment for the entire City. Sewage is routed to the wastewater treatment plant by collections systems owned by CSD-1 and the cities of Sacramento and Folsom. SRWTP is a high purity oxygen activated sludge facility, and is permitted to treat an average dry weather flow (ADWF) of 181 million gallons per day (mgd) and a daily peak wet weather flow of 392 mgd. Currently, the facility's ADWF is approximately 150 mgd. The SRWTP 2020 Master Plan projects a population-based flow of 218 mgd ADWF. After secondary treatment and disinfection, a portion of the effluent from the plant is further treated in SRCSD's Water Reclamation Facility and then used for landscape irrigation within the City of Elk Grove. The majority of the treated wastewater is dechlorinated and discharged into the Sacramento River. The SRCSD maintains the regional interceptors that convey sewage to the treatment plant.

Currently, improvements are being made to the system in anticipation of future growth and to help relieve the existing interceptor system. The Lower Northwest Interceptor (LNWI) and Upper Northwest Interceptor (UNWI) are currently under construction and will convey flows from the Northeast, Gibson Ranch, Rio Linda, McClellan, Natomas, and a portion of the North Highlands drainage basins. These projects will provide relief for the existing interceptor system as well as provide capacity for future growth.

The CSD-1 service area is divided into ten trunk sheds which are based on the collection systems of the individual sewer districts from which CSD-1 was originally formed. Each trunk shed consists of a number of hydraulically independent systems, each discharging into the SRCSD interceptor system. According to the CSD-1 Sewerage Facilities Expansion Master Plan dated March 2002, there are capacity deficiencies in portions of the Southeast (Central), Natomas, Arden/North Highlands and Rio Linda trunk systems. These areas are generally served by older sewer systems that are subject to substantial amounts of infiltration/inflow during wet weather.

Wastewater Infrastructure

Most of the project site currently consists of light industrial uses. Sanitary sewage in the project area currently flows directly to the SRWTP south of the City or the Sacramento River north of the project site. There are existing sanitary sewer lines located in the Richards Boulevard, North 5th Street, and North 7th Street right-of-ways. The lines range from 8-inch pipes along the northern portion of the site, and flows empty into a larger 24-inch pipe along Richards Boulevard. Flows from the site then flow east into a 33-inch pipe and eventually connects with the SRWTP.

Storm Drainage System

As discussed above, portions of the older area of the City are currently served by a combined storm water and sewer system. The remainder of the City, including the proposed project, is served by a separated drainage system. The City is divided into 120 drainage basins. Drainage from most of these basins flows to local rivers or creeks or drainage channels through pumping. The City owns and

operates 105 storm drainage pumping stations throughout the City. The drainage canals and local creeks eventually drain into the Sacramento and American Rivers.

The project site is located in Drainage Basin 111 next to the Sump 111 pump station for the basin. Topography of the site slopes gradually from the American River levee down to Richards Boulevard.

Storm Drainage Infrastructure

Currently there are storm drainage pipelines surrounding the project site. The existing lines are located in the Richards Boulevard, North 5th Street, and North 7th Street right-of-ways. Immediately east of the project site in North 7th Street are 12-inch lines that flow south towards Richards Boulevard and collect in 60-inch lines. The drainage flows west along Richards Boulevard and connects to a larger 72-inch line that travels north in the North 5th Street right-of-way to the pump station which dumps into the American River.

Solid Waste

Within the City of Sacramento, commercial waste collection is performed by both City and permitted private haulers. Residential and commercial solid waste collected by the City is transported to the Sacramento Recycling and Transfer Station (8491 Fruitridge Road) and is then transported to Lockwood Landfill, near Sparks, Nevada. Commercial waste collected by private companies is disposed at a variety of facilities including the Sacramento County Kiefer Landfill, the Yolo County Landfill, Forward Landfill, L and D Landfill, and several privately run transfer stations. Private haulers can deliver waste to the landfill of their choice; they typically select the most cost-efficient option.

In 2005, the City of Sacramento disposed of a total of 430,115 tons of solid waste. Of this total, 138,425 tons were diverted. 291,690 tons were sent to landfills.

There are two large volume transfer stations that generally serve the project site - Sacramento Recycling and Transfer Station, owned by BLT Enterprises, and North Area Transfer Station, owned by the County of Sacramento Public Works Department. Currently, the Sacramento Recycling and Transfer Station is permitted for a maximum daily disposal of 2,000 tons. The North Area Transfer Station accepts up to 2,400 tons per day of construction/demolition, industrial, and green materials, tires, wood waste, and mixed municipal waste.

The Lockwood Regional Landfill is a Class I landfill on a total of 3,700 acres, 500 of which is currently used. The landfill currently accepts an average of between 8,000 and 9,000 tons per day. Approximately 200,000 tons per year (approximately 550 tons per day) are accepted from the City of Sacramento. Lockwood Landfill currently has enough remaining capacity to operate for 20 years, although staff is currently working on an expansion that will add an additional 800 acres and 100 years of life to the landfill. The expansion is expected to be completed by 2008.

Kiefer Solid Waste Landfill, operated by the County Department of Public Works, is the primary municipal solid waste disposal facility in Sacramento County. Kiefer Landfill, categorized as a Class III facility, accepts waste from the general public, businesses, and private waste haulers. More specifically, wastes accepted include: construction/demolition, mixed municipal, and sludge (biosolids). The facility is on a 1,084-acre site near the intersection of Kiefer Boulevard and Grantline Road. The permitted capacity for the landfill is 117,400,000 cubic yards (10,815 tons/day) and, as of 2000, the landfill had a remaining capacity of 86,163,462 cubic yards (73 percent). The landfill has an estimated closure date of 2064.

Other landfills that could receive solid waste from the proposed project if a private hauler is selected for waste disposal include the Yolo County Landfill in Davis, Forward Landfill in Manteca, and L and D

Landfill in Sacramento. If the project is served by a private waste disposal company, the waste could be delivered to a variety of landfills, depending on market conditions and capacity.

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project creates an increase in water demand of more than 10 million gallons per day;

the project substantially degrades water quality;

the project would require or result in the construction of new landfills or the expansion of existing facilities to accommodate the project's solid waste disposal needs;

the project results in the determination of the wastewater treatment provider that adequate capacity is not available to serve the project's demand in addition to existing commitments;

the project generates stormwater that would exceed the capacity of the stormwater system; or

the project requires or results in either the construction of new utilities or the expansion of existing utilities, the construction of which could cause significant environmental effects.

Answers to Checklist Questions

Scenarios A and B

- A, B)** According to the General Plan, sufficient water supply and treatment capacity exists and is planned to exist through Year 2030. It is anticipated that the City of Sacramento would have sufficient water supply and treatment capacity to meet the demand of the proposed project; however, to ensure adequate capacity, a more thorough analysis will be performed in the EIR. In addition, the project is required to prepare a Water Supply Assessment to ensure adequate water is available to serve the project. Impacts are considered ***potentially significant*** and will be addressed further in the EIR.
- C,D)** Wastewater generated by the proposed project could increase existing flows to the existing collection system and could result in a ***potentially significant impact***. This issue will be discussed further in the EIR.
- E)** The proposed project would generate solid waste that could exceed the capacity of a landfill serving the City. This would be considered a ***potentially significant impact*** and will be discussed in the EIR.

Findings

Impacts concerning adverse effects to water supply and treatment capacity, wastewater, and solid waste are potentially significant and will be discussed further in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
13. <u>AESTHETICS, LIGHT AND GLARE</u>			
Would the proposal:			
A) Affect a scenic vista or adopted view corridor?			✓
B) Have a demonstrable negative aesthetic effect?	✓		
C) Create light or glare?	✓		

Environmental Setting

The project site is relatively flat and predominantly covered with structures and impervious surface. Vegetation is sparse and consists of shrubs and trees located sporadically across the site. A portion of the site, approximately 12 acres, is located on the American River side of the levee. The areas to the south, east, and west of the proposed project site are fully developed. The northern portion of the project site is bounded by the American River and American River Parkway. Views from the proposed project site to the south, east, west are distinguished by a built-up urban environment. Views from the proposed project to the north are distinguished by the American River and Parkway.

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project casts glare in such a way as to cause public hazard or annoyance for a sustained period of time; or

the project casts light onto oncoming traffic or residential uses.

Answers to Checklist Questions

Scenarios A and B

A) The project site is not located in a designated scenic vista or an adopted view corridor. Accordingly, development of the proposed project would not impact these resources and impacts are considered ***less than significant***. This issue will not be further discussed in the EIR.

B,C) The proposed project could produce light or glare, or have other demonstrable negative aesthetic effects. Impacts are considered ***potentially significant*** and will be discussed further in the EIR.

Findings

Issues associated with scenic vistas and adopted view corridors are less than significant and will not be addressed in the EIR. Impacts associated with aesthetics, light, glare, will be addressed further in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
14. <u>CULTURAL RESOURCES</u>			
<i>Would the proposal:</i>			
A) Disturb paleontological resources?		✓	
B) Disturb archaeological resources?	✓		
C) Affect historical resources?	✓		
D) Have the potential to cause a physical change which would affect unique ethnic cultural values?	✓		
E) Restrict existing religious or sacred uses within the potential impact area?			✓

Environmental Setting

The project site is located in a geographic region that, at the time of European contact, was occupied by the Valley Nisenan. The Nisenan and their ancestors inhabited the American, Yuba, and Bear River drainages for at least 4,500 years before Euroamerican settlers arrived. Major prehistoric archaeological sites in this portion of Sacramento County tend to be situated on elevated ridges or terraces adjacent to creeks or major watercourses.

Spanish exploration of the Sacramento Valley began in the early nineteenth century. John Sutter, a German-born entrepreneur who had been granted Mexican citizenship, arrived at the confluence of the Sacramento and American rivers in 1839, settling in Nisenan territory. The knoll on which Sutter placed his fort was an abandoned Indian mound. Beginning in 1824, under Mexican rule, land in California was divided into large parcels or Mexican land grants, referred to as ranchos. By 1846, eight land grants were claimed in Sacramento County, including New Helvetia, the first settlement in the Sacramento area, granted to John Sutter in 1839.

In 1848, Sutter hired William Warner to conduct a survey, which imposed a grid pattern on the land east of the Sacramento River with east-west streets designated by letters and north-south streets by numbers. This original grid, which survives today, extended east from the Sacramento River (Front Street) to just beyond Sutter's Fort and south from Sutter's Slough (at approximately 6th and I Street) to where Broadway is today. As the "gateway" to the gold fields, mining and the business of supplying miners served as a basis for the city's early economy. The railroad played a role in making Sacramento the principal agricultural processing and transportation center for the Central Valley and drew people to the area.

The climate, soil conditions, and ample supply of irrigated water that developed around Sacramento during the late nineteenth century, as well as its location as a river and railroad

transportation hub, led to the area's importance as one of California's leading agricultural regions. With successful diversification of produce, technical innovations, and growing national and international demand for California-grown fruits and vegetables, Sacramento flourished and canning became one of the region's most important industries, ensuring distribution of the area's agricultural products and employing thousands of workers through much of the early to mid-twentieth century.

During the early twentieth century, San Francisco businessmen and brothers Peter and Henri Bercut owned the American River Ranch beside the American River near Sacramento (including the current project area). In 1928, the Bercut brothers agreed to lease a portion of this land to the California Cooperative Producers Company, who wished to establish a tomato cannery. The Co-op constructed a large sawtooth roof cannery building and a brick warehouse in 1928 and 1929 to store their goods for shipping. These structures were the beginnings of the Bercut-Richards Cannery. Many of the buildings and structures on the project site were once part of the Bercut-Richards Cannery operations.

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project causes a substantial change in the significance of a historical or archaeological resource as defined in CEQA Guidelines Section 15064.5 or

the project directly or indirectly destroys a unique paleontological resource or site or unique geologic feature.

Answers to Checklist Questions

Scenarios A and B

- A) While the project site has previously been disturbed, construction activities, such as construction of the sub-grade components of the project, may uncover paleontological resources. This would be a potentially significant impact. Implementation of Mitigation Measure Cult-1 would reduce this impact to a less-than-significant level. Therefore, this impact is considered ***less than significant with mitigation incorporated***.

Mitigation Measure Cult-1

Should paleontological resources be identified at any project construction sites during any phase of construction, the project manager shall cease operation at the site of the discovery and immediately notify the City of Sacramento Development Services Department. The project applicant shall retain a qualified paleontologist to provide an evaluation of the find and to prescribe mitigation measures to reduce impacts to a less-than-significant level. In considering any suggested mitigation proposed by the consulting paleontologist, the City of Sacramento Development Services Department shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, specific plan policies and land use assumptions, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while mitigation for paleontological resources is carried out.

- B-D)** Due to the level of prehistoric habitation and historical activity in the vicinity of the project site, it is possible that construction of the proposed project could result in adverse effects to previously unknown subsurface archaeological resources on the site, including objects of unique ethnic cultural value. In addition, there are buildings more than 50 years old on the project site associated with the former Bercut-Richards Cannery that would be demolished to accommodate the proposed project. Development of the project could result in ***potentially significant impacts***. These issues will be addressed in the EIR.
- E)** No sacred uses or churches exist on the project site and no religious practices would be restricted by construction of the proposed project. This impact is considered ***less than significant***.

Mitigation Measures

Mitigation Measure Cult-1 would be required to reduce impacts to paleontological resources to a less-than-significant level.

Findings

Potential impacts to paleontological resources would be reduced to a less-than-significant level with implementation of Mitigation Measure Cult-1 and will not be addressed in the EIR. Impacts related to the restriction of existing religious or sacred uses are considered less than significant and will not be addressed in the EIR. Impacts to historical and archaeological resources are potentially significant and will be addressed in the EIR.

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
15. <u>RECREATION</u> <i>Would the proposal:</i>			
A) Increase the demand for neighborhood or regional parks or other recreational facilities?	✓		
B) Affect existing recreational opportunities?	✓		

Environmental Setting

The project site is located in the RBAP area in the City of Sacramento. The nearest recreational facility is the American River Parkway, immediately north of the project site. Surrounding uses are primarily industrial, and there are no non-passive parks in the immediate project vicinity.

Standards of Significance

For the purposes of this analysis, a significant impact occurs if:

the project causes or accelerates a substantial physical deterioration of existing area parks or recreational facilities or

the project creates a need for construction or expansion of recreational facilities beyond what was anticipated in the General and/or Community Plans.

Answers to Checklist Questions

Scenarios A and B

The project would include approximately 27 acres of public open spaces and approximately 3,920 square feet of private open spaces. Public open spaces would include urban parks and plazas, parkways, a riverfront pavilion, and natural open space along the American River. Private open spaces would consist of central courtyards that would serve as common open space for residential buildings. Although these courtyards would probably not be open to the public, they would serve residents as relief from the higher density nature of the project. Despite these features, the project could cause or accelerate a substantial physical deterioration of existing area parks or recreational facilities or create a need for construction or expansion of recreational facilities beyond what was anticipated in the General and/or Community Plans. This is considered a ***potentially significant impact*** and will be addressed in the EIR.

Findings

Potential impacts to recreational facilities are considered potentially significant and will be addressed in the EIR.

Mandatory Findings of Significance

Issues:	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less-than-Significant Impact
<p>16. <u>MANDATORY FINDINGS OF SIGNIFICANCE</u></p>			
<p>A. Does the project have the potential to degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of a rare or endangered plant or animal; or eliminate important examples of the major periods of California history or prehistory? Disturb paleontological resources?</p>	✓		
<p>B. Does the project have the potential to achieve short-term, to the disadvantage of long-term environmental goals?</p>			✓
<p>C. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)</p>	✓		
<p>D. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?</p>	✓		

A) Potential impacts to paleontological resources would be reduced to a less-than-significant level through implementation of Mitigation Measure Cult-1 included in this initial study. The project would be constructed in an urban area that is immediately adjacent to the American River and American River Parkway. Due to the project site’s proximity to this riparian corridor, there is a potential for adverse affects to biological resources associated with project construction and/or operation. In addition, project construction could result in adverse impacts to prehistoric or historic-period resources, including subsurface archaeological resources and potentially historic structures on the project site. Potential impacts to biological and cultural resources will be further addressed in the EIR. Therefore, this impact is considered ***potentially significant***.

- B)** The proposed project consists of a mixed-use development. The project has been designed and is assumed to comply with federal, state, and local laws and regulations. The intent of developing the Township 9 project is to provide the surrounding community with quality housing, office, retail, and commercial services. This goal would not include any activities or uses that would achieve short-term, to the disadvantage of long-term, environmental goals; therefore, impacts are considered **less than significant**.
- C)** The Township 9 project would not have impacts associated with recreation that are cumulatively considerable. Impacts associated with aesthetics, light, and glare; air quality; biological resources; cultural resources; geology, soils, and seismicity; hazards; water; noise; public services, utilities and service systems; and transportation and circulation are **potentially significant** and will be further evaluated in the EIR to determine if potential impacts would be cumulatively considerable.
- D)** Impacts associated with aesthetics, light, and glare; air quality; biological resources; cultural resources; geology, soils, and seismicity; hazards; water; noise; public services, utilities and service systems; and transportation and circulation are **potentially significant** and will be further evaluated in the EIR to determine if potential impacts would have a substantial adverse effect on human beings.

Section IV – Potentially Affected Environmental Factors

The project would potentially affect the environmental factors checked below:

✓	Land Use and Planning	✓	Hazards
✓	Population and Housing	✓	Noise
✓	Seismicity, Soils and Geology	✓	Public Services
✓	Water	✓	Utilities and Service Systems
✓	Air Quality	✓	Aesthetics
✓	Transportation/Circulation	✓	Cultural Resources
✓	Biological Resources	✓	Recreation
✓	Energy	✓	Mandatory Findings of Significance
	None Identified		

Township 9 (P06-047)
Initial Study

Section V – Determination

Based on this Initial Study:

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

____ I find that, although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the project-specific mitigation measures described in Section III were incorporated into the project. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

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

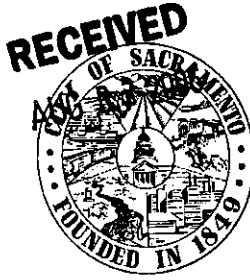

Signature

Feb. 26, 2007
Date

Jennifer Hageman
Printed Name

APPENDIX B – Notice of Preparation (NOP) AND NOP Responses

NOTICE OF PREPARATION (NOP)



ENDORSED:

JUL 17 2006

CRAIG A. KRAMER, CLERK-RECORDER
By *M. Kern* DEPUTY

ENVIRONMENTAL PLANNING SERVICES
DEVELOPMENT SERVICES DEPARTMENT

CITY OF SACRAMENTO
CALIFORNIA

2101 ARENA BLVD 2nd FLOOR
SACRAMENTO, CA 95834

**NOTICE OF PREPARATION FOR AN ENVIRONMENTAL IMPACT REPORT (EIR)
CAPITOL STATION 65 PROJECT (P06-047), JULY 17, 2006**

PUBLIC REVIEW PERIOD: Monday, July 17, 2006 through Tuesday, August 15, 2006

Introduction

The City of Sacramento, Environmental Planning Services Department, will be the Lead Agency for the preparation of an Environmental Impact Report (EIR) for the Capitol Station 65 Project (proposed project). The California Environmental Quality Act (CEQA) Guidelines, Section 15082, states that once a decision is made to prepare an EIR; the lead agency must prepare a Notice of Preparation (NOP) to inform all responsible agencies of that decision. The purpose of the NOP is to provide responsible agencies and interested persons with sufficient information describing the proposed project and its potential environmental effects to enable them to make a meaningful response as to the scope and content of the information to be included in the EIR. The responses to this NOP will help the City of Sacramento determine the scope of the EIR and ensure an appropriate level of environmental review.

The EIR will evaluate the potential environmental impacts of the proposed project and recommend mitigation measures, as required. The EIR will provide a project-specific evaluation of the environmental effects of the proposed project, pursuant to Section 15161 of the CEQA Guidelines.

Project Background

In March 2006, Capitol Station 65, LLC filed an application with the City of Sacramento Development Services Department for land use entitlements for the development of a master-planned, transit-oriented, mixed-use development in the Richards Boulevard Area Plan (RBAP) area in the City of Sacramento. The proposed project consists of approximately 2,982 dwelling units and approximately 145,524 gross square feet of neighborhood-serving retail. The project is intended to be an extension of the Downtown area north to the American River.

Project Location

The project site includes 13 parcels¹ in the RBAP area in the City of Sacramento (see Figure 1). The approximately 65-acre project site is generally bounded by Richards Boulevard to the south, the American River to the north, North 5th Street to the west, and North 7th Street to the east. The City of Sacramento's General Plan land use designation for the project site is Special Planning District (SPD).

¹ Parcel numbers 001-0020-003, -014, -019, -033, -034, -036, -041, -044, -045, -046; 001-0200-012, -013, and -034.

Surrounding land uses consist of the American River to the north, industrial uses to the south, industrial/office to the east, and industrial to the west. The site is predominately covered with impervious surface. Existing uses on the site include industrial and warehouse uses (mainly cold storage and related uses). All existing structures on the project site, totaling approximately 1.4 million square feet, would be demolished to accommodate the proposed project. Vegetation consists of sparse shrubs and trees located sporadically across the site, all of which would be removed to accommodate the project. A portion of the site, approximately 12 acres, is located on the American River side of the levee.

Project Description

The proposed project would include approximately 2,982 dwelling units (single-family, apartments, and condominium units) and approximately 145,524 gross square feet of neighborhood-serving retail (see Figure 2). The retail uses would be located in the ground floor of residential buildings and would include restaurants and services such as hair salons, dry cleaning, small grocery stores, flower shops, and office-type services. Small professional offices may also be included. Buildings on-site would range from 15 story high-rise mixed-use (maximum of 150 foot height), mid-rise mixed-use (up to five stories), mixed-use four-story lofts and home-office use, and three-story town homes. The proposed project also includes an option to develop approximately 809,200 gross square feet of office use (instead of residential) on the proposed lots fronting Richards Boulevard. The two development options are referred to as the Residential/Retail Development Option and the Residential/Retail/Office Development Option.

The project would include space for a transit station and tracks for future construction by Sacramento Regional Transit (Light Rail). In addition, the proposed project would include cleanup of the existing trail along the American River, as well as construction of a new overlook that would be located over both the street side and the river side of the levee.

Project Entitlements and Required Approvals

The proposed project would require the following entitlements:

- **EIR approval.** Before the City can approve the project, it must certify that the EIR has been completed in compliance with CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the lead agency.
- **Tentative Map.** City approval is required for a Tentative Map to develop a mixed-use development comprising 20 lots on approximately 65 acres in the RBAP area in the City of Sacramento.
- **Rezone.** City approval is required to change the zoning designations (as identified in the Title 17 of Sacramento Municipal Code) on the proposed project site. Existing zoning on the project site consists of American River Parkway - Flood Zone - Special Planning District (ARP-F-SPD); Heavy Industrial Zone - American River Parkway Corridor - Special Planning District - North Richards Boulevard (M-2-PC-SPD (N)); and Heavy Industrial Zone - Special Planning District - Central Richards Boulevard (M-2-SPD (C)). The proposed zoning designations for the project site are Residential Mixed Use - Planning District (RMX-PD) and Open Space - Planning District. No zoning changes are proposed for the ARP-F-SPD parcels.
- **Lot Line Adjustment.** City approval is required for a Lot Line Adjustment between the proposed project site and the approximately 20- to 40-foot-wide parcel to the east.
- **Changes to the RBAP.** Proposed changes to the RBAP include changing the location and amount of various designations including residential, office, and open space. In addition, the project proposes changes to development standards, including parking requirements, height restrictions, and street standards. The PUD would include detailed PUD Guidelines.

At this time, it is anticipated that the following public agencies would act as Responsible Agencies for the EIR:

- The Sacramento Metropolitan Air Quality Management District (SMAQMD) would issue a permit to operate.
- The State Water Resources Control Board would issue a Construction Storm Water Discharge permit.
- The State Reclamation Board would issue a permit prior to beginning work within floodways, levees, and ten feet landward of the landside of a levee toe.

Environmental Effects

A Water Supply Assessment will be prepared for the proposed project and included as an appendix to the Draft EIR.

At this time, it is anticipated that the following issue areas will be evaluated in the EIR:

- Land Use Consistency and Compatibility
- Population and Housing
- Hydrology and Water Quality
- Air Quality
- Transportation/Circulation
- Biological Resources
- Hazards and Hazardous Materials
- Noise
- Public Services
- Public Utilities
- Aesthetics, Light, and Glare
- Cultural Resources
- Seismicity, Soils, and Geology

The proposed project would not result in potentially significant impacts related to agricultural resources or mineral resources; therefore, these issues will be addressed in the Initial Study to be included as an appendix to the Draft EIR.

Submitting Comments

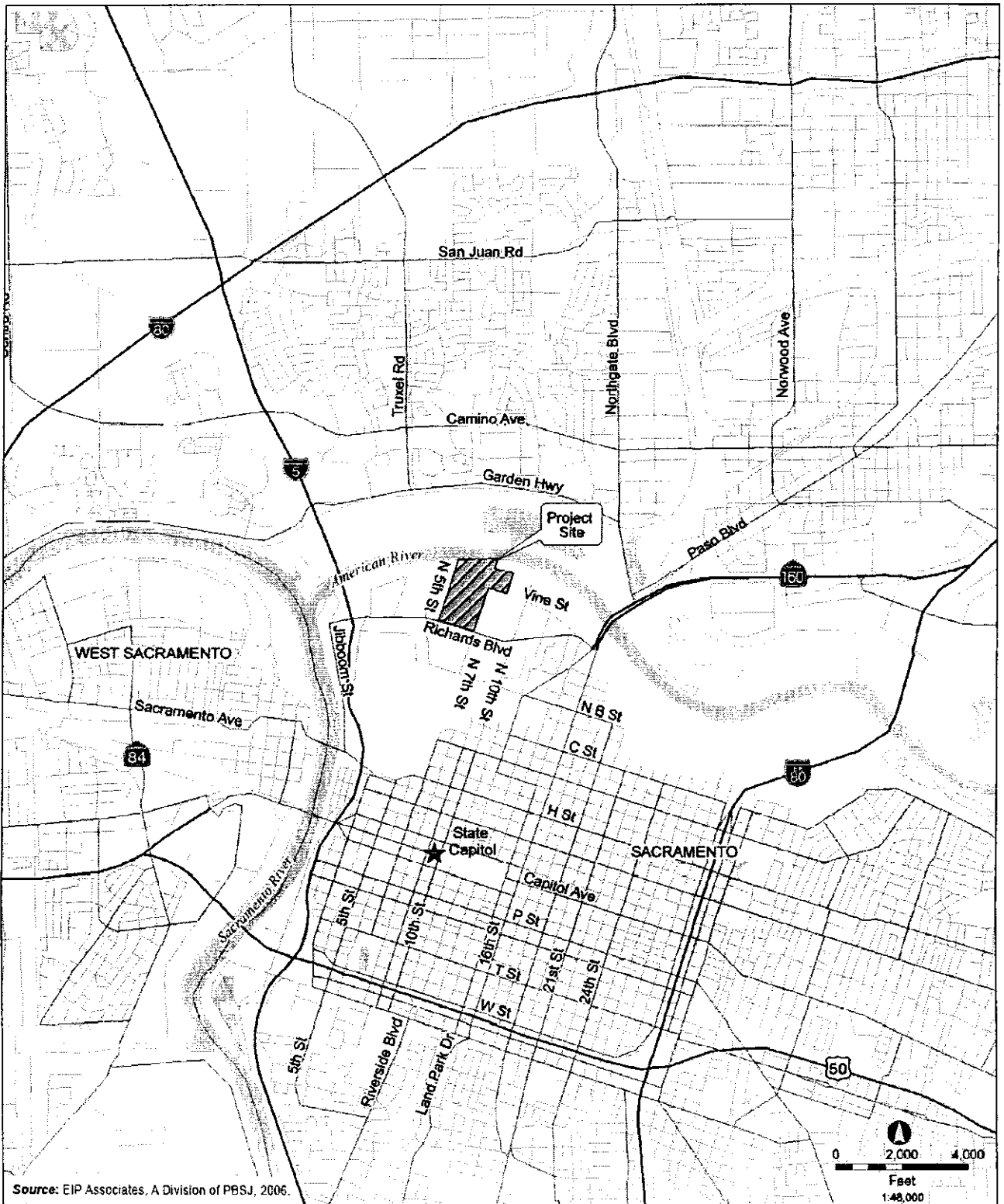
To ensure that the full range of project issues of interest to responsible government agencies and the public are addressed, comments and suggestions are invited from all interested parties. Written comments or questions concerning the scope of the EIR for the proposed project should be directed to the following address by **5:00 PM on Tuesday, August 15, 2006**:

Jennifer Hageman, Senior Planner
City of Sacramento, Development Services Department
2101 Arena Blvd. Suite 200
Sacramento, CA 95834
(916) 808-5538

All comments must include your full name and address in order for staff to respond appropriately.

Scoping Meeting

A public scoping meeting will be held on August 1, 2006, from 5:30 to 7:30 PM in the Planning Commission Hearing Room in the Historic City Hall at 915 I Street. Responsible agencies and members of the public are invited to attend and provide input on the scope of the EIR. All interested parties are welcome to attend the scoping meeting; however, attendance is not mandatory for those who submit written comments by or before the deadline identified above.



Source: EIP Associates, A Division of PBSJ, 2006.

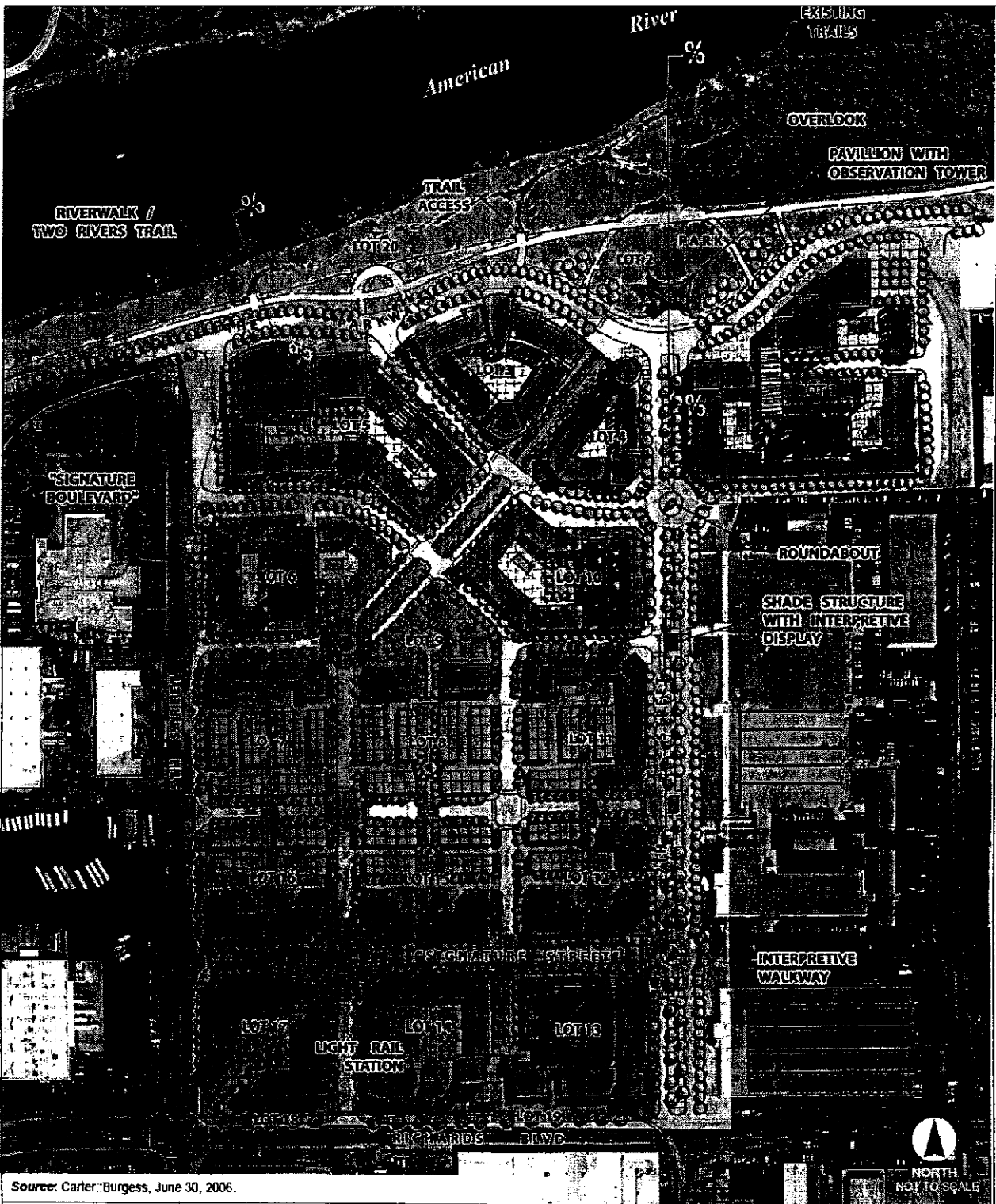
EIP
 1992-2006

A division of **PBSJ**

FIGURE 1
Capitol Station 65 Project Location

D51214.01

Capitol Station 65



Source: Carter::Burgess, June 30, 2006.

EIP
 ENGINEERING
 ARCHITECTURE
 PLANNING
 SERVICES

A division of **PBSJ**

FIGURE 2
Capitol Station 65 Site Plan

D61214.01

Capitol Station 65

NOP RESPONSES

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 3 – SACRAMENTO AREA OFFICE

VENTURE OAKS – MS 15

P.O. BOX 942874

SACRAMENTO, CA 94274-0001

PHONE (916) 274-0614

FAX (916) 274-0648

TTY (530) 741-4509

*Flex your power!
Be energy efficient!*

August 9, 2006

06SAC0114

03-SAC-05 PM 24.645

Capitol Station 65 (P06-047)

Notice of Preparation

SCH#2006072077

Ms. Jennifer Hageman

City of Sacramento

2101 Arena Boulevard, Suite 200

Sacramento, CA 95834

Dear Ms. Hageman:

Thank you for the opportunity to review and comment on the Notice of Preparation for the Capitol Station 65 project. The 65 acre project proposes up to 2,982 dwelling units, 5,339 parking spaces, 145,524 sq. ft. of neighborhood retail, and/or 809,200 sq. ft. of office uses. The project is located between Richards Boulevard and the American River within in the City of Sacramento. The project's only access points from the north are the State Highway System crossings of the American River via Interstate 5 (I-5) and State Route (SR) 160. Our comments are as follows:

- o To help reduce demand on the State Highway System, it is recommended that land uses closest to the Richards Boulevard Light Rail Station on the planned Downtown-Natomas-Airport light rail extension should be oriented for use by pedestrians. Additionally, land uses closest to the City of Sacramento's planned Two Rivers trail along the American River's southern levee should be appropriately accessible to pedestrians and bicyclists.

Ms. Jennifer Hageman
August 9, 2006
Page 2

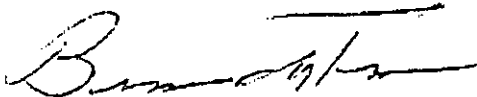
- An analysis of the ability of transit, light rail service, pedestrian and bicycle connections, and local road improvements to reduce potential impacts to the State Highway System within the project area should be conducted. The issue of improved north/south circulation across the American River is especially important within this project area.
- It is anticipated that this project will have impacts of regional significance. Public Resources Code Sections 21081.4, 21081.6 and 21081.7 mandates that lead agencies provide Caltrans with information on transportation related mitigation monitoring measures for projects that are of statewide, regional, or area wide significance. Caltrans' *Guidelines for Submitting Transportation Information from a Reporting or Monitoring Program* is attached.
- A Traffic Impact Study (TIS) should be completed. The TIS should include the Interstate-5 (I-5)/Richards Boulevard and J Street interchanges, and SR 160/Richards Boulevard interchange, at a minimum. The TIS should consider all possible traffic impacts to all ramps, ramp intersections, and the mainline. The "Guide for Preparation of Traffic Impact Studies" can be found on our website at: <http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/>. We request a meeting with the City and the project proponents to review the TIS's scope and assumptions before the Study begins.
- Any significant traffic impacts will require mitigation. Feasible mitigation measures are available including proportional mitigation funding for future improvements such as interchange improvements, ramp widening, ramp intersection improvements, bridge improvements, signalization modification, and mainline improvements.

Ms. Jennifer Hageman
August 9, 2006
Page 3

- o Mitigation measures should be identified where the project would have a significant impact. Caltrans considers the following to be significant impacts:
 - Off-ramps with vehicle queues that extend into the ramp's deceleration area or onto the freeway.
 - Vehicle queues at intersections that exceed existing lane storage.
 - Project traffic impacts that cause any ramp's merge/diverge Level of Service (LOS) to be worse than the freeway's LOS.
 - Project impacts that cause the freeway or intersection LOS to deteriorate beyond LOS "E" for freeway and LOS "D" for highway and intersections. If LOS is already "E" or "F", then a quantitative measure of increased queue lengths and delay should be used to determine appropriate mitigation measures.

If you have any questions about these comments please contact Alyssa Begley at (916) 274-0635.

Sincerely,



BRUCE DE TERRA, Chief
Office of Transportation Planning—South

Attachment

cc: Tom Neumann
Terri Pencovic
Jeff Pulverman

California Department of Transportation (Department)

**GUIDELINES FOR SUBMITTING TRANSPORTATION
INFORMATION FROM A REPORTING OR MONITORING
PROGRAM TO THE CALIFORNIA DEPARTMENT OF
TRANSPORTATION (DEPARTMENT)**

INTRODUCTION The California Environmental Quality Act (CEQA) requires, under Public Resources Code (PRC) Section 21081.6, the adoption of reporting or monitoring programs when public agencies include environmental impact mitigation as a condition of project approval. Reporting or monitoring takes place after project approval to ensure implementation of the project in accordance with mitigation adopted during the CEQA review process.

Assembly Bill 1807 (effective January 1, 2001) amended the PRC in a number of ways. Section 21080.4 was amended to add a requirement that lead agencies submit Notices of Preparation (NOPs) to the Governor's Office of Planning and Research when they determine that an environmental impact report will be required to approve a project.

Section 21081.7 was amended with two additional provisions. The first provision required that transportation information resulting from a reporting or monitoring program adopted by a public agency in accordance with Section 21081.6 be submitted to the Department of Transportation (Department) when a project has impacts that are of statewide, regional, or area-wide significance. The second provision required that the Department adopt guidelines for the submittal of those reporting or monitoring programs.

PURPOSE The purpose of these guidelines is to establish clear and consistent statewide procedures to be used by both Department District Intergovernmental Review (IGR) Program Coordinators to identify the scope and timing of transportation information needed from lead agencies, and public agencies when submitting transportation information to the Department, in accordance with Section 21081.7.

Mitigation Reporting or Monitoring Submittal Guidelines

Page 2

- PROCEDURES**
- A.** The District IGR Program Managers and/or Coordinators shall:
1. Prior to implementation of mitigation measures:
 - a. Notify the CEQA lead agency by letter during "early consultation," the Notice of Preparation (NOP) stage, or the Initial Study (IS) phase of the CEQA review process that the transportation information included in the reporting or monitoring program will need to be provided to the Department following project mitigation agreement.
 - b. Provide the name, address, and telephone number of the District IGR contact to the lead agency.
 - c. Provide, as an enclosure to the notification letter, a copy of these "Guidelines" and the Department's "CEQA Lead Agency Checklist/Certification" form. (Part 1 of the form, *Checklist*, is to be signed by the lead agency following project approval, and a copy submitted to the District along with the transportation reporting or monitoring information. Part 2 of the form, *Certification*, is to be signed by the lead agency and the District upon implementation of all agreed-upon mitigation measures.)
 2. Following implementation of mitigation measures as identified in Part 1, *Checklist*, of the CEQA Lead Agency Checklist/Certification form, and certification of implementation by the lead agency in Part 2, *Certification*:

Ensure sign off of Part 2, indicating that the mitigation measures have been implemented.

 - 1) If the project required encroachment onto a state highway, obtain the District Permit Engineer's signature in Part 2.
 - 2) If the project did not involve encroachment onto a state highway, the District IGR Coordinator shall sign Part 2.

Mitigation Reporting or Monitoring Submittal Guidelines

Page 3

- 3) The District IGR Coordinator shall: (a) Retain the original document; (b) forward a copy to the District Permit Engineer (if the Permit Engineer signed Part 2); (c) forward a copy to the Department's Headquarters IGR Program Manager; and, (d) send a copy to the lead agency.

B. The CEQA lead agency shall:**1. Following project approval:**

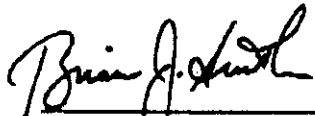
Submit the following information to the Department District IGR contact:

- 1) Name, address, and telephone number of the CEQA lead agency contact responsible for the mitigation reporting or monitoring program.
- 2) Location and custodian of the documents or other material, which constitute the record of proceedings upon which the lead agency's decision to approve the project is based.
- 3) Assurances that the Department can obtain copies of the aforementioned documents and materials, if needed, to clarify details or resolve issues related to the mitigation adopted.
- 4) Detailed information on impact assessment methods, the type of mitigation, specific location, and implementation schedule for each transportation impact mitigation measure included in the reporting or monitoring program.
- 5) A copy of the "CEQA Lead Agency Checklist/Certification" form, with Part 1, *Checklist*, signed and dated, and the reporting or monitoring program transportation information attached or enclosed. The CEQA lead agency, at its discretion, may submit the complete reporting or monitoring program with the required transportation information highlighted.

Mitigation Reporting or Monitoring Submittal Guidelines
Page 4

- 2. Following implementation of mitigation measures:
 - a. Sign and date Part 2, *Certification*, of the "CEQA Lead Agency Checklist/Certification" form.
 - b. Forward the "CEQA Lead Agency Checklist/Certification" form, with appropriate completion documents attached, to the District IGR contact, certifying that the mitigation measures agreed upon and identified in the reporting or monitoring program have been implemented, and that all other reporting requirements have been adhered to, in accordance with PRC Sections 21081.6 and 21081.7.

APPROVED:



 BRIAN J. SMITH 8 July 04
 Deputy Director Date
 Planning and Modal Programs



 LARRY ORCUTT 7-9-04
 Acting Deputy Director Date
 Maintenance and Operations

CEQA LEAD AGENCY CHECKLIST/CERTIFICATION * TRANSPORTATION INFORMATION FROM A REPORTING OR MONITORING PROGRAM

Part 1 - Checklist

Project Name: _____

Lead Agency: _____

Lead Agency Contact (Name, Title, Agency, Address & Phone): _____

State Clearinghouse (SCH) File #/s: _____

Document Type/s: _____

Findings & Approval Date/s: _____

Project Proponent (Name, Title, Company, Address & Phone): _____

For each specific Transportation Related Mitigation Measure associated with this Project, The following information items are included in the attached materials:

Yes	No	
<input type="checkbox"/>	<input type="checkbox"/>	Location/Custodian Of CEQA Documents, Proceedings, Records
<input type="checkbox"/>	<input type="checkbox"/>	Description Of How To Obtain Copies Of Above Documents
<input type="checkbox"/>	<input type="checkbox"/>	Mitigation Measure Name & Identifying Number
<input type="checkbox"/>	<input type="checkbox"/>	Detailed Description of Measure & its Purpose (attach blueprints if necessary)
<input type="checkbox"/>	<input type="checkbox"/>	Measure Location Description, Latitude/Longitude, & Vicinity Map
<input type="checkbox"/>	<input type="checkbox"/>	Location of Impacted State Highway Component (County, Route, Postmile)
<input type="checkbox"/>	<input type="checkbox"/>	Caltrans Encroachment Permit Number (if one was needed)
<input type="checkbox"/>	<input type="checkbox"/>	Copy of Other Agency Permits required for this Measure (if needed)
<input type="checkbox"/>	<input type="checkbox"/>	Completion Criteria (including detailed performance objectives)
<input type="checkbox"/>	<input type="checkbox"/>	Implementation Schedule
<input type="checkbox"/>	<input type="checkbox"/>	Estimated Monetary Value of Completed Measure & % Local Agency Funded
<input type="checkbox"/>	<input type="checkbox"/>	Responsible Contractor (Name, Company, Address & Phone)

The above project mitigation measures will be implemented as indicated in the adopted reporting or monitoring program, and the California Department of Transportation will be notified upon implementation.

CEQA Lead Agency _____ Date _____

Part 2 - Certification

We certify that the agreed upon mitigation measures have been implemented, and all other requirements have been adhered to, in accordance with PRC Sections 21081.6 and 21081.7. Attached: 1. Completion evaluation (including field inspection reports); 2. Photograph of completed measure.

Signature & Date: _____

Name: _____

Title: _____

CEQA Lead Agency

California Department of Transportation

* This form is to be used by public agencies to submit their mitigation reporting or monitoring programs to the California Department of Transportation (Department) when a CEQA project has been found to have transportation or circulation impacts that are of statewide, regional, or area-wide significance. Copies of this form, and the Department Guidelines developed pursuant to PRC Section 21081.7, can be downloaded from our website: (http://www.dot.ca.gov/hq/imp/office/ceqa/ceqa_guidelines_procedures.html). Completed form with attached materials may be post-mailed, e-mailed, or faxed to the appropriate Department District Planning Office, Attention: Intergovernmental Review (IGR) Coordinator. (Form Version 07/2004)



August 15, 2006

Ms Jennifer Hageman
Senior Planner
City of Sacramento
2101 Arena Blvd. Suite 200
Sacramento, CA 95834

**SUBJECT: Capitol Station 65 Project, NOP for an EIR
SMAQMD # SAC200600916B**

Dear Ms Hageman:

Thank you for providing the project listed above to the Sacramento Metropolitan Air Quality Management District (District). Staff comments follow.

Relative to the environmental effects of the proposed project, the District has adopted CEQA thresholds of significance for use in preparing and reviewing environmental documents. Separate thresholds were established for the construction phase and operational phase of projects. Those thresholds are available at www.airquality.org.

Because of the size of this project, we believe it will generate short term (construction) and perhaps long-term (operations) air quality impacts which may be in excess of the established District threshold for construction. An air quality analysis should be done on the project in order to determine if those impacts are significant. Demolition activities and building construction inputs will be critical to an accurate analysis. Relative to the construction impacts, if those impacts are significant, the SMAQMD standard construction mitigation measures should be used. Those measures include both on-site strategies and the possibility of an off-site mitigation fee. They can be found on our website.

If the project is significant for operational impacts, we recommend the creation and implementation of an Air Quality Mitigation Plan which would seek to reduce emissions by 15%. We recommend that the Plan be endorsed by us and included in the DEIR. In order to achieve this timing, we recommend that the proponent work with us as early as possible in order to create that Plan. We have a list of measures from which the proponent could choose. Many of the measures affect the planning phases of a project and so we recommend early consultation. I would be the point of contact for that effort.

All projects are subject to SMAQMD rules and regulations in effect at the time of construction. Please see the attached document describing SMAQMD Rules which may apply to this project.

Please send the environmental document, including the air quality analysis to me. If you have questions, please contact me at 874-4885 or jborkenhagen@airquality.org

Sincerely,

Jeane Borkenhagen
Associate Air Quality Planner Analyst

cc: Larry Robinson SMAQMD
Steve Goodwin Capitol Station 65 LLC
Enc: SMAQMD Rules & Regulations Statement

SMAQMD Rules & Regulations Statement

The following statement is recommended as standard condition of approval or construction document language for all construction projects within the Sacramento Metropolitan Air Quality Management District (SMAQMD):

All projects are subject to SMAQMD rules and regulations in effect at the time of construction. A complete listing of current rules is available at www.airquality.org or by calling 916.874.4800. Specific rules that may relate to construction activities may include, but are not limited to:

Rule 201: General Permit Requirements. Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from SMAQMD prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the District early to determine if a permit is required, and to begin the permit application process. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc) with an internal combustion engine over 50 horsepower are required to have a SMAQMD permit or a California Air Resources Board portable equipment registration.

Rule 403: Fugitive Dust. The developer or contractor is required to control dust emissions from earth moving activities or any other construction activity to prevent airborne dust from leaving the project site.

Rule 442: Architectural Coatings. The developer or contractor is required to use coatings that comply with the volatile organic compound content limits specified in the rule.

Rule 902: Asbestos. The developer or contractor is required to notify SMAQMD of any regulated renovation or demolition activity. Rule 902 contains specific requirements for surveying, notification, removal, and disposal of asbestos containing material.

Other general types of uses that require a permit include dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions.

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 942360001
(916) 653-5791



SEP 1 2008

Jennifer Hageman
City of Sacramento
2101 Arena Boulevard, Second Floor
Sacramento, California 95831

Capitol Station 65
State Clearinghouse (SCH) Number: 2006072077

The project corresponding to the subject SCH identification number has come to our attention. The limited project description suggests a potential encroachment on an Adopted Plan of Flood Control. If indeed your project encroaches on an adopted food control plan, you will need to obtain an encroachment permit from the Reclamation Board prior to initiating any activities. The enclosed Fact Sheet explains the permitting process. Please note that the permitting process may take as much as 45 to 60 days to process. Also note that a condition of the permit requires the securing all of the appropriate additional permits before initiating work. This information is provided so that you may plan accordingly.

If after careful evaluation, it is your assessment that your project is not within the authority of the Reclamation Board, you may disregard this notice. For further information, please contact me at (916) 574-1249.

Sincerely,

A handwritten signature in black ink that reads "Al Vargas".

Al Vargas
Staff Environmental Scientist
Floodway Protection Section

cc: Governor's Office of Planning and Research
State Clearinghouse
1400 Tenth Street, Room 121
Sacramento, CA 95814

Enclosure

Fact Sheet

Reclamation Board Encroachment Permit Application Process

Authority

State law (Water Code Sections 8534, 8608, 8609, and 8710 – 8723) tasks the Reclamation Board with enforcing appropriate standards for the construction, maintenance, and protection of adopted flood control plans. Regulations implementing these directives are found in California Code of Regulations (CCR) Title 23, Division 1.

Reclamation Board Jurisdiction

The adopted plan of flood control under the jurisdiction and authority of the Reclamation Board includes the Sacramento and San Joaquin Rivers and their tributaries and distributaries and the designated floodways.

Streams regulated by the Reclamation Board can be found in Title 23 Section 112. Information on designated floodways can be found on the Reclamation Board's website at http://recbd.ca.gov/designated_floodway/ and CCR Title 23 Sections 101 - 107.

Regulatory Process

The Reclamation Board ensures the integrity of the flood control system through a permit process (Water Code Section 8710). A permit must be obtained prior to initiating any activity, including excavation and construction, removal or planting of landscaping within floodways, levees, and 10 feet landward of the landside levee toes. Additionally, activities located outside of the adopted plan of flood control but which may foreseeable interfere with the functioning or operation of the plan of flood control is also subject to a permit of the Reclamation Board [CCR Title 23 Section 6(c)].

Details regarding the permitting process and the regulations can be found on the Reclamation Board's website at <http://recbd.ca.gov/> under "Frequently Asked Questions" and "Regulations," respectively. The application form and the accompanying environmental questionnaire can be found on the Reclamation Board's website at <http://recbd.ca.gov/forms.cfm>.

Application Review Process

Applications when deemed complete will undergo technical and environmental review by Reclamation Board and/or Department of Water Resources staff.

Technical Review

A technical review is conducted of the application to ensure consistency with the regulatory standards designed to ensure the function and structural integrity of the adopted plan of flood control for the protection of public welfare and safety. Standards and permitted uses of designated floodways are found in CCR Title 23 Sections 107 and Article 8 (Sections 111 to 137). The permit contains 12 standard conditions and additional special conditions may be placed on the permit as the situation warrants. Special conditions, for example, may include mitigation for the hydraulic impacts of the project by reducing or eliminating the

additional flood risk to third parties that may caused by the project.

Additional information may be requested in support of the technical review of your application pursuant to CCR Title 23 Section 8(b)(4). This information may include but not limited to geotechnical exploration, soil testing, hydraulic or sediment transport studies, and other analyses may be required at any time prior to a determination on the application.

Environmental Review

A determination on an encroachment application is a discretionary action by the Reclamation Board and its staff and subject to the provisions of the California Environmental Quality Act (CEQA) (Public Resources Code 21000 et seq.). Additional environmental considerations are placed on the issuance of the encroachment permit by Water Code Section 8608 and the corresponding implementing regulations (California Code of Regulations – CCR Title 23 Sections 10 and 16).

In most cases, the Reclamation Board will be assuming the role of a "responsible agency" within the meaning of CEQA. In these situations, the application must include a certified CEQA document by the "lead agency" [CCR Title 23 Section 8(b)(2)]. We emphasize that such a document must include within its project description and environmental assessment the activities for which are being considered under the permit.

Encroachment applications will also undergo a review by an interagency Environmental Review Committee (ERC) pursuant to CCR Title 23 Section 10. Review of your application will be facilitated by providing as much additional environmental information as pertinent and available to the applicant at the time of submission of the encroachment application.

These additional documentations may include the following documentation:

- California Department of Fish and Game Streambed Alteration Notification (<http://www.dfg.ca.gov/1600/>),
- Clean Water Act Section 404 applications, and Rivers and Harbors Section 10 application (US Army Corp of Engineers),
- Clean Water Act Section 401 Water Quality Certification, and
- corresponding determinations by the respective regulatory agencies to the aforementioned applications, including Biological Opinions, if available at the time of submission of your application.

The submission of this information, if pertinent to your application, will expedite review and prevent overlapping requirements. This information should be made available as a supplement to your application as it becomes available. Transmittal information should reference the application number provided by the Reclamation Board.

In some limited situations, such as for minor projects, there may be no other agency with approval authority over the project, other than the encroachment permit by Reclamation Board. In these limited instances, the Reclamation Board may choose to serve as the "lead agency" within the meaning of CEQA and in most cases the projects are of such a nature that a categorical or statutory exemption will apply. The Reclamation Board cannot invest staff resources to prepare complex environmental documentation.

Additional information may be requested in support of the environmental review of your application pursuant to CCR Title 23 Section 8(b)(4). This information may include biological surveys or other environmental surveys and may be required at anytime prior to a determination on the application.

August 25, 2006