

The Towers on Capitol Mall Final Environmental Impact Report

Prepared for:

The City of Sacramento

Prepared by:

EIP Associates

Transportation and Circulation Responses Prepared by:

Fehr and Peers Associates in coordination with the City of Sacramento

July 2005

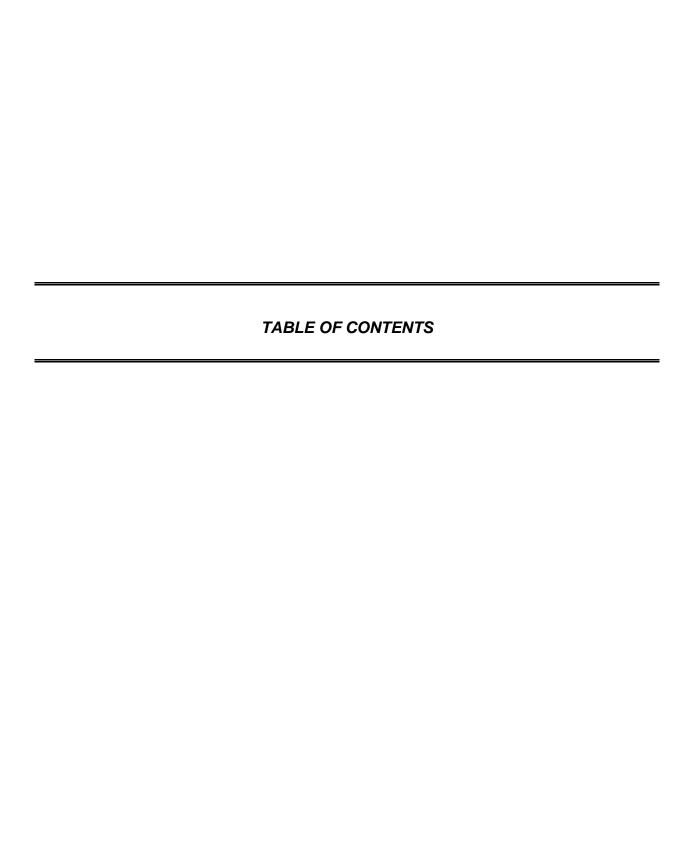
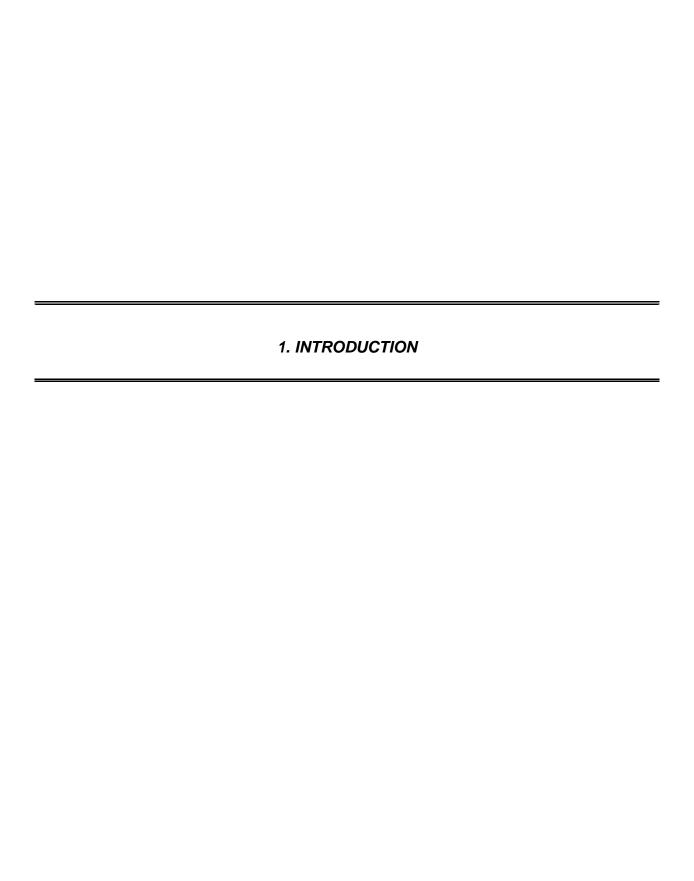


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PURPOSE OF THIS DOCUMENT

This document contains public comments received on the Draft Environmental Impact Report (Draft EIR) for the Towers on Capitol Mall Project (proposed project). Written comments were received by the City of Sacramento during the public comment period held from May 3, 2005 through June 17, 2005. This Final EIR includes written responses to each comment received on the Draft EIR. The responses correct, clarify, and amplify text in the Draft EIR, as appropriate. Also included are text changes made at the initiative of City staff. These changes do not alter the conclusions of the Draft EIR. This document has been prepared in accordance with the California Environmental Quality Act (CEQA).

BACKGROUND

The proposed project is an approximately 1,800,000-square-foot mixed-use residential, hotel, and retail development. The proposed project includes two 615-foot towers on a 10-story podium. including up to 800 condominiums, 276 hotel rooms, 85,000 square feet of retail space, a 40,000square-foot gym, a 10,000-square-foot spa, and 1,100 on-site parking spaces. The existing building on the site, an unoccupied four-story building (one floor below grade), previously the office of the California Department of Toxic Substance Control, would be demolished, and existing surface parking at the project site would be removed to accommodate the project.

The 2.42-acre project site is located at 301 Capitol Mall, occupying the block between 3rd and 4th Streets and Capitol Mall and L Street in the Central Business District (CBD) of downtown Sacramento. The CBD is typified by mixed-use commercial, retail, residential, and office uses of medium to high density. There are currently no residential structures located along Capitol Mall, and many of the buildings within the project vicinity are occupied by office uses. The proposed project is located in an area of the CBD with a high volume of pedestrian and vehicle traffic during business hours.

The proposed project's land use designation in the Sacramento General Plan is Regional Commercial and Office. The Central City Community Plan designates the proposed project site as Multi-Use. Zoning for the site is C-3-SPD. Residential and hotel uses are allowed in this district with approval of a special permit.

Entitlements requested of the City of Sacramento for the proposed project include the following:

- Environmental Determination: Environmental Impact Report;
- Mitigation Monitoring Plan;
- Tentative Map for one condominium parcel:
- Special Permit to construct 800 condominium units in the C-3-SPD zone;
- Special Permit to construct a 276-unit hotel in the C-3-SPD zone:
- Special Permit for a Major Project over 75,000 gross square feet in the C-3-SPD zone;
- Special Permit for heliports for The Towers on Capitol Mall project.

A Notice of Preparation for the Towers on Capitol Mall Project EIR was circulated on December 29, 2004 with a 45-day public review period between January 3, 2005 and February 2, 2005. An NOP errata was distributed on February 2, 2005 with information regarding the conversion of 3rd Street to two-way, which was included in the project application, but was not included in the original NOP. The comment period for the Initial Study was extended to February 11, 2005. A public scoping meeting for the EIR was held on January 28, 2005.

The 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 Draft EIR was released for public review and comment period from May 3, 2005 through June 17, 2005.

Type of Document

This EIR is an informational document intended to disclose to the City of Sacramento and the public the environmental consequences of approving and implementing the Towers on Capitol Mall Project. The preparation of the Final EIR focuses on the responses to comments on the Draft EIR. The Lead Agency (City of Sacramento) must certify that the EIR adequately discloses the environmental effects of the project and has been completed in conformance with CEQA, and that the decision-making bodies independently reviewed and considered the information contained in the EIR prior to taking action on the project. The Final EIR must also be considered by the Responsible Agencies, which are public agencies that have discretionary approval authority over the project in addition to the Lead Agency. For this project, the Responsible Agency must consider the environmental effects of the project, as shown in the EIR prior to approving any portion of the project over which it has authority. The California Environmental Quality Act (CEQA) Guidelines Section 15132 specifies the following:

The Final EIR shall consist of:

- (a) The Draft EIR or revision of the draft.
- (b) Comments and recommendations received on the Draft EIR either verbatim or in summary.
- (c) A list of persons, organizations, and public agencies commenting on the Draft EIR.
- (d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- (e) And any other information added by the Lead Agency.

This document contains the list of commentors, the comment letters, and responses to the significant environmental points raised in the comments. The Draft EIR is hereby incorporated by reference.

ORGANIZATION OF THIS DOCUMENT

For this Final EIR, comments and responses are grouped by comment letter. As the subject matter of one topic may overlap between letters, the reader must occasionally refer to more than one letter and response to review all the information on a given subject. Cross references are provided to assist the reader. Responses to these comments are included in this document to provide additional information for use by the decision makers.

The comments and responses that make up the Final EIR, in conjunction with the Draft, as amended by the text changes, constitute the EIR that will be considered for certification by the City of Sacramento.

The Final EIR is organized as follows:

Chapter 1 - Introduction: This chapter includes a summary of the project description and the process and requirements of a Final EIR.

Chapter 2 - Text Changes to the Draft EIR: This chapter lists the text changes to the Draft EIR.

Chapter 3 - List of Agencies and Persons Commenting: This chapter contains a list of all of the agencies or persons who submitted comments on the Draft EIR during the public review period, ordered by agency, organization and date.

Chapter 4 - Comments and Responses: This chapter contains the comment letters received on the Draft EIR and the corresponding response to each comment. Each letter and each comment within a letter has been given a number. Responses are provided after the letter in the order in which the comments were assigned. Where appropriate, responses are cross-referenced between letters.

Chapter 5 – Mitigation Monitoring Plan: This chapter contains the Mitigation Monitoring Plan (MMP) to aid the City in its implementation and monitoring of measures adopted in the EIR.

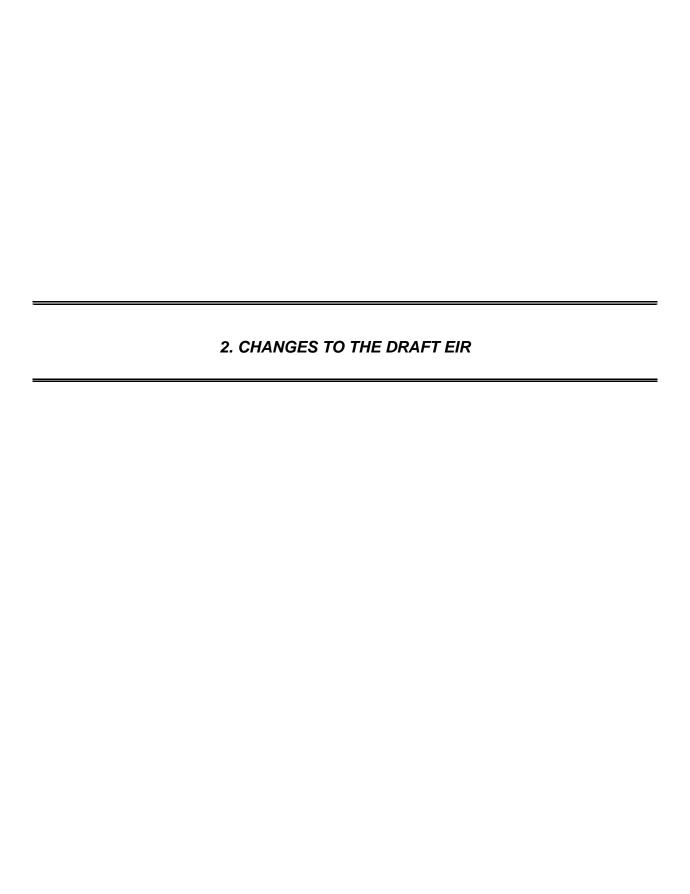
Appendices: This section contains the Water Supply Assessment (WSA), which presents a description and analysis of the available water supply entitlements, water contracts, water rights, and the demand on water supply. The WSA aims to assess whether the City has sufficient water resources to implement the proposed project.

PUBLIC PARTICIPATION AND REVIEW

The City of Sacramento notified all responsible and trustee agencies and interested groups, organizations, and individuals that the Draft EIR on the proposed project was available for review. The following list of actions took place during the preparation, distribution, and review of the Draft EIR:

- A Notice of Preparation (NOP) for an EIR was filed with the State Clearinghouse on December 29, 2004. A 30-day public review comment period for the NOP was established starting on January 3, 2005 and ending on February 2, 2005.
- A public scoping meeting for the EIR was held on January 28, 2005.
- An NOP errata was distributed on February 2, 2005 with information regarding the conversion of 3rd Street to two-way, which was included in the project application, but was not included in the original NOP. The comment period for the NOP was extended to February 11, 2005.
- A Notice of Completion (NOC) and copies of the Draft EIR were filed with the State Clearinghouse on May 3, 2005. An official 45-day public review period for the Draft EIR

- was established by the State Clearinghouse, ending on June 17, 2005 and a Notice of Availability (NOA) was distributed to interested groups, organizations, and individuals.
- Copies of the Draft EIR were available for review at the City of Sacramento's Development Services Department, 1231 I Street, Room 300, Sacramento, CA 95814.



INTRODUCTION

This chapter presents minor corrections and revisions made to the Draft EIR (DEIR) initiated by the public, staff, and/or consultants based on their on-going review. New text is indicated in <u>underline</u> and text to be deleted is reflected by a strike through. Text changes are presented in the page order in which they appear in the DEIR.

Air Quality

Mitigation Measure 5.2-3, on page 5.2-18 of the DEIR is changed, as follows:

5.2-3

The following measures shall be incorporated into construction practices included in the project, as recommended by the SMAQMD:

- (a) The project applicant shall ensure on-going membership in the Sacramento Transportation Management Association.
- (b) Transit passes shall be sold on-site, and transit schedules shall be provided on-site.

Wastewater and Storm Drainage

Because the proposed project does not connect with the Combined Sewer System, it must develop a storage and conveyance plan on site. Therefore, the text under the heading "Mitigation Measure" on page 5.5-16 is changed as follows:

Implementation of the following mitigation measure would require the proposed project to contribute toward upsizing of the existing drainage pipes or the construction of onsite detention basins to accommodate any increase in flows resulting from the project, which would reduce this impact to a less-than-significant level.

5.5-5 The project developer shall contribute its fair share amount toward upsizing of existing drainage pipes; or shall follow the City of Sacramento Utilities infill policy and construct on-site storage or detention to accommodate any increased runoff that would ensure that project runoff would not contribute to system flooding during storm events. The final detention method shall be developed in consultation with the City of Sacramento Utilities Department.

Water Supply Discussion

A discussion of water supply for the proposed project is included in Section 5.5 of the DEIR (pages 5.5-18 through 5.5-27). As stated on pages 5.5-21 and 5.5-22 of the DEIR, the proposed project requires preparation of a Water Supply Assessment (WSA) in compliance with Senate Bill 610 (SB 610). The WSA is an assessment of the available water supplies, including the availability of

these supplies in all water-year conditions over a 20-year planning horizon, and an assessment of how these supplies relate to project-specific and cumulative demands over that same 20-year period. Since publication of the DEIR, a WSA has been prepared for the proposed project (see Appendix A). Although the method for calculating project demand differs in the two documents, the findings of the WSA are consistent with the findings of the DEIR Water Supply section, as described below.

The City has no standard demand rates that it uses to determine demand from individual projects; therefore, the DEIR uses rates developed in consultation with the City Utilities Department. The water demand rates used in the WSA, which are more conservative than those used in the DEIR, were developed based upon a survey of similar uses in other jurisdictions. The DEIR reported that the project demand would be approximately 249 AFY; the WSA estimated demand at 291 acre-feet per year (AFY), which represents a 16 percent difference. Using the demand estimate in the WSA, the proposed project demand would represent 0.14 percent of the total City allocation and 0.41 percent of the unused portion, compared to 0.12 percent and 0.36 percent, respectively, reported in the DEIR. The difference is not substantial and does not affect the conclusions of the DEIR. Using the water demand figures in the WSA, after implementation of the proposed project, 99.59 percent of the unused water allocation would still be available, versus 99.64 percent reported in the DEIR. Therefore, even with the more conservative project demand rates used in the WSA, sufficient water would be available to serve the proposed project.

The WSA found that, with the current infrastructure, there would be sufficient water to serve the proposed project in addition to cumulative demand during normal and dry years; however, under conditions where diversions from the American River are limited, cumulative demand would exceed available supply. According to the requirements of Water Code Section 10911(a), if the results of the WSA conclude that the water supplies are, or will be, insufficient, the WSA must include plans for acquiring additional water supplies. As described in the WSA, the City is already a partner on the Sacramento River Water Reliability Study, which is investigating alternatives for an additional diversion on the Sacramento River. The environmental documents for the alternatives analysis are scheduled to be completed in 2006, which provides eight years for the design and construction of a selected project before any potential peak demand shortfall would occur. The planned 145 mgd diversion and planned Water Treatment Plant included in the Sacramento River Water Reliability Study would ensure the delivery of the entitled water for the City under the cumulative scenario. The DEIR disclosed that development under the cumulative scenario would result in the need for upgrades in the City's water distribution and/or treatment systems. Therefore, the findings of the WSA are consistent with the findings of the DEIR.

The text changes below have been initiated by the City.

The second sentence of the first paragraph on page 5.5-18 is changed as follows:

The City diverts water pursuant to riparian and pre-1914 rights, and pursuant to five post-1914 appropriative water rights.

The Water Forum Agreement used a figure of 136,600 AFY as a modeling tool, but this figure was not intended to be used as a figure for projected water demand. Therefore, to clarify this issue, the following change has been made to the third sentence in the third paragraph of the Water Supply discussion on page 5.5-18 of the DEIR:

¹ Initial Alternatives Report. Final diversion, March 2005. Sacramento River Reliability Study.

The WFA estimated the City's future water demands to be 130,600 AFY, a reduction from the existing demand of 137,750 AFY. 38

Footnote 38. Revised Natomas Basin HCP EIR/EIS. November, 1997. Page 3-10. CH2MHill-

Transportation and Circulation

Table 5.6-16 on page 5.6-35 of the DEIR is changed to add traffic volumes, as shown, and to correct the figure for PM Peak hour density for the I-5 southbound off ramp to Q Street.

				7	ΓABLE	5.6-16							
	FRE	EWAY	RAMP	OPER.	ATION	S – NEA	AR-TI	ERM C	ONDITIO	ONS			
			Nea	r-Term (Conditio	on		N	ear-Term	Plus F	Project (Condition	
Freeway Ramp	Evaluation		AM Peak			PM Peak			AM Peak			PM Peak	
Junction	Type	Vol	Density ¹	LOS ²	Vol	Density	LOS	Vol	Density	LOS	Vol	Density	LOS
I-5 southbound off-ramp to J St	Ramp	2,030		O	1,428		В	2,058		С	<u>1,534</u>		С
I-5 southbound off-ramp to Q St	Diverge	<u>1,756</u>	34.8	ШФ	<u>606</u>	30.2	D	1,756	34.8	ΕĐ	<u>606</u>	30.2 30.1	D E
I-5 northbound off-ramp to J St and P St on- ramp ³	Weave	1,960 (274)		F	<u>733</u> (1,148)		F	1,985 (274)		F	<u>773</u> (1,148)		F
I-5 northbound on-ramp from L St	Ramp	<u>252</u>		Α	<u>1,306</u>		С	<u>311</u>		Α	<u>1,380</u>		С

^{1.} Density in passenger cars per mile per lane.

LOS calculations based on the HCM 2000 procedures.

Ramp LOS equal to the weave section LOS.

XX (XX) J Street Northbound off-ramp (P Street northbound on-ramp) Traffic Volume Shading and Bold indicates intersections operating at an unacceptable LOS. Source: Fehr & Peers, 2005.

Table 5.6-17 on page 5.6-35 of the DEIR is changed to add traffic volumes, as shown.

	FREEWA	Y RAN	AP OPFE			5.6-17	(VFA	R 202	25) CONI	OITIC)NS		
			Yea		Condition	on	(/	'	Year 2025		Project C		
Freeway Ramp Junction	Evaluation Type	Vol	Vol Density ¹ LOS ²			PM Peak Density	LOS	AM Peak Vol Density LOS			PM Peak Vol Density LOS		
I-5 southbound off-ramp to J St	Ramp	2,300		C	<u>Vol</u> 2,080		C	2,328		C	2,188		C
I-5 southbound off-ramp to Q St	Diverge	<u>2,070</u>	38.2	F	1,050	36.8	Е	<u>2,070</u>	38.2	F	1,050	36.8 36.6	Е
I-5 northbound off- ramp to J St and P St on-ramp	Weave	<u>2,360</u> (337)		F	980 (1,312)		F	<u>2,385</u> (337)		F	1,020 (1,312)		F
I-5 northbound on- ramp from L St	Ramp	<u>620</u>		Α	1,490		С	<u>679</u>		Α	1,564		С

Shading and Bold indicates intersections operating at an unacceptable LOS.

Source: Fehr & Peers 2005

To clarify the effect of spillback traffic from congested areas downstream of ramps studied in the DEIR (as discussed in Response to Comments 2-8 and 2-9, in Chapter 3 of this FEIR), the following text is added to the second paragraph under the heading "Freeway Ramps" on page 5.6-34 of the DEIR:

All of the ramps operate at an acceptable LOS (LOS E or better) under both the near-term conditions except for the weave section of northbound I-5 between the P Street on-ramp and J Street off-ramp which operates at LOS F during both the AM and PM peak hours. It should be noted that congested conditions downstream of the study section can affect operations of study ramps, even though the capacity of the ramps is sufficient to accommodate the volumes at an acceptable LOS. The negative traffic conditions at the study ramps, would not be triggered by the proposed project. Instead LOS conditions would be attributable to the downstream congestion. Mitigation or improvements within these ramps would not improve LOS conditions, because downstream congestion would still occur. In order to improve overall operation of State facilities in the project area, the City, project applicant, and Caltrans are coordinating to determine a fair share fee toward improvements to State facilities that would apply to the proposed project.

To clarify the effect of spillback traffic from congested areas downstream of highway segments studied in the DEIR (as discussed in Response to Comments 2-8 and 2-9, in Chapter 3 of this FEIR), the following text is added to the second paragraph under the heading "Freeway Mainline" on page 5.6-35 of the DEIR:

For the Near-Term No Project and Near-Term Plus Project Conditions all of the freeway segments are projected to operate acceptably (LOS E or better). It should be noted that congested conditions downstream of the study section can affect operations of study segments, even though the capacity of the segments is sufficient to accommodate the volumes at an acceptable LOS. The negative traffic conditions at the study segments would

^{1.} Density in passenger cars per mile per lane.

^{2.} LOS calculations based on the HCM 2000 procedures.

^{3.} Ramp LOS equal to the weave section LOS.
XX (XX) J Street Northbound off-ramp (P Street northbound on-ramp) Traffic Volume

not be triggered by the proposed project. Instead LOS conditions would be attributable to the downstream congestion. Mitigation or improvements within these segments would not improve LOS conditions, because downstream congestion would still occur. In order to improve overall operation of State facilities in the project area, the City, project applicant, and Caltrans are coordinating to determine a fair share fee toward improvements to State facilities that would apply to the proposed project.

Table 5.6-18 on page 5.6-36 of the DEIR is changed to add traffic volumes, as shown, and to correct the figure for PM Peak hour density for the I-5 southbound off ramps north of J Street and P Street, as well as the I-5 northbound routes north of I Street and P Street.

					TABLE	5.6-18	}					
FREEWAY MAINLINE OPERATING CONDITIONS - NEAR-TERM CONDITIONS												
Near-Term No Project Near-Term Plus Project												
	AM	Peak Hou	r	PM	Peak Hou	•	AM	Peak Hou	•	PM	Peak Hour	•
Location	Volume	Density ¹	LOS	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS
Northbound I-5 north of I St	6,602	27.5	D	7,875	36.9	Е	6,661 6,602	27.9 27.5	D	7,949 7,875	37.8 36.9	Е
Northbound I-5 north of P St	7,923	37.4	Е	5,979	24.3	С	7,968 7,943	37.9 37.6	Е	6,034 5,997	24.6 24.4	С
Southbound I-5 north of J St	8,279	41.3	Е	7,235	31.6	D	8,307 8,279	41.6 41.3	Е	7,344 7,235	32.6 31.6	D
Southbound I-5 north of P St	6,636	21.3	С	7,130	23.0	С	6,636 6,616	21.3	С	7,130 7,054	23.0 22.8	С

Source: Fehr & Peers, 2005.

Table 5.6-1 on page 5.6-36 of the DEIR is changed to add traffic volumes, as shown.

					TABLE	5.6-1	9					
I	FREEW	AY MAIN	LINE	OPERA1	TING CO	NDIT	ONS - Y	EAR 202	25 CO	NDITION	NS .	
	Year 2025 No Project Year 2025 Plus Project											
		Peak Hou			Peak Hou			Peak Hou			Peak Hou	
Location	Volume	Density ¹	LOS	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS
Northbound I-5 north of I St	6,970	29.8	D	8,160	39.9	E	7,029 6,970	30.2 29.8	D	8,234 8,160	40.8 39.9	E
Northbound I-5 north of P St	8,080	39.0	E	6,070	24.8	С	8,105 8,080	39.2 39.0	E	6,110 6,070	25.0 24.8	С
Southbound I-5 north of J St	8,820		F	8,880		F	8,848 8,820		F	8,989 8,880		F
Southbound I-5 north of P St Notes:	7,150	23.1	С	8,380	28.1	D	7,150 7,120	23.1 23.0	С	8,380 8,280	28.1 27.7	D

^{1.} Density in passenger cars per mile per lane.

Shading and Bold indicates intersections operating at an unacceptable LOS.

^{1.} Density in passenger cars per mile per lane.

Shading and Bold indicates intersections operating at an unacceptable LOS. Source: Fehr & Peers, 2005.

Because the analysis did not provide an analysis of the effect of the spillback traffic in the near term, the proposed project would not result in a direct degradation in LOS. Therefore, the text under impact 5.6-2 on page 5.6-39 is changed as follows:

No mitigation measures are available to reduce the impacts of the proposed project in the near-term condition on the weaving section on northbound I-5 between the P Street on-ramp and J Street off-ramp. In order to improve overall operation of State facilities in the project area, the City, project applicant, and Caltrans are coordinating to determine a fair share fee toward improvements to State facilities that would apply to the proposed project. However, these improvements would not reduce the impacts on this segment to a less-than-significant level. Therefore this impact would remain *significant and unavoidable*.

The analysis of the cumulative project impacts did not provide an evaluation of the effect of the spillback traffic on cumulative traffic volumes. Therefore, there the text under impact 5.6-6 on page 5.6-43 is changed as follows:

No mitigation measures are available to reduce the impacts of the proposed project in the cumulative condition on the weaving section on northbound I-5 between the P Street on-ramp and J Street off-ramp. In order to improve overall operation of State facilities in the project area, the City, project applicant, and Caltrans are coordinating to determine a fair share fee toward improvements to State facilities that would apply to the proposed project. However, these improvements would not reduce the impacts on this segment to a less-than-significant level. Therefore, this impact would remain *significant and unavoidable*.

References

The following references for Section 5.6, Traffic and Circulation are added to Chapter 8, References, of the DEIR:

Caltrans, Traffic Manual, 1996.
City and County of Sacramento, Sacramento City/County 2010 Bikeway Master Plan, November 1993.
City of Redwood City, Marina Shores Village Project Draft Environmental Impact Report, Transportation and Circulation, Fehr & Peers, February 2003.
City of Sacramento, 15th & L Street Hotel Draft Environmental Report, Raney Planning & Management, Inc., July 2002.
, CADA Sites 2, 3, and 4 Draft Environmental Impact Report, TY-Lin/CCS, April 2005.
, City of Sacramento Parking Regulations, 2005.
, Crocker Art Museum Expansion Draft EIR, Design, Community & Environment, September 2004.
, Draft Environmental Impact Report for the CalPERS Headquarters Expansion

Project, EIP Associates, June 2000.

, <u>Traffic Impact Guidelines</u> , February 1996.
Institute of Transportation Engineers, Trip Generation, 7th Edition, 2003.
, Trip Generation Handbook, 2 nd Edition, 2004.
Sacramento Area Council of Governments, <i>Metropolitan Transportation Plan for 2025</i> , May 2002.
, <u>Pre-Census Travel Behavior Report Analysis of the 2000 SACOG Household Trave Survey, July 2001.</u>
Sacramento Regional Transit District, Sacramento Regional Transit District Master Planton October 1993.
San Diego Association of Governments, San Diego Traffic Generators, January 1990.
Transportation Research Board, Highway Capacity Manual, 2000.

3. LIST OF AGEN	CIES AND PERS	CONS COMMEN	TING	
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3.0 LIST OF AGENCIES AND PERSONS COMMENTING

STATE AGENCIES

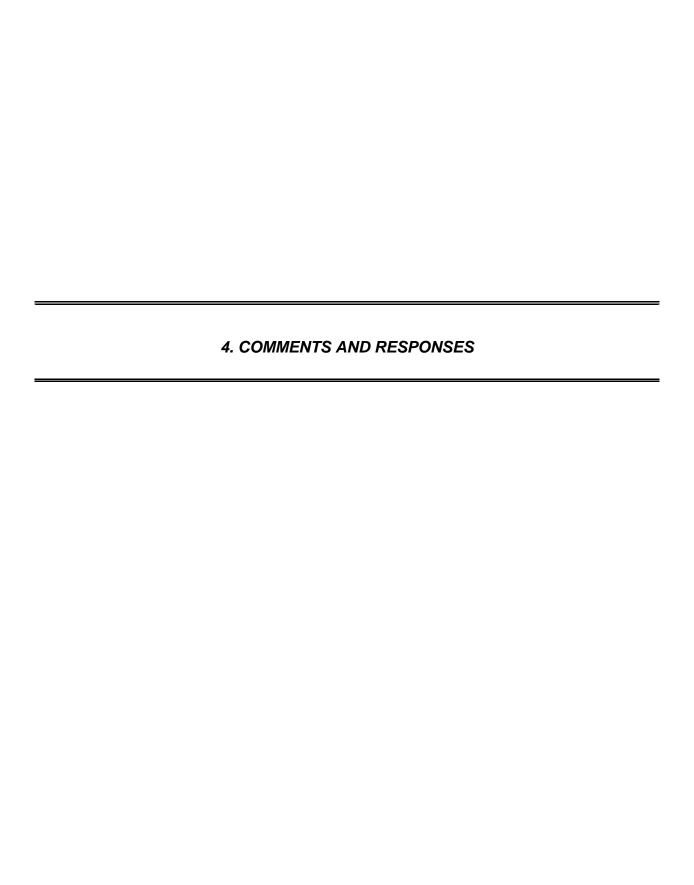
- 1. California Regional Water Quality Control Board, Storm Water Unit, Central Valley Region, Christine Palisoc, Environmental Scientist, June 1, 2005.
- 2. California Department of Transportation, District 3 Sacramento Office, Katherine Eastham, Chief, Office of Transportation Planning Southwest and East, June 17, 2005.

LOCAL AGENCIES

- 3. Sacramento Regional County Sanitation District, Wendy Haggard, P.E, Department of Water Quality, Development Services, June 2, 2005.
- 4. Sacramento Metropolitan Air Quality Management District, Jeane Borkenhagen, Mobile Source Division, June 16, 2005.

INDIVIDUALS AND ORGANIZATIONS

- 5. Valerie Lerman, June 10, 2005.
- 6. Dan Visnich, Executive Secretary, California Capitol Historic Preservation Society, June 17, 2005.



Central Valley Region

Robert Schneider, Chair

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http://www.waterboards.ca.gov/centralvalley

Schwarzenegger Governor

JUN 06 2005

1 June 2005

Alan C. Llovd, Ph.D.

Agency Secretary

Dana Allen City of Sacramento 1231 I Street, Room 300 Sacramento, CA 95814

PROPOSED PROJECT REVIEW, CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA), DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE TOWERS ON CAPITOL MALL, STATE CLEARINGHOUSE #2004122137, SACRAMENTO, SACRAMENTO COUNTY

As a Responsible Agency, as defined by CEQA, we have reviewed the Draft Environmental Impact Report for The Towers on Capitol Mall. Based on our review, we have the following comments regarding the proposed project.

Storm Water

A NPDES General Permit for Storm Water Discharges Associated with Construction Activities, NPDES No. CAS000002, Order No. 99-08-DWQ is required when a site involves clearing, grading, disturbances to the ground, such as stockpiling, or excavation that results in soil disturbances of one acre or more of total land area. Construction activity that involves soil disturbances on construction sites of less than one acres and is part of a larger common plan of development or sale, also requires permit coverage. Coverage under the General Permit must be obtained prior to construction. More information may be found at http://www.swrcb.ca.gov/stormwtr/construction.html

Post Construction Storm Water Management

Manage storm water to retain the natural flow regime and water quality, including not altering baseline flows in receiving waters, not allowing untreated discharges to occur into existing aquatic resources, not using aquatic resources for detention or transport of flows above current hydrology, duration, and frequency. All storm water flows generated on-site during and after construction and entering surface waters should be pre-treated to reduce oil, sediment, and other contaminants. The local municipality where the proposed project is located may now require post construction storm water Best Management Practices (BMPs) pursuant to the Phase II, SWRCB, Water Quality Order No. 2003 – 0005 – DWQ. NPDES General Permit No. CAS000004, WDRS for Storm Water Discharges from Small Municipal Separate Storm Sewers Systems (MS4). The local municipality may require long-term post-construction BMPs to be incorporated into development and significant redevelopment projects to protect water quality and control runoff flow.

Dewatering Permit

The proponent may be required to file a Dewatering Permit covered under Waste Discharge Requirements General Order for Dewatering and Other Low Threat Discharges to Surface Waters Permit, Order No. 5-00-175 (NPDES CAG995001) provided they do not contain significant quantities of pollutants and are either (1) four months or less in duration, or (2) the average dry weather discharge does not exceed 0.25 mgd:

- a. Well development water
- b. Construction dewatering
- c. Pump/well testing
- d. Pipeline/tank pressure testing
- e. Pipeline/tank flushing or dewatering
- f. Condensate discharges
- g. Water Supply system discharges
- h. Miscellaneous dewatering/low threat discharges

<u>Industrial</u>

A NPDES General Permit for Storm Water Discharges Associated with Industrial Activities, NPDES No. CAS000001, Order No. 97-03-DWQ regulates 10 broad categories of industrial activities. The General Industrial Permit requires the implementation of management measures that will achieve the performance standard of best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT). The General Industrial Permit also requires the development of a Storm Water Pollution Prevention Plan (SWPPP) and a monitoring plan. The General Industrial Permit requires that an annual report be submitted each July 1. More information may be found at http://www.swrcb.ca.gov/stormwtr/industrial.html

For more information, please visit the Regional Boards website at http://www.waterboards.ca.gov/centralvalley/ or me at 916.464.4663.

CHRISTINE PALISOC Environmental Scientist Storm Water Unit 916.464.4663

cc:

State Clearinghouse, Sacramento

1-3

1-2 cont.

COMMENT LETTER 1: California Regional Water Quality Control Board

Response to Comment 1-1:

Comment noted. The project would be required to apply for a National Pollution Discharge Elimination System (NPDES) General Construction Permit to prevent potential discharges of runoff from construction activities into the City's storm system, as stated on page 31 of the Initial Study, included in the separately bound appendices in Volume II Appendix A, Initial Study.

Response to Comment 1-2:

Comment noted. The NPDES General Construction Permit would require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) to be kept on the project site during construction activities. The SWPPP must include Best Management Practices (BMPs), such as drop inlet protection devices, vegetation erosion control measures (i.e., mulching, grassy swales, or seeding/plantings), physical stabilization (i.e., dust control, outlet protection, etc.), and sediment control measures (i.e., silt fences, straw bale barriers, sandbag barriers, etc.), or equally effective BMPs, which would protect receiving waters from potential discharges of contaminants and soil during project construction, as stated on page 31 of the Initial Study (see Appendix A in the separately bound appendices).

To address the potential to encounter subsurface water during project excavation, the project would require that any dewatering would comply with applicable requirements established by the Central Valley Regional Water Quality Control Board and shall be coordinated with the City's Flood Control and Sewer Division, as stated on page 22 of the Initial Study (see Appendix A in the separately bound appendices).

Response to Comment 1-3:

The proposed project is a residential and commercial development. The project does not include any industrial activities that would require a NPDES permit for Storm Water Discharges Associated with Industrial Activities. Therefore, a General Industrial Permit is not required for this project.

LETTER 2

DEPARTMENT OF TRANSPORTATION

DISTRICT 3 – SACRAMENTO OFFICE 2389 GATEWAY OAKS DRIVE, SUITE 100 SACRAMENTO, CA 95833 PHONE (916) 274-0614 FAX (274) 274-0648 TTY (530) 741-4509

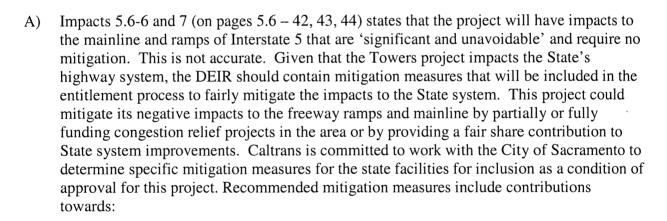
June 17, 2005

05SAC0076 03-SAC-275 PM 2.250 The Towers on Capitol Mall Draft Environmental Impact Report (DEIR) SCH# 2005032080

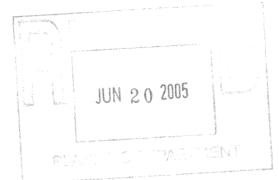
Ms. Dana Allen City of Sacramento Planning Division 1231 I Street, Room 300 Sacramento, CA 95814

Dear Ms. Allen:

Thank you for the opportunity to review and comment on the Towers on Capitol Mall DEIR. Our comments are as follows:



- Ramp meters on I-5 at the L and P Street on-ramps.
- b. I-5 at Richards Boulevard Interchange improvements.
- c. Additional lanes on the L and P Street on-ramps to I-5.
- d. Additional storage on the J and Q Street off-ramps to I-5.
- e. Restriping northbound I-5 from J Street to L Street and reconstructing the L Street onramp to provide four (4) through lanes.
- f. Richards Boulevard improvements to encourage usage of facilities parallel to I-5. "Caltrans improves mobility across California"





B) The DEIR does not mention the I-5 ramp-metering project between Pocket Road and West El Camino Avenue, which is scheduled for completion in 2007. In the vicinity of the Towers on Capitol Mall project are the L and P Street on-ramps to northbound I-5. The activation of these ramp meters will play a key role in metering heavy peak hour traffic from the downtown local streets to the freeway system. This project provides a mitigation measure opportunity for the Towers project, as noted in Comment (A).

2-2

2-3

- C) On page 3.11, in the "Summary of Impacts and Mitigation Measures" table, Impacts 5.6-2 and 6 identifies that the Towers on Capitol Mall project will impact the weaving sections of the I-5 on- and off-ramps. However, the summary does not specifically identify impacts to the ramps themselves or any potential mitigation measures for these impacts. Given that the Towers on Capitol Mall project contains 800 condominiums and 275 hotel rooms and its close proximity to I-5, the project will generate traffic volumes that will impact ramps along I-5.
- D) On page 3-11, Impact 5.6-7 states that the "proposed project will exacerbate unacceptable operations on mainline southbound I-5 between J Street and Richards Boulevard." The document also states that this impact is significant. However, on page 5.6-36, Tables 5.6-18 and 19 shows that the mainline volume and LOS data are identical for the near-term 'no project' and 'plus project' conditions. Based on this data conflict, the DEIR is not internally consistent.
- E) On page 3-11, Impact 5.6-2 states that the "proposed project would exacerbate unacceptable operations on the weaving section on I-5 between the northbound P Street on-ramp and J Street off-ramp." Impact 5.6-6 states that the "proposed project would exacerbate unacceptable operations on the weaving section on I-5 between the northbound P Street on-ramp and J Street off-ramp and southbound Q Street off-ramp." With the exception of the "southbound Q Street off-ramp" in Impact 5.6-6, these two statements duplicating one another. We recommend consolidating these two impacts into one impact.
- F) On pages 5.6-25 and 26, the distribution data in Exhibits 5.6-8 and 9 shows that 30 percent of the inbound and outbound would originate from Route 275. These figures appear to be high. On the other hand, we think the distribution figures for "I", "J", "P", and "Q" Streets are low. These low numbers may not be representative of negative impacts caused by the Tower's project, such as queuing on the ramps.
- G) On page 5.6-35, there is no ramp volume data in Tables 5.6-16 and 17. Without this data, how was the LOS determined? How will LOS conditions impact the I-5's mainline? A queue length analysis of all the ramps in the project's vicinity should be added to the DEIR's scope.
- H) On page 5.6-35, Table 5.6-17 states that in 2025 "I-5 northbound on-ramp from 'L' Street" will be operating at LOS "A" in the AM peak and "C" in the PM peak without and with the

project. The analysis of this ramp may be inadequate. Given that our data shows that this section of I-5 is currently operating at a very low LOS, it is not reasonable to believe that the I-5 northbound "L" Street ramp in 2025 will operate at "A" and "C" in the AM and PM peak, respectively.

- I) On page 5.6-36, Table 5.6-19 states that in 2025 "Southbound I-5 north of P St" will be operating at LOS "C" in the AM peak and "D" in the PM peak without and with the project. This portion of I-5 is already operating at a very low LOS. In this restricted section of I-5, a LOS "F" is more realistic.
- J) On page 5.6-36, Tables 5.6-18 and 19 shows that in near-term and 2025 that the 'no project' and 'plus project' conditions have the same volumes and levels of service. This seems unlikely as the addition of residential units and hotel rooms at this location will generate trips and will result in additional trips being made.
- K) According to Exhibits 5.6-2B, 7B, and 11B on pages 5.6-5, 20, and 31, respectively, there is no net difference between the no project and plus project peak hour traffic volumes at P and 3rd Street for the 2025 cumulative year. At L and 3rd Street leading to the northbound I-5 onramp, there is very little difference between the peak hour traffic volumes for the no project and plus project for 2025. The DEIR's analysis of the peak hour traffic volumes may be inadequate because this project will likely generate a higher level of traffic volumes compared to the performed analysis. The document failed to adequately discuss how the volumes along P and 3rd Street and L and 3rd Street will impact the mainline of I-5 in the morning and afternoon peak periods.
- L) On June 15, 2005, Caltrans provided City of Sacramento staff with additional ramp and mainline data for inclusion in the revised traffic study. We request to review the revised traffic study upon its completion and prior to its incorporation in the FEIR.

Please provide our office with copies of any further action regarding this project. With the possible impacts that this project may have on State owned and operated transportation facilities, we would appreciate the opportunity to be involved throughout your project development process. If you have any questions regarding these comments, please contact Marlon Flournoy at (916) 274-0596.

Sincerely,

KATHERINE EASTHAM, Chief

Office of Transportation Planning – Southwest and East

c: State Clearinghouse

"Caltrans improves mobility across California"

2-8 cont.

2-9

2-10

2-11

COMMENT LETTER 2: Department of Transportation, District 3 – Sacramento Office

Response to Comment 2-1:

As described in the DEIR, the State facilities in the area are already congested and because those facilities are already congested, the DEIR determined that the contribution of project-generated traffic would be significant. While the recommendations listed in the comment would provide better operations, they would not change the level of service for the facilities identified as having significant and unavoidable impacts in the DEIR. However, to reduce congestion in this area, the City, project applicant, and Caltrans are coordinating to determine a fair share fee toward improvements to State facilities that would apply to the proposed project.

Response to Comment 2-2:

Ramp metering would not change the ramp analysis contained in the DEIR, unless the ramp metering rates are such that they do not allow the demand flows onto the mainline freeway. If the rates are less than the projected demands, the reduced traffic flows onto the freeway could result in improved ramp (merge/diverge/weave) level of service (LOS). If this condition were to exist, vehicle queues could be expected to "spillback" onto the city streets resulting in significant traffic impacts. It should be noted, however, that these potential impacts would be a result of the ramp metering project, not the proposed project. The environmental document for the ramp metering project would identify potential impacts based upon specific improvements proposed by Caltrans. It should be noted that the City, project applicant, and Caltrans are coordinating to determine a fair share fee toward improvements to State facilities that would affect by the proposed project (See Comment 2-1).

Response to Comment 2-3:

The project-generated traffic was included in the analysis of the weaving section for both the Near-Term plus Project and Year 2025 plus Project Conditions. The level of service for the weave is the ramp LOS for the P Street northbound on-ramp and J Street northbound off-ramp (shown on page 5.6-35 in Tables 5.6-16 and 5.6-17, respectively). The method of analysis used is consistent with Caltrans traffic impact report guidelines.

Response to Comment 2-4:

Tables 5.6-18 and 5.6-19 on page 5.6-36 of the DEIR erroneously lists some of the volumes and LOS for the "Plus Project" condition as the same as the "No Project" condition. These figures have been revised, as shown below. The changes do not result in any significant impacts, nor do they change the conclusions of the DEIR.

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FREEWAY MAINLINE OPERATING CONDITIONS - NEAR-TERM CONDITIONS

		Near-Term No Project						Near-Term Plus Project				
	AM Peak Hour			PM Peak Hour		AM Peak Hour			PM Peak Hour			
Location	Volume	Density ¹	LOS	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS
Northbound I-5 north of I St	6,602	27.5	D	7,875	36.9	Е	6,661 6,602	27.9 27.5	D	7,949 7,875	37.8 36.9	Е
Northbound I-5 north of P St	7,923	37.4	Е	5,979	24.3	С	7,968 7,943	37.9 37.6	Е	6,034 5,997	24.6 24.4	C
Southbound I- 5 north of J St	8,279	41.3	Е	7,235	31.6	D	8,307 8,279	41.6 41.3	Е	7,344 7,235	32.6 31.6	D
Southbound I- 5 north of P St	6,636	21.3	С	7,130	23.0	С	6,636 6,616	21.3	С	7,130 7,054	23.0 22.8	С

Notes:

Source: Fehr & Peers, 2005.

TABLE 5.6-19

FREEWAY MAINLINE CONDITIONS - YEAR 2025 CONDITIONS

	Year 2025 No Project						Year 2025 Plus Project					
	AM Peak Hour			PM Peak Hour		AM Peak Hour			PM Peak Hour			
Location	Volume	Density ¹	LOS	Volume	Density	LOS	Volume	Density	LOS	Volume	Density	LOS
Northbound I-5 north of I St	6,970	29.8	D	8,160	39.9	Е	7,029 6,970	30.2 29.8	D	8,234 8,160	40.8 39.9	E
Northbound I-5 north of P St	8,080	39.0	Е	6,070	24.8	С	8,105 8,080	39.2 39.0	Е	6,110 6,070	25.0 24.8	С
Southbound I-5 north of J St	8,820		F	8,880		F	8,848 8,820		F	8,989 8,880		F
Southbound I-5 north of P St	7,150	23.1	С	8,380	28.1	D	7,150 7,120	23.1 23.0	С	8,380 8,280	28.1 27.7	D

Notes:

Shading and Bold indicates intersections operating at an unacceptable LOS.

Source: Fehr & Peers, 2005.

Response to Comment 2-5:

Impact 5.6-2 on page 5.6-39 of the DEIR refers to a project-specific impact in the near-term; Impact 5.6-6 on page 5.6-41 of the DEIR refers to the impact on the same facilities under the cumulative condition (Year 2025). The statements are not duplicative and their consolidation would not be required.

Response to Comment 2-6:

The distribution reflects existing travel patterns and future development and travel patterns. Currently, State Route 275 is the quickest route for traffic coming from/going to the west from the proposed project, since the project is on the northeast corner of Capitol Mall and 3rd Street. Using I-5 to State Route 51/Highway 50 is a less direct and more congested route and is less likely to be used by residents and visitors to the proposed project.

In the future, State Route 275 will be downgraded to an arterial, which will reduce the attractiveness of the route for longer distance travel, but the downgrade of the roadway will also bring a reuse of

^{1.} Density in passenger cars per mile per lane.

^{2.} Shading and Bold indicates intersections operating at an unacceptable LOS.

^{1.} Density in passenger cars per mile per lane.

the Raley's Landing and Triangle area in the City of West Sacramento. This will provide employment locations and potential users of the hotel and commercial uses within the proposed project. For these reasons, the distribution pattern used in the DEIR analysis was deemed appropriate.

Response to Comment 2-7:

Ramp volume data is added to Tables 5.6-16 and 17, as shown below. A queue analysis was completed for the J Street southbound off-ramp, J Street northbound off-ramp, and Q Street approach to the Q Street/3rd Street intersection. In all conditions (AM and PM peak hours), the queues were not forecast to exceed the available storage. The northbound J Street off-ramp did result in a queue length of 812 feet during the AM peak hour for the Year 2025 Plus Project Condition. While this is a lengthy queue, three lanes of storage are adequate to accommodate the queue without a queue backup onto the northbound I-5 mainline.

				-	TABLE	5.6-16							
	FRE	EWAY	<u> RAMP</u>	OPER.	ATION	S – NE	\R-TI	ERM C	ONDITIO	<u>ONS</u>			
			Nea	r-Term	Conditio	on		N	ear-Term	Plus F	Project (Condition	
Eroowov Bomn	Evaluation		AM Peak			PM Peak	_		AM Peak			PM Peak	
Freeway Ramp Junction	Evaluation Type	Vol	Density ¹	LOS ²	Vol	Density	LOS	Vol	Density	LOS	Vol	Density	LOS
I-5 southbound off-ramp to J St	Ramp	2,030		С	1,428		В	2,058		С	1,534		С
I-5 southbound off-ramp to Q St	Diverge	1,756	34.8	ЕD	<u>606</u>	30.2	D	1,756	34.8	E D	<u>606</u>	30.2 30.1	D €
I-5 northbound off-ramp to J St and P St on- ramp ³	Weave	1,960 (274)		F	<u>733</u> (1,148)		F	1,985 (274)		F	<u>773</u> (1,148)		F
I-5 northbound on-ramp from L St	Ramp	<u>252</u>		А	<u>1,306</u>		С	<u>311</u>		Α	1,380		С

Density in passenger cars per mile per lane.

LOS calculations based on the HCM 2000 procedures.

Ramp LOS equal to the weave section LOS.

XX (XX) J Street Northbound off-ramp (P Street northbound on-ramp) Traffic Volume

Shading and Bold indicates intersections operating at an unacceptable LOS.

Source: Fehr & Peers, 2005.

	TABLE 5.6-17												
	FREEWAY RAMP OPERATIONS – FUTURE (YEAR 2025) CONDITIONS												
			Ye	ar 2025	Condition	on		,	ear 2025	Plus F	roject C	ondition	
Freeway Ramp	Evaluatio		AM Peak		F	M Peak			AM Peak		Р	M Peak	
Junction	n Type	Vol	Density ¹	LOS ²	<u>Vol</u>	Density	LOS	Vol	Density	LOS	<u>Vol</u>	Density	LOS
I-5 southbound off- ramp to J St	Ramp	2,300		С	2,080		С	2,328		С	2,188		O
I-5 southbound off- ramp to Q St	Diverge	2,070	38.2	F	1,050	36.8	Е	2,070	38.2	F	1,050	36.8 36.6	Е
I-5 northbound off- ramp to J St and P St on-ramp ³	Weave	<u>2,360</u> (337)		F	980 (1,312)		F	<u>2,385</u> (337)	1	F	1,020 (1,312)		F
I-5 northbound on- ramp from L St	Ramp	<u>620</u>		Α	1,490		O	<u>679</u>		Α	<u>1,564</u>		С

Notes:

Response to Comment 2-8:

The L Street on-ramp is its own lane entering northbound I-5. The ramp LOS is as stated in the DEIR, which is based upon the volume to capacity ratio for the ramp. As shown in Table 5.6-18 on page 5.6-36 of the DEIR and as stated in the comment, that portion of I-5 experiences congestion during peak hours. Congested mainline operations affect ramp operations; however, the poor operation of the ramp cannot be remedied by improvements to the ramp itself, because the poor operation is attributable solely to the mainline congestion.

Response to Comment 2-9:

The LOS for the freeway section reported in the DEIR is based on the number of lanes and mainline volumes. However, the section is influenced by downstream congestion, which creates queues during the peak periods that spillback and affect travel speeds and LOS. Therefore, while this section could experience congested conditions, the cause of the congestion is downstream queues and not inadequacies in the capacity of this freeway section.

Response to Comment 2-10:

The fact that the proposed project would generate trips in the project area is acknowledged, and the referenced tables have been updated, as shown in Response to Comment 2-4. However, the addition of residential units to the Central Business District (CBD) would not have the same effect on traffic conditions in the area as a employee-generating use of equivalent intensity. The traffic pattern in the CBD can generally be characterized as more intense traffic into the CBD in the am hours when commuters travel to employers within the area and more intense traffic out of the CBD in the pm hours. The proposed project, on the other hand, would have commuters leaving the CBD in the am and return in the pm. For potential residents of the proposed project who would work within the CBD, they would likely use an alternate mode of transportation. Because the proposed project would include trips that are largely reverse traffic, the proposed project would not substantially contribute to the congested am inflow and pm outflow conditions in the CBD.

^{1.} Density in passenger cars per mile per lane.

LOS calculations based on the HCM 2000 procedures.

Ramp LOS equal to the weave section LOS.

XX (XX) J Street Northbound off-ramp (P Street northbound on-ramp) Traffic Volume

Shading and Bold indicates intersections operating at an unacceptable LOS.

Source: Fehr & Peers, 2005.

Response to Comment 2-11:

Ramp volume data was added to Tables 5.6-16 and 17, as shown in Response to Comment 2-7. A queue analysis was completed for the J Street southbound off-ramp, J Street northbound off-ramp, and Q Street approach to the Q Street/3rd Street intersection. In all conditions (AM and PM peak hours), the queues were not forecast to exceed the available storage. The northbound J Street off-ramp did result in a queue length of 812 feet during the AM peak hour for the Year 2025 Plus Project Condition. While this is a lengthy queue, three lanes of storage are adequate to accommodate the queue without a gueue backup onto the northbound I-5 mainline.

Response to Comment 2-12:

The City of Sacramento circulated the Notice of Preparation (NOP) for the proposed project in December 2004, with a comment period that was ultimately extended to February 11, 2005. The scope of work for the traffic analysis was finalized after that date, based upon comments received on the NOP, including comments from Caltrans. The mainline and ramp data used for the analysis was the most current available from Caltrans at that time of the preparation of the traffic study. The data referenced in the comment was collected January through mid-April 2005, a portion of which occurred during preparation of the traffic study for the proposed project. CEQA Guidelines Section 15125(a) allows the Lead Agency (in this case, the City of Sacramento) to establish a baseline for the analysis, generally the conditions at the time of the release of the NOP, which helps to prevent an on-going cycle of analysis as the conditions change during preparation of the analysis. The City therefore determined that the use of the 2004 data is appropriate for the project analysis, since that data was available subsequent to project scoping and upon commencement of the traffic analysis.

3-1



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IN 0.8 2005

Dana Allen City of Sacramento Planning Division 1231 I Street, Room 300 Sacramento, CA 95814

Dear Mr. Allen,

Application: Notice of Availability of Draft Environmental Impact

Report (EIR) for The Towers on Capitol Mall Project

APN: 006-0141-043 Control No.: P04-221

The comments sent in a letter dated January 9, 2005, are still valid and are repeated below for your convenience.

County Sanitation District 1 (CSD-1) and Sacramento Regional County Sanitation District (SRCSD) have reviewed the Notice of Preparation (NOP) of the Environmental Impact Report (EIR) for the subject project. The project is within the boundary limits of SRCSD and the Urban Services Boundary (USB). The project is outside the boundary of CSD-1. SRCSD facilities do not exist within the project area and the master plan does not propose any projects within the area. Therefore, we do not foresee any impact to the SRCSD facilities.

If you have any questions regarding these comments, please call me at 876-6094.

Sincerely,

Wendy Haggard, P.E.

Welly Happard

Department of Water Quality

Development Services

WH/JRO: clm

cc: Maria Cablao

Amber Schalansky

Steve Hong (Infrastructure Finance Section)--mc 01-304

allen060205.ltr

COMMENT LETTER 3: Sacramento Regional County Sanitation District

Response to Comment 3-1:

The comment states that the project site is within the boundaries of the SRCSD and the Urban Services Boundary. No SRCSD facilities currently exist within the project area and no future projects are proposed within the area. The comment is noted.



Larry Greene
AIR POLLUTION CONTROL OFFICER

JUN 20 2005

June 16, 2005

Ms Dana Allen Department of Planning and Building Environmental Planning Services City of Sacramento 1231 I Street, Room 300 Sacramento, CA 95814-2998

RE: Draft EIR for The Towers on Capitol Mall Project, P04-221 SAC200400313C

Dear Ms Allen:

Thank you for the opportunity to comment on the EIR for the Towers on Capitol Mall project. Due to the size of the proposed project, the potential air quality impacts from construction and operations will be clearly significant. Staff comments follow.

The EIR does not present a separate Air Quality mitigation plan for the operational impacts of the project. Rather, the document points out that the proposed project incorporates "many of the mitigation measures recommended by the SMAQMD... due to (the project's) characteristics and location. Those measures listed on page 5.2-17 are proposed to reduce the operational emissions of the project by 15%. While we can agree that most of the measures listed on that page are intrinsically incorporated into the project's design, we do not believe any points should be awarded for the following:

"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 point).

That particular measure was intended to be applied to projects that are more suburban in nature; for example, a single-family suburban subdivision which might be contiguous with a commercial development. One would not expect to see a berm or sound wall around a high rise in an urban environment and so the lack of one should not be awarded points.

That would leave the de-facto Air Quality Mitigation plan with only 14 points, all of which came about because of the design of the project. We recommend that the City require further mitigation for operational emissions. In particular, we suggest the City require the following mitigation measures be conditions of approval. We have provided language for page 5.2-18.

Mitigation Measures

In addition to the above-mentioned mitigation that is already included in the project design and would give a 14% NOx and ROG reduction, the following mitigation measures will be (notice:

the word "may" has been changed) implemented to further reduce operational emissions of criteria pollutants:

5.2-3 The following measures shall be incorporated into the operational (notice: the word "construction" was changed) practices of the project:

(a) TMA membership and Transportation Coordinator

The project applicant shall insure on-going membership of the project in the Sacramento Transportation Management Association. Membership would be the "concierge level" of service as coordinated by the TMA. With this level, the programs are provided by the TMA, but the delivered by the on-site Coordinator. The proponent will insure funding of the cost of membership.

The applicant will insure that an employee will perfom the duties of Project-site Transportation Coordinator. This person will have responsibility for regularly coordinating with the Executive Director of the Sacramento TMA, providing alternative transportation information to residents and tenants, for selling on-site transit passes, for providing information about vendor delivery services (such as grocery stores) to residents and for creating and updating the site specific alternative transportation program. These duties can be part-time or full-time duties of an employee of the property management firm which manages the project.

4-1 cont.

(b) Bicycle facilities

A convenient bicycle storage room will be provided for the project's residents. This space will allow for safe storage and easy access to at least 200 bicycles. It will have easy access to an exit door of the building. (A good model for such a space can be found in the CAL/EPA building.

(c) Reduction in parking

Reduce the amount of parking spaces in the buildings. Consider implementing a car sharing program. Car-share programs, currently more common in Europe, are well suited for urban environments. Also, consider having residents pay separately for their parking spaces. This would disincentivize residents from having many cars in the project. (3 points)

We believe these measures are feasible mitigation and should be required in light of the significant air quality impacts which will be on-going with this project.

In addition, the project will be 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.

Thank you for the opportunity to comment on this project. If you have any questions regarding these comments, please contact me at 916.874.4885 or jborkenhagen@airquality.org.

4-2

Sincerely,

Jeane Borkenhagen Mobile Source Division cc: Ron Maertz

Can Borhenhour

Ann Geraghty Walk Sacramento Marilyn Bryant Sacramento TMA

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.

4-2 cont.

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.

ver. 1.0: 4/2005

COMMENT LETTER 4: Sacramento Metropolitan Air Quality Management District

Response to Comment 4-1:

The measure cited by the SMAQMD was interpreted in the DEIR to apply to projects that do not have physical barriers between commercial and residential uses. As discussed in the project description (see Chapter 2 in the DEIR), the proposed project includes both commercial and residential uses in one building, providing easy circulation between the commercial and residential components. The comment recommends additional measures to further reduce impacts, such as membership in a Transportation Management Association (TMA). The DEIR includes Mitigation Measure 5.2-3 (DEIR p. 5.2-18), which requires the applicant to "ensure on-going membership in the Sacramento Transportation Management Association." The SMAQMD, in their Recommended SMAQMD Guidance for Land Use Emission Reductions document, awards 2.5 points for TMA membership. Therefore, even if the one point awarded for projects without physical barriers between commercial and residential uses were removed, the proposed project would have a total of 16.5 points, which exceeds the 15 point goal. However, as stated in the DEIR (p. 5.2-17), because it is unlikely that project-related emissions could be reduced to below thresholds and helicopter emissions would further contribute to this impact, it would remain significant and unavoidable.

Response to Comment 4-1:

The DEIR assumes, as stated on page 5.0-3, that the proposed project would comply with all applicable laws and regulations, which would include those noted in the comment.

LETTER 5

6/10/05

Dana Allen, Associate Planner: Subject: Towers On Capitol Mall Project

Please rethink the number of floors in the Tower On Capitol Mall project. The proposed height of the building will astoundingly dwarf any others in the downtown area. This I believe will make it an eyesore. There are several other factors to consider such as available parking, traffic congestion, and whether this might be a project exemplifying one of those classic of the end of a building boom.

While the idea of development in the downtown area is appealing when done tastefully, I believe that this project is a bit overdone.

Thank you for your time in considering this matter. Sincerely,

Valerie Lerman 1500 4th st. Sac, Calif. 95814 5-1

5-2

COMMENT LETTER 5: Valerie Lerman

Response to Comment 5-1:

The comment expresses concern regarding the height of the proposed project and states the opinion that the project would be an "eyesore." The comment is noted. Building height is analyzed in Section 5.1, Aesthetics of the DEIR. As discussed on page 5.1-24, there are no height restrictions on the project site. The lack of height limitations in areas of the Central Business District (CBD) not immediately adjacent to the Capitol reflects a City policy to encourage high-density, high-rise buildings in the CBD, to create a prominent skyline of taller buildings in Downtown Sacramento.

As discussed on page 5.1-25, the City has no adopted standards regarding visual quality, but relies upon review of project design to ensure that projects are in keeping with the vision of the City. The proposed project design would be subject to review by the City, which could include review by the Design Review/Preservation Board, Planning Commission, and/or the City Council. While the proposed project would become the tallest building in Sacramento, the construction of a high-rise in downtown Sacramento is not inconsistent with the existing City policy. The reviewing bodies would use the criteria listed in the adopted Urban Design Plan in analyzing the proposed project design. The review of the project design is intended to ensure that the design is of the highest quality, commensurate with a project of this magnitude and visibility. Among considerations of these entities would be that the pedestrian levels would be appropriate in scale and detailing to the surrounding area; that the highest quality materials and detailing would be used on all elevations of the building; that the proposed project would complement existing downtown high-rise development. Review would also consider the details of fenestration, that massing and planar changes of the building would create visual interest, and that the overall project provides a distinctive skyline with appropriate detailing and finish at the building top.

Response to Comment 5-2:

Traffic generated by the project along with parking demand and impacts to transit, bicycles and pedestrians are all addressed in Section 5.6 of the DEIR. As noted in Section 5.6, no significant impacts were identified for transit, bicycles or pedestrians. The proposed project would, however, increase traffic along local roadways and intersections, but under a.m. and p.m. peak periods, all potential impacts to intersections can be reduced to less-than- significant levels. The DEIR found that Caltrans facilities would be affected by project-generated traffic, because the adjacent facilities are currently operating at unacceptable levels without the project. These impacts were determined to be significant and unavoidable. Please also see Comment Letter 2 for Caltrans' comments on the DEIR and the accompanying responses.

Response to Comment 5-3:

Comment noted. The comment expresses the opinion that the project is "overdone." The comment is noted and is hereby forwarded to the decision-makers for their consideration.

June 17, 2005

MEMORANDUM

TO:

DANA ALLEN, Associate Planner, Development Services Office,

JUN 2 n 2005

City of Sacramento.

FROM:

DAN VISNICH, Executive Secretary, California Capitol

Historic Preservation Society.

SUBJECT:

Comments on DEIR for Twin Towers on Capitol Mall.

The California State Capitol and Capitol Park, located in downtown Sacramento, are listed together on the United States Park Service's National Register of Historic Places. Capitol Mall is the primary view corridor in the City and the Capitol is the chief urban design consideration on the Mall. Capitol Mall is an important visual link to the Capitol from the Tower Bridge, the gateway entry from West Sacramento. Tower Bridge, a very unique structure itself, also has a historic designation.

The height and scale of the existing buildings, the tree-lined sidewalks and the expansive, open area down the median of the mall all assist to frame the Capitol to the visual corridor. Any visual intrusion or disruption to the design setting that helps frame the Capitol dome during the day and especially at night, would greatly disrupt the integrity of the setting, sense of place and historical significance of this nationally recognized historic building.

The California Capitol is considered one of the most impressive and beautiful buildings in the United States. To compromise the exceptional Capitol view, through years of extraordinary Capitol Mall planning efforts, would completely muscle out the exemplary supremacy of this great state.

The City has a responsibility to protect and maintain the historic, architectural and cultural character of this area against new development that would violate the Capitol physically and aesthetically. This proposed project should be developed to enhance the Capitol and its Mall, not diminish it. The Capitol is the most significant historic resource that belongs to all of California, not just the City. It must continue to serve as a significant, visible reminder of the State's unique history.

HISTORIC INTENT

The design of Capitol Mall (similar to Thomas Jefferson's University of Virginia's historic rotunda in Virginia) reflects Sacramento's intent to acknowledge the past and to embrace the future of California, bringing about its absorption of a new state through its citizens' view via the State Capitol. Like Jefferson's long progression to his Rotunda

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6-2

6-3

library (through a series of stately, but subordinate campus buildings), the Capitol Mall captures the same 21st century enlightenment.

Jefferson laid out his design not to face the western frontier of the Louisiana Purchase, but the east and Europe to inspire the sun, rising over the Rotunda's dome. Thus was the intent of Sacramento's design, to excite travelers coming across the Sacramento River, eastward towards the Capitol dome, the state's symbol of democracy. When designed the Sacramento River was the major entrance to the City. This visual prominence was adopted from the Nation's Capitol Mall in Washington, D.C. It not only reflects Jefferson's neo-classical vision, but also projects the later imperial nation's white Beaux-Arts buildings of new America.

This grand display of might and presence during the turn-of-the century reverberated throughout the world not only by late 19th and early 20th century state capitols throughout the nation, but with Teddy Roosevelt's Great White Fleet display of naval power that emphasized California's majesty. The addition of Twin Towers on Capitol Mall does not necessarily have to spoil the original plan to visually focus down the corridor if they do not exceed the current uniform height order of buildings there. The Beaux-Arts plan was established as a model for America Planning by the great Columbia Exposition of 1893.

The California Capitol Historic Preservation Society believes that the Capitol of California must remain the focal center along Capitol Mall. The Twin Towers on the Mall, as depicted with its 53 stories, would destroy this connection by attracting — indeed, demanding — the visual attention of all people. The massive scale and height proposed for the Twin Towers would certainly squash the Capitol's image and be an embarrassment to state government.

the great American celebration of its coming of age and self-assertion of world power.

The hierarchy ideal of government, the outstanding change of perspective and focus will all but be lost while traveling along Capitol Mall. Reminiscent of fossils, only small traces will remain, and the grand ideal concept of government would be dead.

In conclusion, the City should remember its preservationist concern several years ago that a proposed high-rise at Number One Capitol Mall would seriously affect Old Sacramento and threaten its well being. That structure was lowered considerably because the City then believed that it was highly improper to situate such a tall building so close to the historic area. The historic Capitol deserves equal treatment.

6-4 cont.

6-5

6-6

6-7

COMMENT LETTER 6: Dan Visnich, Executive Secretary, California Capitol Historic Preservation Society

Response to Comment 6-1:

The City of Sacramento recognizes the importance of maintaining an open view of the Capitol Building and has adopted Capitol view protection requirements (Ordinance 17.96.100; see page 5.1-21 of Section 5.1, Aesthetics), which establish "height restrictions, setback requirements and parking regulations for certain areas of the central business district located near the State Capitol building and Capitol Park. These regulations are designed to provide visual protection to and from the Capitol building and Capitol Park." The City adopted the Sacramento Central Business District Urban Design Plan (Urban Design Plan) on February 18, 1987. The Urban Design Plan includes massing guidelines for development along Capitol Mall. The City will review the project for compliance with this ordinance to ensure that views of the Capitol are not negatively affected. Please see page 5.1-23 in Section 5.1, Aesthetics, for a discussion of the massing guidelines. A description of the potential effect on the view of the Capitol is described in Section 5.1, Aesthetics, which also includes visual simulations that show the proposed project as it would appear in the context of Capitol Mall.

Response to Comment 6-2:

Opinions stated in the comment about the beauty of the Capitol are noted. With regard to the "compromise" of the Capitol view, the City must implement the City's current vision, while still considering the historic context of the State Capitol. As stated in Response to Comment 5-1, it is in design review by the Design Review/Preservation Board that this weighing of history and implementing future vision of the City are accomplished.

Response to Comment 6-3:

The comment does not state how the proposed project would "violate the Capitol physically and aesthetically" or how it would diminish the Capitol or Capitol Mall. As stated in Response to Comment 6-1, Section 5.1 of the DEIR analyzes the aesthetic issues associated with the proposed project. It is unclear from the comment what changes could be made to the project to enhance the Capitol. The comment is hereby forwarded to the decision makers for their consideration.

Response to Comment 6-4:

The comparison of the California Capitol to the University of Virginia's historic rotunda is noted. However, the project would not impede views of the Capitol building. As shown in Figure 5.1-10 (DEIR p. 5.1-15), the project would frame the view of the Capitol from the Tower Bridge, with the Capitol building as a central focus in the background.

Response to Comment 6-5:

As discussed in Section 5.1, Aesthetics, the proposed project site would not be subject to the height restrictions set forth in Chapter 17.96.100 of the City's Zoning Ordinance for the Capitol View protection requirements. There is no current "uniform height" of buildings along Capitol Mall or in the Central Business District, as shown in Table 5-1 on page 5.1-3 of the DEIR. The height restrictions listed under section 17.96.100(B) apply only to the blocks immediately surrounding the State Capitol and Capitol Park. As described in Impact 5.1-1 on pages 5.1-24 and 25 and shown in Figure 4.1-10 on page 5.1-14 of the DEIR, the proposed project would not impede views to and from the Capitol,

so there would not be a substantial difference in effect on views to and from the Capitol associated with the project.

Response to Comment 6-6:

When the entire skyline is in view, the proposed project would be a defining feature of the City's skyline, which is a stated goal of the project. However, as shown in Figure 5.1-10, the proposed project does not intrude on the view corridor down Capitol Mall. Please note that the photograph included in the DEIR is taken with a wide angle lens in order to include a wider field of view in the photograph. The wide angle view results in a distortion of scale of the objects in the frame: objects that are more distant appear smaller than they appear with the naked eye. Consequently, when one is standing east of the Tower Bridge looking toward the Capitol, the size of the Capitol is much larger (more prominent) than it appears in the photo. Because the view down Capitol Mall would not be impeded by the proposed project, a viewer's eye would still be drawn to the view down the Mall (toward the Capitol), as opposed to being drawn skyward toward the top of the proposed Towers.

Response to Comment 6-7:

The comment is noted and is hereby forwarded to the decision makers for their consideration.

Response to Comment 6-8:

The effect of the proposed project on views of the Capitol is discussed in the above responses and in Section 5.1 of the DEIR. The comment is noted and is hereby forwarded to the decision makers for their consideration.



INTRODUCTION

The California Environmental Quality Act (CEQA) requires review of any project that could have significant adverse effects on the environment. In 1988, CEQA was amended to require reporting on and monitoring of mitigation measures adopted as part of the environmental review process. This Mitigation Monitoring Plan (MMP) is designed to aid the City of Sacramento in its implementation and monitoring of measures adopted from the Towers on Capitol Mall DEIR.

MITIGATION MEASURES

The mitigation measures are taken from the Towers on Capitol Mall DEIR, including the Initial Study included as Appendix A of the DEIR, and are assigned the same number they had in the DEIR. The MMP describes the actions that must take place to implement each mitigation measure, the timing of those actions, and the entities responsible for implementing and monitoring the actions.

MMP COMPONENTS

The components of each monitoring form are addressed briefly, below.

Impact: This column summarizes the impact stated in the DEIR.

Mitigation Measure: All mitigation measures that were identified in the Towers on Capitol Mall DEIR are presented, and numbered accordingly. The mitigation measure from the Initial Study is identified by topic and number.

Action: For every mitigation measure, one or more action is described. These are the center of the MMP, as they delineate the means by which EIR measures will be implemented, and, in some instances, the criteria for determining whether a measure has been successfully implemented. Where mitigation measures are particularly detailed, the action may refer back to the measure.

Implementing Party: This item identifies the entity that will undertake the required action.

Timing: Each action must take place prior to the time at which a threshold could be exceeded. Implementation of the action must occur prior to or during some part of approval, project design or construction or on an ongoing basis. The timing for each measure is identified.

Monitoring Party: The City of Sacramento is responsible for ensuring that most mitigation measures are successfully implemented. Within the City, a number of departments and divisions will have responsibility for monitoring some aspect of the overall project. Occasionally, monitoring parties outside the City are identified; these parties are referred to as "Responsible Agencies" by CEQA.

Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party
		- 4. Biological Resource			,
4-1 Project construction could result adversely affect nesting birds.	B-1 To prevent direct impacts on nesting birds, tree removal shall occur between September 16 and February 28. B-2 If construction activities would occur during the breeding season (approximately March 1 through September 15), the project applicant, in consultation with the CDFG and USFWS, shall conduct a preconstruction, breeding season survey of the project site during the same calendar year that construction is planned to begin. The survey shall be constructed by a qualified avian biologist to determine if any birds are nesting on or directly adjacent to the project site. If phased construction procedures are planned for the proposed project, the results of the above survey shall be valid only for the season when it is conducted. A report shall be submitted to the project applicant and the City of Sacramento, following the completion of the nesting survey that includes, at a minimum, the following information: • A description of methodology including dates of field visits, the names of survey personnel with resumes, and a list of references cited, and persons contacted. • A map showing the location(s) of any nests observed within the project site. B-3 The project applicant, in consultation with CDFG and USFWS, shall avoid all active nest sites within the project area while the nest is occupied with adults and/or young. The occupied nest shall be monitored by a qualified avian biologist to determine when the nest is no longer used. Avoidance shall include the establishment of a non-disturbance buffer zone, to be determined in consultation with CDFG, around the	Verify schedule of any tree removal or demolition; if within the nesting season demonstrate retention of a qualified avian biologist to conduct appropriate nesting surveys and to consult with CDFG and USFWS if active nests are within the project area; obtain permits if nests cannot be avoided.	Project developer	Prior to tree removal	City of Sacramento Development Services Department

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Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party		
Impact	nest site, which will be delineated by highly visible temporary construction fencing. Active nest trees that would not be removed but are in close proximity to construction activities shall be monitored weekly to determine if construction activities are disturbing the adult or young birds, until the birds have left the nest. B-4 If an active nest site cannot be avoided and would be destroyed, special permits would be required, depending on the bird species. a. For a State-listed bird (i.e. Swainson's hawk), the project applicant shall obtain a Section 2081 permit. Standard mitigation for the loss of an active nest tree generally requires planting 15 trees (a mix of cottonwood, sycamore and valley oaks) and monitoring the success of the trees for five years with a 55% success rate. Locating these trees would likely not be feasible so an alternative approach could be to participate in mitigation deemed appropriate by the CDFG. b. For any bird covered by the Migratory Bird Treaty Act, the project applicant would consult with the USFWS to determine appropriate mitigation	Action	Implementing Party	Timing	Monitoring Party		
	measures.						
	-	y – 5. Cultural Resources					
5-1 Project construction could uncover paleontological artifacts or unique geologic resources.	C-1 Construction contractors involved in earth-moving activities shall be instructed on indicators that subsurface paleontological resources are present and shall be instructed in procedures to follow in the event that resources are encountered and the following measures shall be incorporated into all construction contracts:	Verify that bid documents and contracts include provisions to cease excavation in the event of discovery of paleontological resources; excavation plan to be created and resources shall be	Project developer	Prior to excavation; on-going as needed during construction; if applicable, excavation plan shall be prepared and adopted prior to any excavation being undertaken after discovery.	City of Sacramento Development Services Department		

Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party
	(a) In the event any paleontological resources, such as fossils, are uncovered during construction, work within 100 feet of the find shall cease and a qualified paleontologist shall be contacted by the by the project proponent to determine if the resource is significant. If the find is determined to be of significance, an excavation plan shall be created and resources shall be donated to an appropriate cultural center. All work products and plans shall be reviewed and approved by the City prior to execution.	donated to an appropriate cultural center, if required.			
5-2 Project construction could disturb human remains.	C-2 Construction contractors involved in earth-moving activities shall be instructed on indicators that human remains are present and shall be instructed in procedures to follow in the event that resources are encountered and the following measures shall be incorporated into all construction contracts: (a) When Native American archaeological, ethnographic, or spiritual resources are involved, all identification and treatment shall be conducted by qualified archaeologists who are either certified by the Register of Professional Archaeologists (RPA) or meet the federal standards as stated in the Code of Federal Regulations (36 C.F.R. 61), and Native American representatives who are approved by the local Native American community as scholars of their 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. (b) If human bone or bone of unknown origin is found during construction, all work shall stop in the vicinity of the find and the County Coroner shall be contacted immediately. If the remains are determined to be Native American, the Coroner	Verify that bid documents and contracts include provisions to cease work and notify County Coroner in the event of discovery of human remains.	Project developer/contractor	Prior to approval of construction plans.	City of Sacramento Development Services Department

THE TOWERS ON CAPITOL MALL PROJECT
MITIGATION MONITORING PLAN

Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party
•	shall notify the Native American Heritage Commission who shall notify the person it believes to be the most likely descendent. The most likely descendent shall work with the contractor to develop a program for reinternment of the human remains and any associated artifacts. No additional work is to take place within the immediate vicinity of the find until the identified appropriate actions have been carried out.				
		and Henriders N	Antoniala		
		azards and Hazardous M		I B	Lou to
7-1 Project construction could uncover unidentified contaminated soils.	 Mitigation Measure H-1 The proposed project shall prepare and conduct a program of random soil sampling and analyses to characterize the extent, if any, of soil contaminants listed in the Phase 1 reports. The program and analyses shall be prepared by a State licensed and qualified engineer. Further, a report of the program results shall be made by a State licensed and qualified engineer and submitted to the Sacramento County Emergency Management Department (SCEMD) and Department of Toxic Substances Control (DTSC). If the findings of the soil analyses indicate levels of contaminants above those acceptable by the SCEMD or DTSC, then a remediation program shall be prepared by a State licensed and qualified engineer to excavate and remove the contaminated soils to the appropriate solid waste disposal facility. Construction and operation of the proposed project shall implement a dewatering regime detailed in a subdrain plan. The subdrain plan shall use a passive dewatering system including, but not limited to, a series of subdrains, sumps, and pumps, to prevent any influence on the movement or extent of the existing UPRR rail yards groundwater plume. The passive dewatering system and subdrain plan shall be 	Verify provision of random soil sampling and analysis performed and prepared by a State licensed and qualified engineer; remediation plan and/or subdrain plan shall be prepared and implemented, if required by sampling results.	Project developer/contractor	Prior to excavation.	City of Sacramento Development Services Department

Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party
·	written, managed, and updated by a qualified State licensed engineer.				
		ection 5.1 Aesthetics			
5.1-3 Project could create light or glare that could affect adjacent properties.	 5.1-3 (a) The configuration of exterior light fixtures shall emphasize close spacing and lower intensity light that is directed downward in order to minimize glare on adjacent uses. (b) Highly reflective mirrored glass walls shall be avoided as a primary building material for facades. Instead Low E glass shall be used in order to reduce the reflective qualities of the buildings, while maintaining energy efficiency. 	Design lighting system to avoid lighting of adjacent properties; include exterior building materials that minimize potential for glare.	Project developer/ contractor	Prior to the approval of final development plans and specifications.	City of Sacramento Building Division
5.1-6 The project, in combination with cumulative development in the Central City, could create cumulative light or glare that could affect adjacent properties.	5.1-6 Implement Mitigation Measure 5.1-3 (a) and (b).	See MM 5.1-3	See MM 5.1-3	See MM 5.1-3	See MM 5.1-3
		ection 5.2 Air Quality			T = 1 = 1 =
5.2-1 Project construction could generate emissions of PM ₁₀ .	 5.2-1 The following measures shall be incorporated into construction practices during demolition activity: (a) The project shall ensure that all demolished material will be completely wetted during demolition and during any subsequent disturbance of the material. (b) The project shall ensure that piles of demolished material, when not being disturbed, are either completely wetted or completely covered. (c) Two feet of freeboard space shall be maintained on all trucks transporting demolished material. 	Verify that project contractor construction bid documents and contracts include demolition activity measures; periodic field inspections during construction.	Project developer/ contractor	Prior to issuance of a grading or building permit; on-going during construction.	City of Sacramento Building Division; City of Sacramento Building Inspector

WITHGATION MONITORING PLAN							
Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party		
5.2-2 Project construction could generate emissions of ozone precursors.	The following measures shall be incorporated into construction practices as recommended by the SMAQMD: (a) The project shall provide a plan for approval by SMAQMD demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average at time of construction; (b) The project representative shall submit to SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the 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 representative 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 shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately and SMAQMD shall be notified within 48 hours of	Verify that project contractor construction bid documents and contracts include construction practices recommended by the SMAQMD; periodic field inspections during construction.	Project developer/contractor	Prior to issuance of a grading or building permit; on-going during construction.	City of Sacramento Building Division; City of Sacramento Building Inspector		

Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party
	identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.			9	
5.2-3 Project operations could contribute to long-term emissions of ozone precursors.	5.2-3 The following measures shall be included in the project, as recommended by the SMAQMD: (a) The project applicant shall ensure on-going membership in the Sacramento Transportation Management Association. (b) Transit passes shall be sold on-site, and transit schedules shall be provided on-site.	The project applicant shall demonstrate ongoing membership in the STMA to the SMAQMD; the project shall accommodate sales of transit passes on the project site.	Project developer Building Manager	On-going during project operation	SMAQMD
5.2-6 The project could expose people to uncomfortable wind speeds.	5.2-6 The proposed project shall include wind screening, through awnings, landscaping, or other methods, to reduce wind in the public area of the podium to ensure that people are not exposed to wind speeds in excess of 20 mph more than 20 percent of the time as a result of project design. Reductions shall be demonstrated through wind tunnel testing.	Provide wind tunnel results to City; incorporate recommendations for wind reductions in project design.	Project developer	Prior to the approval of final development plans and specifications.	City of Sacramento Building Division

THE TOWERS ON CAPITOL MALL PROJECT MITIGATION MONITORING PLAN

Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party
impact		on 5.3 Cultural Resource		Tilling	Widilitoring Farty
5.3-1 The project could adversely affect known and/or previously unidentified historic archaeological resources.	The project proponent shall hire a qualified professional to formulate and implement a research design and field strategy plan for test and data recovery excavations for the remaining strips of land not excavated in the 1960s for the construction of the Copley Press building. Records for the removal of tanks for the filling station shall also be obtained to further identify areas of previous disturbance prior to testing and data recovery of the site. After the asphalt covering of the parking lot areas is removed, excavations and data recovery shall commence. All artifacts and features shall be excavated and analyzed. If significant findings are made, historic materials and artifacts shall be incorporated into an interpretive display in the proposed buildings. The interpretive display shall include a history of the site uses including information on the various ethnics groups that dominated the site. Display of all historic materials and artifacts shall follow the standard practices and procedures generally accepted in museum curation. If an interpretive display is not feasible on site, all materials shall be donated to a local museum with the ability to display the items. All activities related to the data recovery of the site shall be recorded and compiled into a report and submitted to both the City and the North Central Information Center.	Provide a research design and field strategy plan for test and data recovery excavations prepared by a qualified professional for referenced portions of the project site.	Project developer, qualified professional archaeologist	Prior to excavation.	City of Sacramento Development Services Department
5.3-2 The project, in combination with other development in the City, could adversely affect known and/or previously unidentified historic archaeological resources.	5.3-2 Implement Mitigation Measure 5.3-1.	See MM 5.3-1	See MM 5.3-1	See MM 5.3-1	See MM 5.3-1

THE TOWERS ON CAPITOL MALL PROJECT MITIGATION MONITORING PLAN

Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party
		Section 5.4 Noise	<u> </u>		
5.4-1 Project construction could produce temporary noise.	The prime contractor shall ensure that the following measures are implemented during project construction. (a) Erect a solid plywood construction/noise barrier along the exposed project boundaries. The barrier should not contain any significant gaps at its base or face, except for site access and surveying openings. (b) Construction activities shall comply with the City of Sacramento Noise Ordinance. Demolition and pile driving activities shall be coordinated with adjacent land uses in order to minimize those noise impacts. (c) To further mitigate pile driving noise impacts, holes will be pre-drilled to the maximum feasible depth. This will reduce the number of blows required to seat the pile, and will concentrate the pile driving activity closer to the ground where noise can be attenuated more effectively by the construction/noise barrier. (d) Locate fixed construction equipment such as compressors and generators as far as possible from sensitive receptors. Shroud or shield all impact tools and muffle or shield all intake and exhaust ports on power construction equipment. (e) Designate a disturbance coordinator and conspicuously post this person's number around the project site and in adjacent public spaces. This disturbance coordinator will receive all public complaints about construction noise disturbances and will be responsible for determining the cause of the complaint, and implement any feasible measures to be taken to alleviate the problem.	Verify that project contractor construction bid documents and contracts include construction noise measures.	Project developer/contractor	Prior to the issuance of a building permit; inspections during construction.	City of Sacramento Building Division; City of Sacramento Building Inspector

THE TOWERS ON CAPITOL MALL PROJECT **MITIGATION MONITORING PLAN**

Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party
5.4-5 Helicopters using the project's heliport could create noise that could annoy residents and disrupt sleep.	5.4-5 Helicopter take-offs or landings shall be restricted to occur between the hours of seven a.m. and six p.m. on Monday through Saturday, and between the hours of nine a.m. and six p.m. on Sunday. Any emergency helicopter activity shall be exempt from the provisions of this mitigation.	Restrict heliport hours of operation between the hours of seven a.m. and six p.m. on Monday through Saturday, and between the hours of nine a.m. and six p.m. on Sunday. Complaints of offhours heliport use shall be investigated by the City.	Project developer Building Manager	On going during project operation	City of Sacramento Development Services Department
	DEIR Section 5.	5 Public Utilities and Ser	vices		
5.5-5 The project could create or contribute stormwater runoff over predevelopment conditions that would exceed the existing or planned capacity of Basin 52.	5.5-5 The project developer shall contribute its fair share amount toward upsizing of existing drainage pipes; or shall construct on-site storage or detention to accommodate any increased runoff that would ensure that project runoff would not contribute to system flooding during storm events. The final detention method shall be developed in consultation with the City of Sacramento Utilities Department.	Contribute required fees toward upsizing drainage pipes or construct on-site storage or detention to accommodate increased runoff.	Project developer	Prior to construction of the project.	City of Sacramento Department of Utilities
	DEIR Section 5.6	Transportation and Circ			
5.6-1 The project could exacerbate unacceptable operations at local intersections (3 rd Street/P Street) under Near-Term Plus Project Condition.	5.6-1 The project shall provide the funding to the City of Sacramento to add the appropriate traffic signs and to restripe the southbound approach to the 3rd Street/P Street intersection to add a second right turn lane.	Provide funding for noted improvements.	Project developer	Prior to construction of the project.	City of Sacramento Department of Transportation and Development Engineering and Finance
5.6-3 The project could result in the degradation of pedestrian facilities on the project site.	5.6-3 The project shall replace all existing sidewalks as part of frontage improvements required with approval of the project. Existing pedestrian crosswalks or pedestrian traffic signal indications shall be replaced by the project with approval of the project.	Construct frontage improvements.	Project developer	Prior to building occupancy.	City of Sacramento Development Engineering and Finance

THE TOWERS ON CAPITOL MALL PROJECT MITIGATION MONITORING PLAN

Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party
5.6-5 The project could exacerbate unacceptable operations at local intersections under Year 2025 Plus Project Condition.	5.6-5 (a) The project shall provide the funding to the City of Sacramento to install the appropriate traffic signs on the west side of 3rd Street to restrict parking between 4:00 to 6:00 pm and to restripe the southbound approach to the 3rd Street/P Street intersection to add a second right turn lane. (b/c) The City should retain the one-way southbound operation of 3rd Street between Capitol Mall and L Street. The City shall monitor the operation of the traffic signal at 3rd Street and Capitol Mall and retime the signal to conform to traffic demands. (d) The City shall monitor the operation of the traffic signal at 3rd Street and L Street and retime the signal to conform to traffic demands.	Provide funding for noted improvements.	Project developer	Prior to construction of the project.	City of Sacramento Department of Transportation and Development Engineering and Finance
5.6-8 Operation of the loading dock during peak periods will affect traffic operations on L Street.	5.6-8 The City shall restrict the use of the loading dock during the peak period of 7:00 to 9:00 AM and 4:00 to 6:00 PM.	Restrict use of the loading dock during the peak period during operation of the project.	Project developer Building Manager	On-going during project operation.	City of Sacramento Department of Transportation and Development Engineering and Finance
5.6-9 Operation of the parking garage could result in traffic queues extending onto L Street.	5.6-9 The City shall condition the project to construct the garage access points to include one service position and a 100-foot throat depth for the condominium access and a one-lane access from L Street that widens to two service positions with a 60-foot throat depth for each service position for the hotel/retail/fitness center access.	Include garage access points according to specifications in construction plans.	Project developer	Prior to project approval.	City of Sacramento Department of Transportation and Development Engineering and Finance
5.6-10 Conversion of 3rd Street between L Street and Capitol Mall from one- way to two-way operation.	5.6-10 Retain the existing one-way operation on 3rd Street. Implement Mitigation Measures 5.6-3 (b/c). Figures 5.6-12 and 5.6-13 present the traffic volumes without the conversion of 3rd Street between Capitol Mall and L Street to two-way operation.	No action required	n/a	n/a	n/a

THE TOWERS ON CAPITOL MALL PROJECT **MITIGATION MONITORING PLAN**

Impact	Mitigation Measure	Action	Implementing Party	Timing	Monitoring Party
5.6-11 Installation of a left-	5.6-11	Provide funding for	Project developer/	Prior to the approval	City of Sacramento
turn pocket on eastbound	The City shall condition the project to construct a left-	construction of a left	City of Sacramento	of the project/ Prior to	Department of
Capitol Mall at 4th Street.	turn pocket on eastbound Capitol Mall to city	turn pocket on	Public Works	project occupancy.	Transportation and
	standards. The left-turn pocket should be a minimum	eastbound Capitol	Department		Development
	of 180-feet in length to accommodate vehicle queues.	Mall. City to construct			Engineering and
		improvements.			Finance





City of Sacramento

FINAL

Water Supply Assessment

for the Proposed

Towers on Capitol Mall Project

July 2005

Prepared by:



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EXECUTIVE SUMMARY

The City of Sacramento (City) is the lead agency for the development of the proposed Towers on Capitol Mall project (proposed project); a commercial and residential project bounded by Capital Mall, L, 3rd and 4th streets.

As the public water system that supplies water to the proposed project area, the City is preparing this water supply assessment (WSA), as per the requirements of Senate Bill 610 (passed in 2002), and the California Water Code (primarily Sections 10910 through 10913). There are three primary areas to be addressed in a water supply assessment: (1) all relevant water supply entitlements, water rights, and water contracts; (2) a description of the available water supplies; and (3) an analysis of the demand placed on those supplies, both by the project, and all existing and planned future uses in the area.

The water supply for the proposed project comes from the City's water rights and a 1957 contract with the United States Bureau of Reclamation (USBR). Under the contract, the City is entitled to 326,800 acre-ft per year (AFY). As a signatory of the Water Forum Agreement (WFA), the city has agreed to withdrawal limitations from the American River. During the driest year scenario, the WFA limits annual withdrawal from the American River to 50,000 AFY. The WFA does not limit withdrawal from the Sacramento River; therefore, entitled American River water may be diverted at the Sacramento River Water Treatment Plant (WTP) below the confluence of the American and Sacramento Rivers. The resulting annual limitation is a function of the annual treatment plant capacity, resulting in a total supply of 230,000 AFY. The total supply during the driest year scenario can meet the anticipated annual demand in 2025 and the anticipated annual demand at 2030 with existing groundwater infrastructure.

The withdrawal rate from the American River is limited during low flow conditions. Based on modeling of historical climatic data, low flow conditions occur during 59 percent of the years during the peak demand months. During low flow conditions, the WFA limits the diversion rate from the American River to 155 cubic feet per second (cfs) during June through August when the peak demand occurs. Assuming treatment at the reduced diversion rate from the American River and maximum treatment at the Sacramento River WTP, the total surface water supply is 260 million gallons per day (mgd). The

projected maximum day demand exceeds 260 mgd in 2010. The additional 24 mgd available from the current groundwater sources would ensure maximum day demand is met up to 2014. Additional demand from the proposed project will not significantly alter this timeline. The City is already undertaking studies to evaluate an additional Sacramento River diversion and treatment facility. With continued efforts to secure additional treatment capacity on the Sacramento River, the City has sufficient time to ensure reliable delivery of water for the proposed project and future demand past 2030.

This WSA concludes that the City's annual entitlements will meet the proposed project and projected future demand over the next 20 years, but due to diversion limitations agreed to in the WFA and the current infrastructure capabilities, an additional diversion structure and treatment plant on the Sacramento River or additional groundwater wells will be required to meet the maximum demand.

1.0 INTRODUCTION

The Towers on Capitol Mall is a mixed-use commercial and residential project. The Towers include two high rise towers on a ten-story podium with a total height of up to 615 feet. The project would be bounded by Capitol Mall, L, 3rd and 4th streets. The residential portion of the project would include up to 800 condominium units. The podium portion would contain restaurants and retail stores, a recreational gymnasium, a spa-salon, a rooftop swimming pool, and covered parking. Particularly, Tower One would be 53 stories with a full-service hotel on floors 11 through 22, and up to 400 condominium units on floors 23 through 53. Tower Two would also be 53 stories and would house 400 condominiums on floors 10 through 53.

The City of Sacramento (City) is conducting an environmental review under the requirements of the California Environmental Quality Act (CEQA) for the proposed project. This water supply assessment (WSA) will provide information for use in the CEQA analysis for this project. The environmental review for the proposed project includes the need for an assessment of the available water supply to serve the project. The requirements for such a WSA are described in the sections of the California Water Code (Water Code) amended by the enactment of Senate Bill 610 (SB 610) in 2002. Approval of any tentative subdivision maps may also require a written verification of available water supplies under the sections of the Public Resources Code amended by the enactment of Senate Bill 221 (SB 221) in 2002.

SB 610 and SB 221 provide a nexus between the regional land use planning process and the environmental review process. These laws also reflect the growing awareness of the need to incorporate water supply and demand analysis at the earliest possible stage in the land use planning process. The core of these laws is an assessment of whether available water supplies are sufficient to serve the demand generated by a project, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under a range of hydrologic conditions.

This WSA provides information on the available water supply to serve the proposed project, based on the sections of the Water Code amended by SB 610. In addition, this information can be used as part of the written verification of water supplies, as required under SB 221.

This document is divided into 4 sections: Introduction, Water Supply, Demand Analysis, and Conclusion. The Introduction describes the project and water supply planning under SB 610 and SB 221.

1.1. Project Description

The Towers on Capitol Mall (proposed project) is a 1,800,000-square foot, mixed-use, residential project. The proposed project includes two high rise towers on a ten-story podium with a total height of up to 615 feet. The podium would contain 85,000 square-feet of retail use, 40,000 square-feet of gym use, 10,000 square-feet of spa use, a roof top swimming pool, 830 above-grade parking spaces, and 270 below-grade parking spaces. The residential portion of the project would include up to 800 condominium units.

FIGURE 1-1 and FIGURE 1-2 show the proposed project vicinity and location. The project would be bounded by Capitol Mall, L, 3rd and 4th streets.

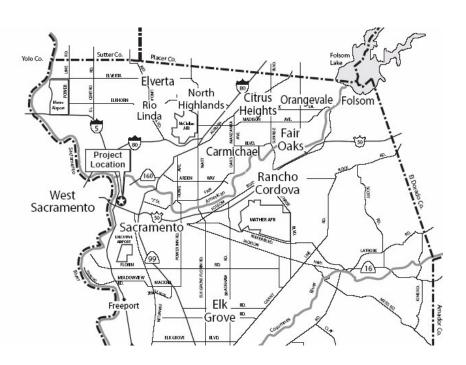


FIGURE 1-1. Project Vicinity Map – Towers on Capitol Mall

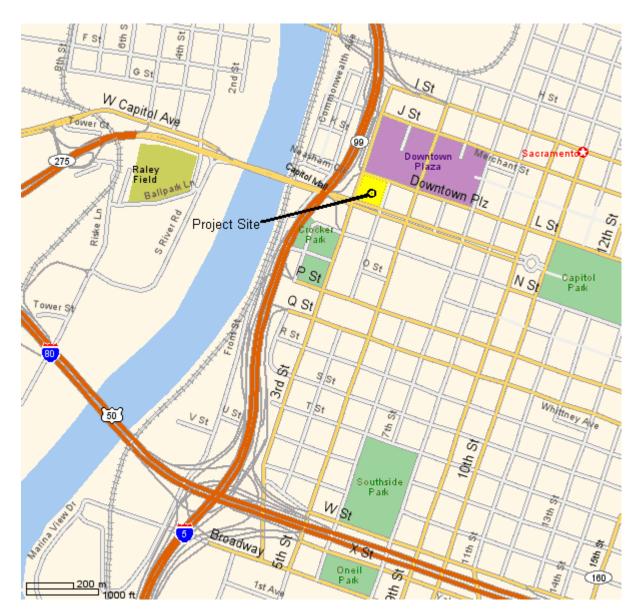


FIGURE 1-2 Proposed Project Site Map - Towers on Capitol Mall

Tower One would be 53 stories (including the podium floors) with a full-service hotel on floors 11 through 22 (which includes ballrooms, meeting rooms, restaurant, lounge, and kitchen) with up to 275 rooms, and an additional 400 condominium units on floors 23 through 51 (with penthouse units on the 52nd and 53rd floors). Tower Two would also be 53 stories and would house 400 condominiums on floors 10 through 51 (with penthouse units on the 52nd and 53rd floors).

1.1.1. Climate

The City of Sacramento and the surrounding region has an arid Mediterranean climate; the weather consists of long, dry summers and cool, rainy winters. Summer trends extend from May to October. Average temperatures in July are 93°F with lows in the mid 60s. The rainy season is from late November to mid-April; average precipitation is 18.5 inches annually; snow is uncommon and rare. Winter daytime temperatures are generally in the mid-50s to low 40s, and overnight lows often dip below 30°F.

Sacramento has experienced two declared droughts in the last three decades. The drought of 1975 – 1977 accounted for only 7.5 inches of rain and the drought of 1987–1992 is considered the most severe drought in California's history¹ (Priest, et al., 1993). Conversely, in years following drought periods Sacramento was drenched with rainfall, for example in 1997 regional water levels rose to record highs which threatened levee breaks and flooded parts of the out-lying metropolitan area. This extreme climatic variability is common throughout California.

1.2. Water Supply Planning Under SB 610 and SB 221

Senate Bill 610 and SB 221 were passed into law on January 1, 2002. These laws reflect the need to incorporate water supply and demand analysis at the earliest possible stage in the planning process. SB 610 amended portions of the Water Code, including Section 10631, which contains the Urban Water Management Planning Act, as well as adding Sections 10910, 10911, 10912, 10913, and 10915, which describe the required elements of a WSA. SB 221 amended Section 65867.5 and added Sections 66455.3 and 66473.7 to the Government Code. Upon signing these bills, Governor Gray Davis stated, "Most notably, these bills will coordinate local water supply and land use decisions to help provide California's cities, farms and rural communities with adequate water supplies. Additionally, these bills increase requirements and incentives for urban water suppliers to prepare and adopt comprehensive management plans on a timely basis."²

Senate Bill 610 is designed to build on the information that is typically contained in an Urban Water Management Plan (UWMP). The amendments to Water Code Section 10631 were designed to make water supply assessments and UWMPs consistent. A key difference between the WSA's and UWMPs is that UWMPs are required to be revised every five years, in years ending with either zero or five, while WSAs are required as part of the environmental review process for each individually qualifying project.

¹ Priest, D.F. et al. 1993. *California's 1987-92 Drought: A summary of six years of drought.* State of California Department of Water Resources

² Department of Water Resources, *Guidebook for Implementation of SB 610 and SB 221* of 2001, 2003.

As a result, the 20-year planning horizons for each type of document may cover slightly different planning periods than other WSAs or the current UWMP. Additionally, not all water providers who must prepare a WSA under SB 610 are required to prepare an UWMP.

Under SB 221, approval by a city or county of certain residential subdivisions, as defined by California 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. 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.

1.2.1. SB 610 Water Supply Assessment

The SB 610 water supply assessment process involves answering the following questions:

- Is the project subject to CEQA?
- Is it a project under SB 610?
- Is there a public water system?
- Is there a current UWMP that accounts for the project demand?
- Is groundwater a component of the supplies for the project?
- Are there sufficient supplies available to serve the project over the next 20 years?

1.2.1.1. "Is the Project Subject to CEQA?"

The first step in the SB 610 process is determining whether the project is subject to CEQA. SB 610 amended Public Resources Code Section 21151.9 to read: "Whenever a city or county determines that a project, as defined in Section 10912 of the Water Code, is subject to this division [i.e., CEQA], it shall comply with part 2.10 (commencing with Section 10910) of Division 6 of the Water Code." The proposed project is currently under environmental review pursuant to the requirements of CEQA; therefore, the information contained in this assessment will be used to support the Environmental Impact Report (EIR) at the project-level analysis.

1.2.1.2. "Is It a Project Under SB 610?"

The second step in the SB 610 process is to determine if a project meets the definition of a "Project" under Water Code Section 10912 (a). Under this section, a "Project" is defined as meeting any of the following criteria:

- 1. A proposed residential development of more than 500 dwelling units;
- 2. A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (ft²) of floor space;
- 3. A commercial building employing more than 1,000 persons or having more than 250,000 ft² of floor space;
- 4. A hotel or motel with more than 500 rooms;
- 5. 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 ft² of floor area;
- 6. A mixed-use project that includes one or more of these elements; or
- 7. 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" also 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. Because the proposed project is a mixed-use facility that includes one or more of the elements from the list, it meets the requirements as a "Project" under the Water Code.

1.2.1.3. "Is There a Public Water System?"

The third step in the SB 610 process is determining if there is a "public water system" to serve the project. Section 10912 (c) of the California Water Code (Water Code) states: "[A] public water system means a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections."

The proposed project site is served by the City's Utilities Department, which is a public water agency that served 131,745 connections in June 2004. The City operates two water treatment plants (WTP). The Sacramento River WTP is located on the east bank of the Sacramento River, about a half mile downstream of the confluence of the Sacramento and American Rivers. The E. A. Fairbairn WTP (formally American River WTP) is located adjacent to the American River between the H Street and Howe

Avenue bridges, approximately 7 miles upstream of the confluence. The City also has 32 municipal drinking water wells; of these 23 are currently active, and 9 are on standby³.

1.2.1.4. "Is There a Current UWMP That Accounts for the Project Demand?"

Step four in the SB 610 process involves determining if there is a current UWMP that considers the projected water demand for the project area. The Water Code requires that all public water systems providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 ac-ft per year (AFY), must prepare an UWMP, and this plan must be updated at least every five years on or before December 31, in years ending in five and zero.

Water Code Section 10910 (c)(2) states, "If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g) [i.e., the WSA]." The City's most recent UWMP was released in 2000. Although the proposed project was not included in the City's 2000 UWMP, the existing facility on the project site was considered. The proposed project is larger and water use is expected to be substantially greater. Presently, the City is working on an UWMP for release in 2005.

1.2.1.5. "Is Groundwater a Component of the Supplies for the Project?"

This section addresses the requirements of Water Code Section 10910 (f), paragraphs 1 through 5, which apply if groundwater is a source of supply for a proposed project. The City maintains 32 wells for potable and non-potable use, 23 wells are actively used to supply drinking water⁴. The current system can supply 24 mgd and produce up to 26,800 AFY.

The City is located in the 548-square mile North American (Subbasin) as described by the Department of Water Resources. The Subbasin's boundaries are the Feather and Sacramento Rivers on the west, the Bear River to the north, south to the American River and east to the Sierra Nevada. The underlying geology or hydrostratigraphy of the basin consists of a variety of geologic formations that make up the water bearing units. There are two aquifer systems: an upper unconfined system consisting of the Victor, Fair Oaks, and Laguna Formations, and a lower, semi-confined system in the Mehrten Formation. These

³ Dan Sherry, City of Sacramento, Utilities Department, Comment on Towers WSA, June 23, 2005

⁴ Dan Sherry, City of Sacramento, Utilities Department, Comment on Towers WSA, June 23, 2005

geologic formations are composed of lenses and layers of inter-bedded sand, silt and clay with coarsegrained stream channel deposits.⁵ The groundwater contained in the upper aquifer system of the Victor, Fair Oaks and Laguna Formations is of superior quality compared to that in the lower semi-confined system, mainly because the water in the Mehrten Formation is higher in iron and manganese, and requires more treatment. The upper unconfined system only requires chlorination treatment to be potable.

The City is a member of the Sacramento Groundwater Authority. The Sacramento Groundwater Authority (SGA) is a joint powers authority created in 1998 by a coordinated effort between the Sacramento Metropolitan Water Authority and the Water Forum Agreement to manage the region's North Area Groundwater Basin, a sub-region of the North American Subbasin. The signatory participants are managing the basin in a cooperative fashion by allowing representatives from the local water purveyors, the agricultural community and other groundwater pumpers to serve on the Board of the SGA. The goal of the SGA is the responsible management of the groundwater basin through a commitment to not exceed the sustainable yield of the basin, which is approximately 131,000 AFY according to the WFA. The SGA developed a Groundwater Management Plan (GMP) to ensure a safe, reliable water supply for the rapidly growing northern Sacramento County area⁶. Within this program the SGA will continually assess the status of the groundwater basin and make appropriate management decisions to sustain the basin.

The City and other SGA members, in accordance with the WFA, have implemented a conjunctive use program to responsibly manage and use the groundwater systems. This conjunctive use program is part of the WFA thirty-year agenda. The program accounts for the annual climatic variability of the region, whereby in normal or wet years of precipitation the water providers will divert more surface water and reduce or eliminate groundwater use, allowing the system to recharge. In dry years when the Lower American River flows must be maintained, groundwater will again be pumped and used to supplement the reduced diversions from the river systems.

"In general, the intent of the WFA is to increase the use of groundwater in dry years and reduce surface water diversions. The decrease in available dry year diversions is a consequence of the WFA objective to provide instream flows in the lower American River for environmental purposes. In wet years, when more surface water is available,

⁵ Sacramento Groundwater Authority, *Groundwater Management Plan*, 2003, page 7. http://www.sgah2o.org/sga/programs/groundwater/.

⁶ Sacramento Groundwater Authority, *Groundwater Management Plan*, 2003, page 1.

diversion will be increase and groundwater extraction will be reduced, thereby promoting recharge of the basin."⁷

1.2.1.6. "Are There Sufficient Supplies to Serve the Project Over the Next Twenty Years?"

The next step in the SB 610 process is to prepare the actual assessment of the available water supplies, including the availability of these supplies in all water-year conditions over a 20-year planning horizon, and an assessment of how these supplies relate to project-specific and cumulative demands over that same 20-year period. In this case, the period covers the years 2005 to 2025.

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."

There are three primary areas to be addressed in a water supply assessment:

- relevant water supply entitlements, water rights, and water contracts;
- a description of the available water supplies;
- analysis of the demand placed on those supplies, both by the project and on cumulative basis.

Water entitlements are addressed in Section 2 and the analysis of the demand is discussed in Section 3. Section 4 contains results and conclusions.

⁷ Sacramento Groundwater Authority, *Groundwater Management Plan*, 2003, page 24.

2.0 WATER SUPPLY

This section reviews the City's water supply entitlements and water rights.

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."

2.1. Water Rights and Contracts

Water rights are a historically important means of securing water use in California. These rights date back to the Gold Rush days of the 1850's, whereby water claims were made by "first in time, first in rights"; this established a water user's right to divert water from a specific point on a stream for a specific use. Since 1914, the State Water Resources Control Board (SWRCB) has been charged with administrating and regulating 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 place of use (POU) for that water.

The City claims pre-1914 rights to divert 75 cubic feet per second (cfs) and secured five additional appropriative water rights with various priorities ranging between 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 and releases from the Upper American River Project. Currently, the City has Application S014834 pending with the SWRCB for additional 50,581 AFY from the Sacramento River. The City's surface water permits require use of the diverted water within the authorized POU. The project falls within the POU of all the permits.

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 build-out in 2030, the USBR contract provides the city a maximum annual diversion of 326,800 AFY. This contract has no delivery limitations and is included in Appendix A. The City is a signatory of 2000 WFA which explicitly does not impact the USBR annual diversions, but does reduce the diversion in the American River during dry years or if flows are below Hodge flow criteria. The permits and USBR contractual diversions are listed in TABLE 2-1. The 2005 contract amount is 205,000 AFY. The contract amount increases annually to a maximum of 326,800 AFY in 2030 as show in FIGURE 2-1 and TABLE 2-2.

TABLE 2-1 Surface Water Entitlements						
Maximum Permitted Diversion						
Permit	Authorized Diversion	AFY	cfs			
1957 USBR 2030	American River	245,000	675			
Contractual	Sacramento River	81,800	225			
Maximum ^c	Total Combined Diversion	326,800	900			
2000 WFA	American River	245,000	310 ^a			
Maximum	Sacramento River	81,800	290 ^b			
Waxiiiuiii	Total Combined Diversion	326,800	900			

a. 310 cfs is a maximum withdrawal rate, additional restrictions apply.

c. Based on permits 00922, 011358, 011359, 011360, and 11361.

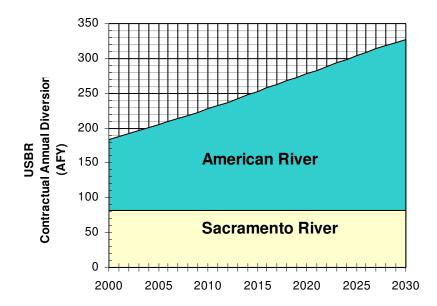


FIGURE 2-1 USBR Maximum Contracted Annual Surface Water Diversion

b. The Sacramento WTP, below the confluence of the American and Sacramento River, is an allowable withdrawal point for the permitted American River flows, allowing an increase in the diversion from the Sacramento River.

TABLE 2-2 USBR Maximum Contracted Annual Surface Water Diversion (AFY)							
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 205,000 227,500 252,000 278,000 304,000 326,800							

2.2. Reliability of Water Supplies

An important aspect when discussing water supplies and reliability within Sacramento region is the Water Forum Agreement; this is an agreement between multiple stakeholders of 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.⁸ 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. The elements specific to water supply reliability 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 of these elements plays a vital role in the Water Forum's coequal objectives. As a signatory of the WFA, the City's Utilities department is actively participating in all seven elements. Recently, the City increased water treatment capacity at the Sacramento River Water Treatment Plant and the E.A. Fairbairn WTP.

The City is continuing to develop a water supply consistent with the WFA. Public Law 106-554 authorized the Sacramento River Water Reliability Study, which includes a feasibility study for a second Sacramento

⁸ Water Forum Agreement 2000, page 29.

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 Draft Planning report is scheduled for review at the end of 2005. 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 flow is below the "Hodge flows" as defined in *Environmental Defense Fund et al. v. East Bay Municipal Utility District*. Parties in the litigation cannot divert water from the American River unless instream flows measure at least 2,000 cfs from October 15 through February; 3,000 cfs from March through June; and 1,750 cfs from July to October 14. The diversion limits change seasonally and are listed in TABLE 2-3. Based on CALSIM II analysis of the 1922 to 1994 climate data, 59 percent of the years will experience Hodge flow conditions during the peak months of June through August.

TABLE 2-3					
Restricted	American River	Diversion Rates			
	Divers	ion Limit ^a			
Month	cfs	AF			
January	120	7,400			
February	120	6,700			
March	120	7,400			
April	120	7,100			
May	120	7,400			
June	155	9,200			
July	155	9,500			
August	155	9,500			
September	120	7,100			
October	100	6,100			
November	100	6,000			
December 100 6,100					
	occurs when the flone Hodge flow condi	w passing the WTP ition.			

The Sacramento River WTP has a capacity of 160 mgd (250 cfs). Fairbairn WTP has a treatment capacity of 200 mgd (310 cfs), equal to the maximum diversion rate allowed in the WFA. If both plants operated at their maximum production, the combined theoretical output would be approximately 360 mgd.

One of the alternatives being evaluated in the Sacramento River Water Reliability Study is for a 145 mgd (225 cfs) WTP on the Sacramento River near Elverta Road, north of the Sacramento International Airport.

The potential completion date of a new Sacramento WTP is within the next six to ten years. With the addition of the new Sacramento River WTP, the combined maximum production will be 505 mgd and the low flow production will be 405 mgd. Maximum day production before and after completion of a 145 mgd Sacramento WTP is shown in TABLE 2-4.

TABLE 2-4 Maximum Day Production						
Source	Capacity Above Hodge Flows (mgd)	Capacity Below Hodge Flows (mgd)				
Fairbairn WTP	200	100				
Sacramento WTP	160	160				
Groundwater	24	24				
TOTAL without new WTP no groundwater	384 360	284 260				
New Sacramento WTP	145	145				
TOTAL with new WTP no groundwater	529 505	429 405				

During years when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre-feet, the WFA limits diversion from the American River to 50,000 AFY. The WFA has labeled the extremely low flow conditions as a "conference year" where signatories will meet to discuss water management strategies. A conference year scenario has a 1.8 percent probability of occurring and did occur in 1924 and 1977. The WFA does not restrict diversion of the American River entitlements from a Sacramento River diversion point; therefore normal year and dry year supplies are identical for the City as shown in TABLE 2-5. However, annual surface water diversions below the USBR contracted amounts are limited by the diversion capacity from the Sacramento River.

Assuming 50,000 AFY from the Fairbairn WTP and a maximum production from the Sacramento WTP of 180,000 AFY, the current drought limiting scenario still allows for a theoretical maximum production of 230,000 AFY. (The additional 145 mgd Sacramento River WTP would increase the total annual production to 311,800 AFY.) The theoretical maximum "conference year" production of 230,000 AFY over estimates the current drought year production, because the Sacramento WTP can not operate at maximum capacity of 160 mgd when the maximum demand is below maximum treatment capacity, as is the case in winter months. Average day demand is not expected to exceed 160 mgd until after 2015; therefore, the Sacramento WTP will operate below annual maximum production capacity until after 2015. The most appropriate approach to addressing the diversion limitations is by analyzing maximum day

demand; consequently, reference to total annual production capacity is for discussion purposes and does not appropriately reflect daily system operations.

TABLE 2-5					
2005 Annual Surface Water Supply (AFY)					

	2005 USBR	2005 to 2007 Dry Year Supply ^a				
Source	Contracted Supply	First Dry Year 2005	Second Dry Year 2006	Third Dry Year 2007		
American River	123,200	50,000	50,000	50,000		
American River diverted from the Sacramento River		73,200	77,700	82,200		
Sacramento River	81,800	81,800	81,800	81,800		
TOTAL ^b	205,000	205,000	209,500	214,000		

a. Current diversion capacity from the Sacramento River is 180,000 AFY, allowing a drought year production of 230,000 AFY.

b. Total increases during multiple years according to USBR contract.

3.0 WATER DEMAND ANALYSIS

This section shows the calculated water demand for the proposed project as well as projected demand for the entire system and then compares the demand to the supply.

3.1. Proposed Project Water Demand

The expected water use of the proposed project was determined by analyzing each use of the building and 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 the 1994 Proposed Water Demand/Wastewater Generation Factors Report by Nolte Engineering and West Yost and Associates, as well as current and historical uses at similar facilities, and personal communications with the State Department of Water Resources, Southern Nevada Water Agency, Placer County Water Agency, Irvine Ranch Water District, and the City of Sacramento, Department of Utilities. As shown in TABLE 3-1, the proposed project will potentially use 291 AFY or an annual average demand of 0.26 mgd. The calculated demand represents the upper range of the potential demand.

TABLE 3-1									
Proposed Project Water Demand									
Space Used Space Used Annual Demand Annual Demand Building/Facility (ft²) demand factor/unit (gpd) (AFY)									
Hotel (floors 11-22)	148,621	(0.0367 gpd/ft ²) ^a	5,456	6.11					
Bar/Restaurant/Retail	85,000	(0.35 gpd/ft ²) ^b	29,750	33.32					
Residential housing (800 Condos)	999,814	250 gpd/condo ^a	200,000	223.00					
Gym	40,000	(0.49 gpd/ft ²) ^d	19,650	22.01					
Spa	10,000	(0.49 gpd/ft ²) ^c	4,900	5.49					
Parking Garage	534,900	0	0	0.00					
Swimming Pool (ft ³) (75'x50'x4')									
TOTALS	1,818,335		260,986 (181gpm)	291.31					

- a. Nolte Engineering with West Yost & Associates, 1994 Proposed Water Demand/Wastewater Generation Factors Report City of Vacaville.
- b. Hospital service water demand from Palo Alto Medical Center Draft EIR, 2005.
- c. Cleaning & maintenance data California Fitness Center, 2004.
- d. Water Use at 40,000 ft² California Fitness Center, 2004 Daily Consumption of approximately 19,500 gallons (21.8 AFY).

The existing facility has an estimated annual demand of 16 AFY as shown in TABLE 3-2, resulting in a net increase of in water demand of 275 AFY or an annual average demand increase of 0.25 mgd.

TABLE 3-2								
Historical Water Use at the Proposed Project Site								
Space Used Space Used Building/Facility Space Used Gemand factor/unit Average Annual Demand Annual Demand Annual Demand (gpd) (AFY)								
Office Building	421,660	0.41 gpd/ft ^{2 a}	14,000	16.1				
a. Nolte Engineering with West Yost & Associates, Proposed Water Demand/Wastewater Generation Factors Report 1994.								

3.2. System Demand

The Sacramento historical demand over the last five years is shown in TABLE 3-3. The total water supplied by the City from June 2003 to July 2004 was 143,784 acre-ft. Over the last 7 years, 17 percent of the delivered water has been met with groundwater.

	TABLE 3-3									
Historical Water Deliveries										
	Surface Water Groundwater Total Water Delivered									
Year	Population ^a	Annual Surface Water Delivered (AFY)	Total Annual Water Delivery (AFY)	average (mgd)	Percent Increase					
1997/98	392,800	92,031	140.40	1.71	7,186	99,216	88.58			
1998/99	396,200	102,180	143.60	1.58	24,630	126,810	113.22	21.8%		
1999/00	405,963	112,547	161.60	1.61	24,146	136,693	122.04	7.2%		
2000/01	418,711	114,172	214.00	2.10	23,578	137,750	122.98	0.8%		
2001/02	426,013	113,979	159.80	1.57	24,271	138,250	123.43	0.4%		
2002/03	433,400	111,539	278.90	2.35	23,997	135,537	121.01	-2.0%		
2003/04	441,000	128,412	318.40	2.33	15,372	143,784	128.37	5.7%		
Average	7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7									
	nal Statistics 200 ta from correspo		report.							

The City of Sacramento recently completed a 2030 demand analysis for the USBR Sacramento River Water Reliability Study (March, 2005) including transfers within the designated point of use and demand through annexation. The City of Sacramento's demand was calculated as 156,766 AFY with a maximum day demand of 251 mgd. The total demand for the City's permitted Sacramento and American River

diversions were calculated as 239,804 AFY with a peak demand of 402 mgd. The demand is summarized in TABLE 3-4. The projected demands are from the Water Forum Agreement and modified to reflect a 25.9 percent conservation factor. Supporting calculations, including population projections, are included in Appendix B.

TABLE 3-4 Projected Annual and Maximum Day Demand for Sacramento 2030 ^a							
Area Annual Demand Maximum Day Demand (AFY) Demand (mgd)							
City of Sacramento	156,766	251					
Area "D"	30,222	50					
Cal-American (Rosemont)	12,129	20					
Cal-American (Parkway)	10,551	17					
Florin County Water District	2,296	4					
Unincorporated Area (Zone 40)	10,644	19					
Fruitridge Vista Water Company	4,734	8					
Tokay Park Water District	119	1					
Pending Annexation	5,208	8					
Sacramento Wastewater Treatment Plant	520	1					
Wheeling Demand	6,616	23					
TOTAL	š , , , , , , , , , , , , , , , , , , ,						
a. Demand based on estimates in USBR Sacramento River Water Reliability Study (March, 2005). b. Maximum Day Demand based on a peaking factor of 1.8 except for wheeling demand.							

The projected demand does not include the increased demand from the proposed project, which would result in potential net increase of 275 AFY or 0.1 percent. The maximum day demand may increase by 0.44 mgd, based on a peaking factor of 1.8 or 0.1 percent. The anticipated increase from the project results in an annual demand of 240,000 AFY and peak day demand of 402 mgd. Future projects altering the land uses from those included in the original analysis of 2030 demand have not been included.

3.3. Comparison of Available Water Supplies versus Demand

Section 10910 (c)(3) of the Water Code states, "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 for 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."

3.3.1. Annual Supply and Demand

The 2004 demand of 143,764 AFY was well below the current USBR contracted limit of 200,500 AFY for that year. The projected annual demand remains approximately 70% of the USBR contracted annual

diversion when using a constant 2.0 percent per year growth rate to achieve the 2030 projected demand of 240,080 AFY as shown in TABLE 3-5. For the purposes of a cumulative analysis, the net increase in demand from the project was added to the 2030 projected demand and was assumed to be part of a constant 2.0 percent annual growth over the next 25 years.

TABLE 3-5 Supply and Demand Comparison during Normal Years (AFY)							
	2005	2010	2015	2020	2025	2030	
Surface Water Supply	<u>.</u>						
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 SURFACE WATER SUPPLY ^a	205,000	227,500	252,000	278,000	304,000	326,800	
Demand	146,647	161,567	178,336	196,842	217,265	239,805	
Net Project Demand		275	275	275	275	275	
TOTAL DEMAND	146,647	161,842	178,611	197,117	217,540	240,080	
SURPLUS	58,353	65,658	73,389	80,883	86,460	86,720	
a. Total Surface water supply	is based on USB	R contracted del	ivery.				

The WFA limits the driest year diversion to 50,000 AFY from the American River, but does not limit the diversion of the American River entitlement from the Sacramento River, resulting in no reduction in contracted delivery for single or multiple dry years. The annual supply becomes limited by diversion and treatment capacity of Sacramento River water. Current theoretical maximum production during the "conference years" is approximately 230,000 AFY. As stated in Section 2.3, the "conference year" production estimate of 230,000 AFY over estimates the current drought production, because the Sacramento WTP can not operate at maximum capacity of 160 mgd when the maximum demand is below maximum treatment capacity, as is the case in winter months. The most appropriate approach to addressing the diversion limitations is by analyzing maximum day demand.

TABLE 3-6 shows annual surface water supply and demand for "conference years". Total annual contracted diversion, total annual production, "conference year" production capacity, and projected demand are also included in FIGURE 3-1. The figure does show a potential surface water deficit occurring in 2028 if a new diversion and WTP is not constructed on the Sacramento River. The deficit grows to 10,000 AFY in 2030. The anticipated deficit could be met with a combination of existing groundwater infrastructure, by curtailing wheeling agreements, or conservation measures.

TABLE 3-6								
Supply and Demand Comparison during "Conference Years" a								
	2005	2010	2015	2020	2025	2030		
Surface Water Supply								
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	120,200	146,200	172,200	195,000		
Sacramento River	81,800	81,800	81,800	81,800	81,800	81,800		
TOTAL SURFACE WATER SUPPLY ^b	205,000	227,500	252,000	278,000	304,000	326,800		
Demand	146,647	161,567	178,336	196,842	217,265	239,805		
Net Project Demand		275	275	275	275	275		
TOTAL DEMAND	146,647	161,842	178,611	197,117	217,540	240,080		
SURPLUS	58,353	65,658	73,389	80,883	86,460	86,720		

a. "Conference Year", defined by the WFA, when the projected unimpaired inflow to Folsom Reservoir is less than 400,000 acre-feet.

<sup>b. Total Surface water supply is based on USBR contracted delivery and not based on the maximum dry year treatment and diversion capacity of 230,00 AFY.
c. Exceeds current dry year diversion capacity of 230,000 AFY.</sup>

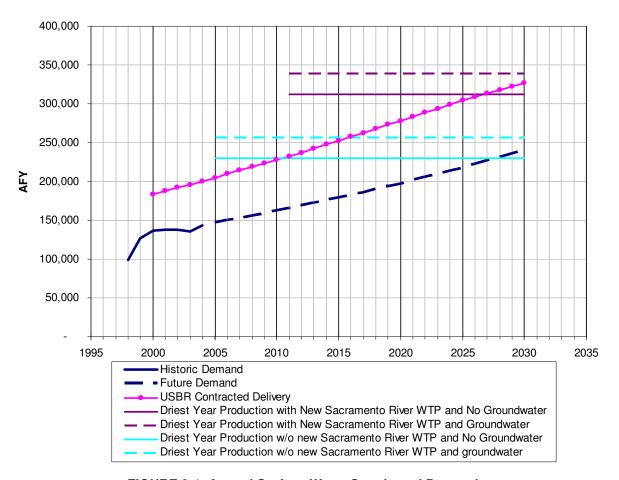


FIGURE 3-1 Annual Surface Water Supply and Demand

3.3.2. Maximum Day Supply and Demand

Because of diversion limitations during Hodge flow conditions, the maximum peak day demand should also be considered during the supply and demand analysis. TABLE 3-7 shows the maximum day surface water supply and demand under normal flow conditions. TABLE 3-8 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 of the maximum day demand, a deficit of surface water production will occur in 2010 without a new Sacramento River diversion and WTP as shown during Hodge flow conditions in FIGURE 3-28. In 2014, the deficit exceeds Hodge flow-limited surface supply combined with the current groundwater supply of 24 mgd. In 2030 the projected deficit is 142 mgd. A new 145 mgd Sacramento River diversion WTP would meet the anticipated peak day deficit in 2030 under all conditions.

TABLE 3-7
Peak Day Surface Water Supply 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
Demand ^b	235.7	261.9	291.5	324.5	361.2	402.0
Net Project Demand		0.4	0.4	0.4	0.4	0.4
TOTAL DEMAND		262.3	291.9	324.9	361.6	402.4
SURPLUS	124.3	97.7	68.1	35.1	-1.6	-42.4

a. Surface supply is based on nominal plant capacity.

TABLE 3-8
Peak Day Surface Water Supply 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 ^b	160	160	160	160	160	160
TOTAL SURFACE WATER SUPPLY	260	260	260	260	260	260
Demand ^c	235.7	261.9	291.5	324.5	361.2	402.0
Net Project Demand		0.4	0.4	0.4	0.4	0.4
TOTAL DEMAND		262.3	291.9	324.9	361.6	402.4
SURPLUS	24.3	-2.3	-31.9	-64.9	-101.6	-142.4

a. American River diversion is limited 100 mgd during Hodge flow conditions.

b. Based on 2.2 percent annual growth rate between 2004 and 2030 demand.

b. Sacramento WTP peak day supply is based on the nominal capacity of the plant.

c. Based on 2.2 percent annual growth rate between 2004 and 2030 demand.

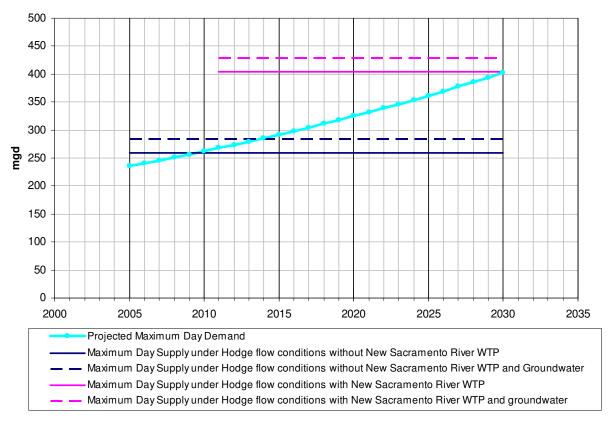


FIGURE 3-2 Maximum Day Surface Water Production and Demand

4.0 CONCLUSION

According to the requirements of Water Code Section 10910(c)(3) the water supply assessment shall include a discussion of "whether the public water system's total projected water supplies available ... will meet the projected water demand associated with proposed project, in addition to the public water system's existing and planned future uses." Due to the limitations occurring during peak day demand, the supply will not meet the projected demand. According to the requirements of Water Code Section 10911(a), if the results of the assessment conclude that the water supplies are, or will be, insufficient, the water supply assessment shall include plans for acquiring additional water supplies. Those plans may include, but are not limited to, information on costs and financing, permits, and timeframes.

The City is already a partner on the Sacramento River Water Reliability Study, which is investigating alternatives for an additional diversion on the Sacramento River. The environmental documents for the alternatives analysis is scheduled to be completed in 20069, providing eight years for the design and construction of a selected project before any potential peak demand shortfall would occur. The 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 past 2030.

This assessment finds that the City of Sacramento has sufficient water allocation secured from their 1957 contracts with the USBR and other related permits to serve the proposed project and projected future demand over the next 20 years. Annual and peak day demands are summarized in TABLE 4-1. However, based on a WFA limitation of 50,000 AFY from the American River, during a dry year, a surface water limitation does occur by 2030, but the full demand can be met with the groundwater infrastructure. Due to limitations agreed to in the WFA and current infrastructure capabilities, an additional diversion and WTP on the Sacramento River will be required to meet the peak day demand by as early as 2014.

⁹ Initial Alternatives Report. Final diversion, March 2005. Sacramento River Reliability Study.

TABLE 4-1 Projected Annual and Maximum-Day Supply and Demand Comparison

	USBR contracted	Projected Annual	Annual	Peak Day Surface Water Supply under	Maximum	Peak Day
Year	delivery (AFY)	Demand (AFY) ^a	Surplus (AFY)	Hodge Flow conditions (mgd) ^c	Day Demand (mgd) ^d	Surplus (mgd)
2005	205,000	146,647	58,353	260	236	24
2010	227,500	161,842	65,658	260	262	-2
2015	252,000	178,336	73,664	260	292	-32
2020	278,000	197,117	80,883	260	325	-65
2025	304,000	217,540	86,460	260	362	-102
2030	326,800	240,080 ^b	86,720	260	402	-142

a. Demand based on estimates in Sacramento River Water Reliability Study (March, 2005) plus the net demand from project.

b. Exceeds "conference year" theoretical maximum production of 230,000 AFY, see TABLE 3-6.

c. Based on Hodge flow limitations of 100 mgd at Fairbarn WTP and nominal capacity of 160 mgd at Sacramento WTP.

d. Maximum-day demand based on a peaking factor of 1.8, except for wheeling demand.

Indicates demand exceeds supply due to infrastructure limitations.